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THE INDIA WEATHER REVIEW

FOR THE YEAR

1905.

Published by authority of the Government of India.

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GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JANUARY, 1905.

INTRODUCTION.

THE review of the weather in India for the month of January 1905, is based on observations taken ily at 8 A.M. at 231 stations, and on additional servations recorded at 10 A.M. and 4 P.M. at 64 stations. the case of the rainfall section of the review there are ilized the data of the meteorological observatories and the rainfall statements of the month published in the vernment Gazettes by the Provincial Governments that d been issued prior to the date of the publication of the view. A brief summary of the information relating to the weather in the Bay of Bengal and the Arabian Sea, extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given, and brief notes on solar and magnetic disturbances are supplied by the observatories. In the remaining monthly reviews of the present year the brief statements of the methods of recording and tabulating the data, for each of the elements of observation, given in the present number at the commencement of each section, will not be repeated.

Summary of the chief features of the weather in India during the month of January, 1905.

The weather was more disturbed than usual over rthern India during the month of January 1905. Only é serious storm entered north-west India, *viz.*, that of the th and 21st, but a succession of feeble depressions passed m west to east across the country and the weather s more cloudy and rainy than usual, more particularly in north-east, the various depressions of the month having velled further to the eastward than is usually the case. On the 1st and 2nd the mean temperature was lower in usual except in north Bombay and the Indus Valley ere the weather was warmer than usual. On the 3rd, and 5th light showers occurred in the north-west, of w on the hills and of rain on the plains. The fall of temperature which succeeded this precipitation erased the high temperatures noticed in the north-west on the 1st and 2nd and on the 4th and 5th the mean temperature was low except over the inland districts of the Peninsula, the Central Provinces and the Gangetic Plain. During the next four days the weather was generally quiet with a few scattered showers and the changes of temperature were generally irregular and unimportant.

On the 10th the barometer fell rapidly in the north-west with cloudy skies, the temperature rose and from the 10th to the 14th the mean temperature was generally excessive except over the Madras Coast, the West Coast, the United Provinces and in north-east India and Burma.

The following gives comparative temperature data for all divisions for these five days :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M of				
	10th January.	11th January.	12th January.	13th January.	14th January.
	°	°	°	°	°
Burma	−1·4	−1·9	−1·5	−0·7	−0·2
Assam	−2·4	−3·0	−2·5	−0·3	−3·9
Bengal	−2·7	−2·1	−1·2	+0·8	−2·0
Orissa	−0·6	+0·7	+1·4	+2·2	+0·5
Bihar	−3·3	−3·6	−2·1	−0·5	−2·4
Chota Nagpur	−2·5	−1·4	+3·1	+1·1	−3·9
United Provinces of Agra and Oudh.	−3·1	−2·3	−0·1	−1·3	−1·3
Punjab	+0·6	+0·4	−0·1	+1·3	+2·4
North-west Frontier Province.	+3·5	+1·6	−2·2	+0·8	+1·1
Baluchistan	+7·0	+6·9	+4·4	+7·1	+4·4
Sind	+2·6	+2·9	+3·4	+3·0	+3·3
Rajputana	−0·6	+1·1	+1·6	+1·5	+2·2
Gujarat	+1·2	+1·1	+0·4	+0·9	+0·6
Central India	+0·2	+0·9	+1·8	−1·7	0
Central Provinces	+0·6	+2·0	+2·2	+0·6	−1·2
Berar	+0·5	+1·8	+2·1	−0·1	+0·5
West Coast	+0·7	−0·7	−1·4	−1·7	−1·1
Bombay Deccan	−0·7	+0·9	+0·3	−0·2	+1·5
Mysore	+0·2	+0·1	+2·3	+1·6	+1·5
Madras Coast	−1·1	−0·7	−0·3	−1·3	−0·5
Madras Deccan	−0·7	+0·6	+1·2	+0·7	+2·5
South India	−0·3	+2·0	+2·1	+1·3	+0·6

During the above period snow showers occurred almost daily in Further Kashmir and some local rain in north-east India. The former, apparently, had no particular effect on the temperature conditions of upper India, but the latter kept temperature low in the north-east. On the 15th, while snow showers continued over the west Himalayas, rain extended over the plains of north-west India and temperature changed irregularly in the extreme north-west. The following gives comparative data :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of	
	15th January.	16th January.
	°	°
Baluchistan	−0·1	+3·3
Kashmir	−0·5	−1·6
N.-W. Frontier Province	−3·2	+0·5
Punjab	−1·4	+0·1
Rajputana	+2·2	+1·3
Sind	+4·3	+6·0

On the 16th and 17th there occurred an increase of temperature over a large part of the country and on the latter date the mean temperature was generally excessive over the Deccan and part of north-west India. The following gives data for all districts for the 17th :—

Province or division.	Departure from normal of		
	Mean maximum temperature, 17th January.	Mean minimum temperature, 17th January.	Mean temperature, 17th January.
	°	°	°
Burma	−1·8	+1·7	−0·1
Assam	−1·3	−0·6	−1·0
Bengal	−2·3	+1·7	−0·3
Orissa	−5·4	+3·6	−0·9
Bihar	−5·1	−1·4	−3·3
Chota Nagpur	−6·1	−1·3	−3·7
United Provinces of Agra and Oudh	−5·3	−0·8	−3·1
Punjab	−3·7	+3·0	−0·4
North-west Frontier Province	−6·8	+5·8	−0·5
Sind	+1·9	+8·2	+5·1
Rajputana	−0·7	+5·6	+2·5
Gujarat	+2·1	+3·3	+2·7
Central India	−3·3	−0·4	−1·9
Central Provinces	−2·6	−2·7	−2·7
Berar	−0·5	+0·4	−0·1
West Coast	−2·6	+0·6	−1·0
Bombay Deccan	+1·1	+0·9	+1·0
Mysore	+1·9	+0·9	+1·4
Madras Coast	−0·2	−0·3	−0·3
Madras Deccan	+2·1	+3·7	+2·9
South India	+1·7	−3·3	−0·8

On the 18th and 19th showers of snow occurred on the hills and of rain on the plains of northern India and temperature fell steadily, so that by the 20th the mean temperature was low over the greater part of northern India. This is shown below :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	18th January.	19th January.	20th January.
	°	°	°
Bengal	−1·4	−0·1	−1·1
Orissa	−2·2	0	−0·4
Bihar	−2·6	−6·4	−3·1
Chota Nagpur	−1·7	−2·3	−1·4
United Provinces of Agra and Oudh	−0·5	−4·0	−4·2
Punjab	+0·2	−2·0	−1·0
North-west Frontier Province	−1·7	−0·4	+1·3
Sind	−3·8	−3·1	−0·5
Rajputana	−1·5	−1·2	−2·7
Gujarat	−0·7	−5·8	−4·8
Central India	−0·3	−4·0	−4·8
Central Provinces	+1·3	+1·5	−1·8

The only important exception to this general deficiency of temperature was shown over Baluchistan and the North-west Frontier Province where, as given below, the mean temperature was in excess :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	18th January.	19th January.	20th January.
	°	°	°
Baluchistan	—2·2	+3·2	+4·6
North-west Frontier Province	—1·7	—0·4	+1·3

This excess preceded the appearance of the only deep depression of the month. On the morning of the 21st a deepish storm was shown over the West Punjab and cyclonic winds and rain were reported over north-west India. At the same time light to moderate snow fell in Baluchistan and the north-west Himalayas. The storm entered and broke up among the north-west Himalayas during the 22nd when light to very heavy snow was received. This disturbed weather and snowfall were followed by a very remarkable cold wave which entered north-west India on the 22nd and thence extended eastward right across northern India reaching Assam by the 25th and 26th. During the existence of this cold wave the mean temperature was reduced to between 10° and 20° below the normal over a large part of the country and severe frost was experienced in many districts as shown in the Temperature Section. The following gives comparative data of temperature for northern India for the 25th on which day the cold wave was at its greatest extent :—

Province or division.	Departure from normal of		
	Mean maximum temperature, 25th January.	Mean minimum temperature, 25th January.	Mean temperature, 25th January.
	°	°	°
Assam	— 7·1	— 4·8	— 6·0
Bengal	— 8·5	— 7·2	— 7·9
Orissa	— 3·0	— 2·8	— 2·9
Bihar	—12·5	— 9·9	—11·2
Chota Nagpur	—10·2	— 9·1	— 9·7
United Provinces of Agra and Oudh	—14·1	—10·4	—12·3
Punjab	—14·5	— 9·9	—12·2
North-west Frontier Province	— 9·7	—10·5	—10·1
Sind	—12·3	— 7·2	— 9·8
Rajputana	—14·3	—12·5	—13·4
Gujarat	— 9·8	—10·5	—10·2
Central India	—12·0	—10·4	—11·2
Central Provinces	— 9·0	—10·0	— 9·5

From the 23rd to the 26th the weather was generally fine over India, but on the 27th another heavy fall of snow occurred over the mountain regions surrounding north-west India. This fresh snowfall was followed by a fresh cold wave which was as intense as the former, but did not extend so quickly or so fully over northern India. The distribution of temperature, relatively to the normal, was very interesting as illustrated by the conditions prevailing during the last five days of the month. The following gives data for all divisions :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	27th January.	28th January.	29th January.	30th January.	31st January.
	°	°	°	°	°
Burma	—5·1	— 5·1	— 4·1	— 2·4	— 1·6
Assam	—7·6	— 5·1	— 3·8	— 2·0	— 0·4
Bengal	—8·1	— 4·5	— 0·1	+ 2·3	+ 0·7
Orissa	—5·8	— 1·4	+ 1·7	+ 3·2	+ 2·8
Bihar	—5·9	— 2·7	+ 1·5	+ 1·0	— 2·1
Chota Nagpur	—6·0	— 1·2	+ 4·6	+ 3·3	— 0·9
United Provinces of Agra and Oudh.	—2·6	+ 1·2	+ 3·4	— 2·7	— 9·6
Punjab	—4·8	— 4·3	— 4·5	—11·5	—14·3
North-west Frontier Province.	—4·6	— 8·9	— 7·9	—12·3	—11·7
Sind	—7·3	— 8·9	—10·7	—15·1	—16·0
Baluchistan	—2·2	—12·1	—19·1	—21·3	—19·6
Rajputana	—0·9	+ 2·9	— 3·7	—11·7	—18·3
Gujarat	+1·6	+ 0·9	— 5·5	—12·2	—15·2
Central India	—1·4	+ 3·8	+ 1·1	— 5·0	—12·2
Central Provinces	—1·7	+ 2·0	+ 3·0	— 0·5	— 5·4
Berar	0	+ 3·2	+ 3·4	— 3·4	— 6·9
West Coast	+0·7	+ 0·2	— 1·0	— 2·4	— 3·5
Bombay Deccan	+1·2	+ 1·9	+ 1·0	— 3·3	— 5·2
Mysore	+0·5	— 1·1	— 1·8	— 1·3	+ 0·3
Madras Coast	—0·9	— 0·6	— 1·7	— 1·4	— 0·7
Madras Deccan	+0·2	+ 0·1	— 0·8	— 0·3	+ 0·3
South India	—0·1	+ 0·4	— 2·1	— 1·5	— 0·1

The data of the 28th show the low temperatures due to the first cold wave lying over Burma and north-east India, the intervening high temperature area lying over the Gangetic Plain, Central India and the Central Provinces and the low temperatures of the second cold wave over north-west India. The whole system moved eastward between the 29th and the 31st when the low temperatures of the first cold wave were disappearing through Tenasserim, the high temperatures of the intervening region were shown over Bengal and the low temperatures of the second cold wave had extended as far as Bihar.

Solar and Magnetic Disturbances.

The following reports regarding solar and magnetic disturbances during the month of January have been received from the observatories:—

KODAIKANAL, SOLAR OBSERVATIONS.—JANUARY 1905.

Sunspots and faculæ were observed on every day except the 2nd which was cloudy throughout. On other six days the sky was not clear enough for prominence observations. Spectroheliograms were obtained on 26 days.

During the month 24 new spot groups appeared and though there were very few spots visible for the first six days, the mean daily number of groups visible was 5·77 —the largest which has been recorded here. On the 2nd and 3rd only one group was visible while on the 14th no less than 13 groups were noted. The three groups 449, 450 and 451 which came round the eastern limb on the 10th and 11th originally seemed quite separate from each other and have been treated as three groups but in reality they formed one large group extending over some 16° of solar longitude. It was a very fine group containing three principal spots and a large number of smaller ones. It crossed the sun's disc without undergoing any very large changes and, except on the 11th and 17th, the spectrum was that of a quiet spot. On these two days, however, the C line was strongly reversed in the spot and D^3 showed very dark near the spot. On the 11th the C line was both reversed and distorted.

The last spot of the month (464) appeared coming round the east limb early on the morning of the 29th and was at once seen to be of very large size. It was preceded on the 28th by a fine metallic prominence nearly 50,000 miles high and extending along, but separate from, the limb as a great streamer some 120,000 miles long. This spot may be considered as the return of a group (443) which formed on the visible disc of the sun at almost the same place during the previous rotation of the sun. It was first seen on the 5th as a single small spot but before it disappeared on the 14th it had become a considerable group in which the spectrum showed moderate disturbance. Details regarding the spot will be given next month but it may be stated now that it was a spot of the largest class, was exceedingly active and produced a large magnetic disturbance.

The distribution of spots with regard to latitude was normal. The spots were almost equally distributed between the northern and southern hemispheres and of the two largest groups one was in the north and the other in the south. Sixteen of the groups lay in the belts between 10° and 20°, one short-lived spot was as far north as 33° while three in the northern and one in the southern hemisphere were less than 10° from the equator.

Faculæ were, as usual, numerous and on several occasions the spectroheliograms showed nearly continuous bands of very bright flocculi across the disc in the spot-belts.

Prominences were also very abundant during the month. The highest noted was on the 22nd in latitude 42° N. (east). It was 3′, or over 70,000 miles high. There were 4 prominences seen of about 2′ and 13 of 1½′ high. On the 27th there was a group of small prominences covering about 20° of the limb, on three days there were groups covering 15°, and on eight other days groups covering 10°. Disturbed prominences showing rapid motion or bright metallic lines which have hitherto been rare are, as might be expected, becoming more numerous and 6 of them were noted during the month.

There were no large magnetic disturbances during the month but there were moderate disturbances on the 5th, 6th, 29th, and 31st. On the 5th and 6th there were no spots near the central meridian but it is worth noting that on the 5th there was a large bright patch of calcium flocculi close to the central meridian. No spectroheliogram could be obtained on the 6th but the patch seen on the 5th, was still conspicuous on the 7th.

On the 29th and 31st spots 461 and 460 respectively were near the central meridian. No. 461 was apparently a quiet spot but No. 460 had shown evidence of disturbance.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay:—Note on the Colaba Magnetic Record.

During the month the traces showed 8 calm days, 20 days of small and 3 days of moderate disturbances.

Movements suspected to be due to seismic causes occurred on the 4th at about 4-30 A.M. and on the 14th at about 1 P.M. the strain apparently lasting for about 4 hours in both cases.

The selected quiet days of the month were the 2nd, 8th, 13th, 27th and 30th.

The mean observed absolute values of the several elements as also the ranges and summed ranges of the Horizontal Force and Declination for the month were as follow:—

Horizontal Force	0·37398 C. G. S. unit.
Declination	14′ 39″ East.
Dip	21° 53′·5
Horizontal Force range	·00032 C. G S. unit.
„ „ summed range	·00206 C. G. S. unit.
Declination range	2′·02
„ summed range	7′·40

Note.—(Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.)

Only one seismic disturbance was recorded during the month on the 22nd, the amplitude of the disturbance being 5·0 m.m. corresponding to an apparent tilt of 2″·20 of arc.

MAGNETIC DISTURBANCES.

JANUARY 1905.

January 1905.		January 1905.		January 1905.	
1	S.	11	S.	21	S.
2	C.	12	S.	22	M.
3	C.	13	C.	23	S.
4	S.	14	S.	24	S.
5	M.	15	S.	25	S.
6	M.	16	C.	26	S.
7	S.	17	S.	27	C.
8	C.	18	S.	28	S.
9	C.	19	S.	29	S.
10	S.	20	S.	30	C.
				31	S.

The magnitudes of the disturbances are determined from Horizontal Force traces. C = Calm; S = Small; M = Moderate; G = Great; G = Very great. Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Government Observatory, Bombay.

Alipore.—List of displacements recorded by the Seismograph at the Alipore Observatory during January 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement.	Maxima. G. M. T.	End.	Maximum amplitude in m m.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M.	
Jan. 8	19-57'7	19-58'8	20-4'9	20-13'0	0'50	0-15'3	
„ 9	0-57'7	1-1'8	1-27'2	3-26'2	1'50	2-28'5	Doubtful.
„ 10	6-6'4		6-6'9	6-10'4	2'00	0-4 0	Doubtful.
„ 13	13-41'1	13-51'3	14-3'5	14-49'3	1'25	1-8'2	
„ 20	22-43'4	22-53'1	22-56'1	23-7'3	0'75 (a)	0-23'9	
„ 22	2-51'4	2-52'9	3-12'7	4-28'0	14'00	1-36'6	

(a) Measured from the base line. Sensibility 1 m m. = 0″·38 of tilt.

The local times of the commencement :—

Date 1905.	H. M.
January 9	1-51'0
„ 9	6-51'0
„ 10	11-59'7
„ 13	19-34'4
„ 21	4-36'7
„ 22	8-44'7

G. W. KUCHLER,
Asst. Meteorological Reporter to the Govt. of India.

Royal Alfred Observatory, Mauritius, Solar observations.—No observations could be made on the 1st, 5th, 6th, 7th, 10th, 18th, 23rd, 24th, and 28th, on all other days groups of spots and faculæ were observed.

The following were the Magnetic disturbances recorded during the month. The measurements are given in C. G. S. measure for horizontal force and vertical force and in minutes of arc for declination :—

Day.	Magnetic Disturbances.
4	Accentuated diurnal variation in H. F.; 3½h. increase of H. F. ('000106); 5h—13h small fluctuations in H. F.; 16h-18½-h wave (—'000165); 20h—23h small fluctuations (±'000049).
5	9h—11h increase of H. F. ('000297); 19½h—22½h irregular decrease of H. F. ('000858); in declination 20½h increase (3'·5 w.)
6	oh—3h fluctuations in H. F. (±'000082); 3½h to 3½h increase of horizontal force ('000297); 11h—21h wave in H. F. ('000432) culminating at 17h.
14	11½h sudden increase of H. F. ('000165); 14h—17h wave in H. F. (—'000264).
17	3½h—5½h wave in H. F. (+'000231); 14½h—17h wave (—'000231) with small rapid superposed fluctuations.
22	Accentuated diurnal variation in H. F. with superposed fluctuations.
31	13½h sudden increase in H. F. ('000148) followed by rapid fluctuations (±'000066).

T. F. CLAXTON,
Director.

Weather over the Indian monsoon region.

The mean atmospheric pressure of the month of January 1905 exceeded the normal in all parts of the trades-monsoon area except locally at Mauritius. Notwithstanding this general excess of pressure the weather was unsettled over various parts of the area under review and more particularly in the extreme north and south. The local deficiency of pressure in the neighbourhood of Mauritius was due to low pressures between the 20th and 29th due to a cyclone. This cyclone which was of small diameter travelled from Lat. 15°S. and Long. 69°E. on January 20th to Lat. 20°S. and Long. 58°E. on January 23rd, passing about 50 miles to the east of Mauritius on the morning of the latter date. The rate of translation of the storm increased from 9 miles per hour on the 20th to the unprecedented velocity of 21 miles per hour on the 23rd. At the observatory at Mauritius the barometer fell from 29·633″ at 12 hours on the 22nd to 29·173″ at 5 hours on the 23rd and the velocity of the wind as recorded by the Dines' pressure tube anemometer increased from 9 miles at midnight on the 23rd to 35 miles per hour at 4½ hours on the 23rd. The highest velocity recorded in the squalls was 54·5 miles per hour at 4 hours 25′ on the 23rd. In the south-east trade wind

region the general meteorological conditions were as follows:—

JANUARY.	Mauritius.	Zanzibar.	Seychelles.
	"	"	"
Pressure departure	—·036	+·022	+·024
	°	°	°
Actual mean wind direction . .	N 34 E	N 33 E	N 20 W
Normal mean wind direction . .	S 86 E	N 33 E	N 42 W
Actual mean wind velocity (miles per diem)	192	183	147
Normal mean wind velocity (miles per diem)	266	187	144
Rainfall departure	+12·77	—1·01	—3·49

There were thus considerable departures from the normal in the general conditions. Pressure was below the normal at Mauritius and slightly above at both Zanzibar and the Seychelles. There was a marked increase in the amount of northing in the wind over the greater part of the Belt and while there was a large excess of rainfall at Mauritius there was a considerable deficiency at the Seychelles. Over the Indian seas the departures of the mean force of the wind from the normal were as follows:—

JANUARY.	Arabian Sea.	Bay of Bengal.
Actual mean force (Beaufort Scale) . .	3·5	3·0
Normal do. do. . .	3·3	3·0

Arabian Sea:—Over the greater part of the Arabian Sea the north-east winds of the winter monsoon were fairly steady but in the north the directions changed somewhat with the disturbances occurring over the land area. During the first eight days the usual north-east winds prevailed generally but on the 9th the wind changed to west in the north though north-east winds continued elsewhere. These conditions lasted till the 11th after which the ordinary north-east winds re-appeared generally and continued till the 16th. Between the 17th and the 21st the winds were more or less variable, but on the 22nd north-east winds again set in and with a brief exception on the 25th and 26th continued till the close of the month.

In the Persian Gulf the winds, as over the north of the Arabian Sea, were somewhat changeable. They varied between east and north on most days but were westerly between the 9th and 11th and the 16th and the 20th. In the Gulf of Aden the wind was steadily north-easterly and east-north-easterly.

On the mean of the month the air movement over the whole of the Arabian Sea averaged 3·5, the normal force being 3·3. The mean air movement exceeded the average from the 1st to the 9th (with the exception of the 4th); on the 18th; on the 22nd and 23rd; and from the 28th to the 31st or in general when the ordinary north-east winds were blowing. At other times the wind force was normal or below the normal. The force was greatest, 5·0 on the 29th, and was lowest 2·3 on the 26th.

Bay of Bengal:—The wind was generally very steady from north-east and north-north-east over this area, but between the 11th and the 13th, on the 16th and 17th and between the 23rd and 26th the winds were variable, while between the 29th and 31st, south-westerly winds prevailed over the northern half of the Bay due to low pressures over north-east India.

The air movement, on the mean of the month, averaged 3·0 which was exactly normal. The mean air movement exceeded the normal from the 1st to the 9th (with the exception of the 3rd); the 18th, the 25th, the 27th and the 29th and was lower than usual at other times. The force was greatest 4·2 on the 5th and 6th and was lowest 1·9 on the 23rd.

The above shows that as regards air movement conditions were fairly normal over the Bay of Bengal and the Arabian Sea and this condition, to a great extent, prevailed over Burma and the Indian Peninsula, but further to the northward conditions were very unsettled. In Egypt the mean atmospheric pressure was above and the mean temperature below the normal. The European meteorological charts show that during the first three days of the month pressure was low and storms were passing eastward over the Mediterranean. On the 4th pressure rose, but on the 5th a depression occasioning rain and snow was shown over the Black Sea region. This depression passed eastward during the 6th and 7th occasioning general rain and snow over the Caspian area. On the 8th and again on the 11th depressions giving rain and snow were shown over the Caspian Sea and both depressions moved eastward. Between the 14th and 16th the lowest pressures were reported from the Black Sea area and from the 18th to the 20th from the Mediterranean, but on the 23rd, 25th and 30th, depressions again appeared over the Caspian area whence, after giving general rain and snow, they apparently advanced in an easterly direction. The following table shows the dates of the occurrence of the various minima of pressure and of temperature and of the occurrence of rain along a line running from the east of the Mediterranean as far as north-west India:—

January 1905.

Alexandria.			Beirut.			Baghdad.			Ispahan.			Chaman.			Lahore.		
P.	T.	R.	P.	T.	R.	P.	T.	R.	P.	T.	R.	P.	T.	R.	P.	T.	R.
4	2	10	6	1	1	3	5	6	4	5	1	3	4	2	3	4	4
11	12	11	11	19	6	6	7	7	7	13	12	10	15	3	10	7	5
14	23	12	14	24	9	9	13	8	12	15	24	13	18	14	14	17	6
22	25	14	22	31	10	11	15	9	15	18	27	16	23	18	18	15	15
29	31	17	30		11	14		14	19	23		20	30	20	21	19	18
31		23			12	18	25	15	26	25		26		21	24	24	21
		24			14	23			31	29		31		25	28	31	22
		25			15	31								26	29		27
		26			16									27			28
					17									28			29
					22												
					23												
					24												

The dates of the occurrence of the pressure minima show that pressure was very unsteady during the month. There appears to have been a fairly simultaneous minimum throughout the line on the 3rd or 4th. On the 11th there occurred a minimum at Alexandria, Beirut and Baghdad and this may have passed on to Ispahan on the 12th, to Chaman on the 13th and to Lahore on the 14th. The next minimum occurred at Alexandria, Beirut and Baghdad on the 14th, at Ispahan on the 15th, at Chaman on the 16th and at Lahore on the 18th. The next minimum apparently developed over Asiatic Turkey on the 18th, reached Ispahan on the 19th, Chaman on the 20th and Lahore on the 21st and was the best marked minimum of the month. The remaining minima do not give any evidence of translation. There appears to have been a simultaneous minimum over the east of the belt on the 26th and a more or less general minimum throughout the belt on the 31st. The above shows that the evidence of the translation of the baric minima from west to east is slightly clearer than is usual, but there are several instances of the simultaneous appearance of minima throughout the belt as though the movement were rather between north and south than from west to east. There was very little similarity in the dates of the occurrence of minima of temperature throughout.

Depressions and cyclonic storms of the month.

At the commencement of the month pressure was higher than usual over the whole Indian region—but particularly so in the north-east and gradients were very steep over the Peninsula and the Bay. On the 1st pressure was giving way rapidly in the north-west and a very feebly marked depression was approaching from the westward. The depression had reached Rajputana by the 2nd but the disturbance remained exceedingly feeble and the weather was unaffected. Between the 2nd and 3rd the storm intensified while moving very slowly towards north-east, and on the morning of the 3rd cloudy to overcast weather was reported from the whole of northern India, light snow from Kashmir and the north-west Himalayas, and light rain from parts of Sind, the south and east Punjab, east Rajputana and the west of the United Provinces. The reports of the 4th showed that the barometer was rising briskly to rapidly over north-west India and that the storm had practically disappeared.

From the 5th to the 9th pressure was higher than usual—more especially in the north-west and north-east—and the weather generally fine and quiet, but on the morning of the 10th pressure was giving way everywhere—rapidly in the north-west—and on the 11th a very shallow and feeble depression was shown over the western desert. Light snow had fallen in Further Kashmir and the sky was cloudy all over northern India. The reports of the 12th showed a rapid recovery of pressure over north-west India and apparently the transference of the shallow depression from the western desert quickly eastward to the east of the United and Central Provinces, Chota Nagpur and South Bihar. The weather was cloudy in the depression area, but the weather generally was practically unaffected.

On the 13th conditions were quiet but on the 14th another shallow depression was shown over the western desert accompanied with high temperatures and cloudy to overcast skies, but no rain of any importance. The depression advanced eastward and on the morning of the 15th lay over the south-western districts of the United Provinces. Light local rain had fallen over parts of north-west India and light to moderate snow on the Himalayas. A second low pressure area was shown on this day over the south of the Central Provinces. Both depressions practically filled up during the day. Neither was of any importance, but wide-spread showers were received over northern and central India.

On the 16th pressure was increasing over the greater part of India and over Kashmir, but was giving way slightly to briskly in Baluchistan. Pressure was giving way all over north-west India on the morning of the 17th and a shallow and ill-defined depression was lying over Gujarat while a depression, which had advanced from Persia, was apparently passing through Baluchistan. Both depressions subsequently advanced eastward and on the 18th the depression from Gujarat was shown over south-east Rajputana and that from Baluchistan over the Indus Valley region. Light but fairly general precipitation had been received over north-west, central and part of north-east India. The reports of the 19th showed that the Indus Valley depression had practically filled up while that shown over the south-east of Rajputana had moved eastward to the Central Provinces. Local rain had again been received over a considerable area.

On the 20th the barometer was falling everywhere—rapidly in Baluchistan, Sind, and the North-west Frontier Province and a deepish depression was passing through Baluchistan. The following gives 8 A.M. data for the storm area:—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M., reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Departure from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				Inches.	
Quetta .		—·169	—·194	Calm	4	10	0·98	Snow storm.
Chaman .		—·195	—·274	ESE	12	8	1·65	Continuous rain.
Jacobabad .	29·566	—·169	—·107	SSE	2	10	0·03	
Hyderabad .	·972	—·145	—·091	N	6	9	—	Drizzling.
Kurrachee .	·970	—·130	—·088	NE	8	10	—	
Multan .	30·023	—·132	—·062	Calm	1	10	—	
D. I. Khan	·024	—·116	—·062	Calm	0	0	0·07	
Montgomery	·046	—·113	—·028	Calm	2	10	—	

STATION.	PRESSURE. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	PRESSURE. Change in past 24 hours.	PRESSURE. Departure from normal.	WIND. Direction at 8 A.M.	WIND. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	REMARKS.
	"	"	"				Inches.	
Peshawar .	·070	—·139	—·075	Calm	1	10	—	
Rawalpindi.	·061	—·132	—·050	Calm	3	10	—	
Bhuj . .	29·956	—·128	—·088	NE	7	7	—	
Deesa .	·976	—·094	—·065	E	11	9	—	
Murree .		—·074	—·068	ESE	8	10	—	
Srinagar .		—·078	—·103	S	1	10	—	
Leh . .		—·006	—·081	SW	3	10	—	

As mentioned above the barometer was falling rapidly in the north-west where light south-easterly and easterly winds were blowing. Moderately heavy rain and snow were falling in Baluchistan.

January 21st.—The following gives 8 A.M. data for the storm area:—

STATION.	PRESSURE. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	PRESSURE. Change in past 24 hours.	PRESSURE. Departure from normal.	WIND. Direction at 8 A.M.	WIND. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	REMARKS
	"	"	"				Inches.	
Quetta .		+·005	—·188	W	5	—	0·58	Snow storm.
Chaman .		+·158	—·114	S	18	—	0·42	Strong wind.
Jacobabad .	29·851	—·115	—·218	NNW	8	1	—	
Multan .	·726	—·297	—·350	N	4	10	0·25	
D. I. Khan .	·732	—·292	—·349	Calm.	1	10	0·55	
Peshawar .	·773	—·297	—·372	NE	1	10	0·95	
Rawalpindi.	·765	—·296	—·332	ESE	3	10	1·33	
Khushab .	·722	—·321	—·348	SSE	8	10	1·00	Raining.
Sialkot .	·817	—·229	—·237	ENE	4	9	1·33	Drizzling.
Lahore .	·764	—·274	—·293	SE	3	10	0·26	Raining.
Montgomery	·727	—·319	—·332	SSE	12	10	0·36	Continuous rain.
Bikaner .	·786	—·250	—·271	SSE	10	7	0·07	Drizzling.
Sirsa . .	·843	—·195	—·209	SE	4	10	0·19	Raining.
Ludhiana .	·842	—·206	—·201	SE	1	9	—	
Murree .		—·303	—·368	ESE	2	10	1·80	Snow storm.
Srinagar .		—·294	—·395	SW	2	10	0·15	Snow storm.

Pressure had given way very rapidly in Kashmir, the North-west Frontier Province and the West and Central Punjab while it had been steady or risen in Baluchistan. At 8 A.M. pressure was ·395″ at Srinagar and ·372″ at Peshawar below the normal. A deep depression had entered north-west India and was central over the West Punjab. Cyclonic winds, strong to a gale in velocity, prevailed around the storm and moderately heavy rain had fallen in the storm area. In Kashmir and Baluchistan snow had been received.

January 22nd.—The following gives 8 a.m. data for the storm area:—

STATION.	PRESSURE. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	PRESSURE. Change in past 24 hours.	PRESSURE. Departure from normal.	WIND. Direction at 8 A.M.	WIND. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	REMARKS.
	"	"	"				Inches.	
Peshawar .	29·897	+·124	—·250	Calm	3	7	0·11	Showery.
Rawalpindi.	·888	+·123	—·237	Calm	3	10	0·78	Frosty.
Khushab .	·893	+·171	—·201	SW	14	0	0·03	Strong wind.
D. I. Khan .	·911	+·179	—·180	W	—	0	—	Gale.
Jacobabad .	30·132	+·281	+·060	NNW	12	0		
Hyderabad.	·146	+·299	+·084	N	9	0		Severe gale.
Multan .	29·925	+·199	—·160	SW	4	0	—	
Montgomery	·929	+·202	—·148	W	8	0	0·02	
Lahore .	·899	+·135	—·183	W	5	2	0·44	
Sialkot .	·864	+·047	—·199	S	9	9	1·96	
Ludhiana .	·908	+·066	—·156	SE	1	0	1·58	Continuous rain.
Sirsa .	·943	+·100	—·131	SW	7	0	0·90	
Murree .		+·032	—·334	SE	12	10	0·60	Snow-storm.
Srinagar .		—·056	—·449	SE	14	4	0·93	Do.
Leh . .		—·200	—·549	ENE	2	10	0·13	Do.
Simla . .		—·040	—·201	S	17	10	0·84	Do.
Chakrata .		—·068	—·158	Calm	7	10	4·47	Snowing.

The storm had apparently moved north-north-eastward into the north-west Himalayas and pressure was ·549″ at Leh, ·449″ at Srinagar and ·334″ at Murree below the normal. A rapid to very rapid recovery of pressure had taken place over the plains of north-west India, the change at Hyderabad (Sind) amounting to ·299″. Strong winds and gales from south-west to south-east prevailed over north-west India both on the hills and plains and light to very heavy snow was reported from the hill stations in the north-west. Rain had fallen all over the plains of the north-west and was heavy in places (see Rainfall section). Temperature had fallen rapidly in the rear of the disturbance and, as shown in the Temperature section, an intense cold wave entered India from the westward.

January 23rd.—The following gives 8 A.M. data for

Baluchistan, Kashmir and the extreme north-west of India:—

STATION.	PRESSURE. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	PRESSURE. Change in past 24 hours.	PRESSURE. Departure from normal.	WIND. Direction at 8A.M.	WIND. Average hourly velocity in miles during past 24 hours.	Cl. ud.	Rainfall.	REMARKS.
	"	"	"				Inch.	
Quetta		+·110	+·020	Calm.	3	0	—	Frosty.
Chaman		+·043	+·076	NNE	8	0	—	
Murree		+·241	−·090	SSE	4	0	0·20	Snow-storm.
Srinagar		+·275	−·172	NNW	9	4	—	
Leh		+·158	−·387	W	7	8	—	Frosty.
Peshawar	30·310	+·413	+·122	Calm.	4	4	—	Frosty.
Rawalpindi	·271	+·383	+·114	WNW	3	0	—	
Khushab	·254	+·361	+·156	NW	12	0	—	Gale.
D.I. Khan	·302	+·391	+·196	NW	9	0	—	Gale.
Multan	·228	+·303	+·133	N	4	0	—	
Montgomery	·232	+·303	+·140	NW	6	0	—	
Lahore	·201	+·302	+·113	NW	3	0	—	Frosty.
Sialkot	·199	+·335	+·116	W	4	0	—	

A very rapid increase of pressure had occurred over the above region and the deep depression had apparently filled up. The rainfall and snowfall in the north-west had been relatively light, but showers had extended eastward over northern and north-eastern India. The winds had changed to north-west and perhaps the most marked feature of the weather on this day was the cold wave which was spreading over the country.

Quiet weather prevailed over the Indian area on the 24th, but the barometer was falling over Persia and on the 26th a fresh depression was shown over Baluchistan whence moderate to heavy snow was reported. The depression was still over Baluchistan on the 27th. Snow continued to fall at Quetta and Chaman and rain on the plains and snow on the hills of north-west India. This depression did not apparently enter India, but the weather was very unsettled over north-west India on the 28th and pressure was very low over and at the foot of the Kashmir Himalayas. The lowpressure area over the Himalayas deepened during the day and rain and snow were reported from that area on the 29th. On the two following days fine weather with anticyclonic conditions prevailed over the Indian area.

Pressure.

The barometers in use at the great majority of stations in India are mercurial barometers on Fortin's principle and are generally Casella's small observatory standards with tubes 0·4 inch in diameter.

Casella's observatoty barometers on the Kew principle (with a contracted scale to compensate for changes of level of the mercury in the cistern) are in use at the following stations:—

Aden.	Dinajpur.	Mymensingh.
Akyab.	Dunga (Zanzibar).	Negapatam.
Arrah.	Faridpur.	Noakhali.
Barisal.	Gorakhpur.	Nowgong.
Bhamo.	Jacobabad.	Perim.
Bogra.	Jalpaiguri	Rangoon.
Bushire.	Mangalore.	Rangpur.
Chapra.	Midnapore.	Sambhar.
Cochin.	Monywa.	Tavoy.
Comilla.	Moulmein.	Toungoo.
Cuddapah.		Zanzibar.

The instruments at the following stations are by various makers and of various kinds:—

Dehra.	Patiala.	Trivandrum.
Katmandu.	Six Islands (Chagos).	Wellington.
Kurnool.		

At Bombay and Calcutta large Newman's standards on Fortin's principle, with adjustable scales and tubes of more than 0·5" in diameter, are in use.

All instruments are carefully compared at Calcutta before issue, and their corrections determined to the Calcutta standard, which is believed to be ·011" higher than the Kew standard.

The barometers are kept in all cases in masonry buildings to protect them as much as possible from changes of temperature.

The heights above mean sea-level of the barometers of all stations given in table I which have been obtained as accurately as possible by actual measurement are given in Roman figures. In the great majority of cases they have been referred to datum levels determined by the Great Trigonometrical Survey of India; of the remaining stations, those heights which have been determined barometrically are printed in italics and those which are only approximate are indicated by a note of interrogation.

The readings of the barometers are reduced to 32° F. and from 1st January 1905, are corrected to constant gravity in all cases. They are reduced to sea-level in the cases of stations the elevations of which are accurately known and are below 3,200 feet. Each reading is separately corrected and the means of the month are the means of the daily corrected readings.

In Table I, columns 4 to 11, under the general heading "Pressure, 8 A.M., in inches," are given for each station the 8 A.M. barometric data of the month, including the mean 8 A.M. pressure reduced to 32° F., and its departure from the normal mean pressure (reduced to 32° F.) of the month, the mean 8 A.M. pressure corrected to sea-level, and to constant gravity, or to constant gravity only in case of stations the elevations of which are above 3,200 feet, the highest and the lowest pressures recorded during the month, and their respective dates of occurrence and the total range of 8 A.M. pressure during the month.

In Table II, columns 4 to 9, under the general heading "Pressure," are given the monthly means of the two hours of observation, 10 A.M. and 4 P.M., reduced to 32° F., the mean daily range, the mean of daily mean pressures reduced to 32° F., and its departure from the normal and the mean of daily mean pressures reduced to 32° F., and

corrected to constant gravity and sea-level, or to constant gravity only in case of stations the elevations of which are above 3,200 feet for all stations recording observations at 10 hours and 16 hours. The means of daily pressures have been obtained for stations by taking the means of the 10 and 16 hours' observations and applying corrections for each month, derived from the observations of the same or neighbouring stations, to give true daily means.

The distribution of the mean 8 A.M. pressure of the month is shown by means of two charts. The first chart (Plate I) shows the distribution of the mean pressure of the month reduced to sea-level and to constant gravity (that of Lat. 45°) by means of isobars drawn for differences of pressure of 0·05 or $\frac{1}{20}$ of an inch. The second chart (Plate II) gives the departures of the actual mean 8 A.M. pressure reduced to 32° F. from the normal pressure.

The normal 8 A.M. daily and monthly means of pressure utilized in the pressure section of the review have been deduced from the barometric observations of the twenty two years' period 1878—99, the same period being selected for all stations (with ten or eleven exceptions) in order that the means may be fairly comparable.

A small chart, No. 2 of Plate IV gives the distribution of the monthly mean daily pressure corrected to standard gravity and to sea-level, and of the mean winds; it is in the same form and manner as in the monthly charts issued with the annual reports on the meteorology of India previous to the year 1891. The data on which this chart is based will be found in Table II.

The monthly means employed in the determination of the departures of the mean actual from the mean normal pressures of the month given in Table II are derived from all the available trustworthy pressure data for each station. These normal means are given in the "Indian Meteorological Memoirs," Vol. XVII, pages 66 to 69.

The more important barometric changes and movements during the month are described in the statement of depressions and cyclonic storms of the month. The data that are chiefly used in that discussion are the 8 A.M. reduced observations and the departures derived from comparison of these observations with the normal daily 8 A.M. values.

The mean 8 A.M. pressure of the whole Indian land area for the month of January 1905 was 0·019″ above the normal. The mean pressure of the month exceeded the normal at all stations except those for which comparative data are given below :—

STATION.	Departure from normal of mean 8 A.M. pressure of January 1905.
	″
Peshawar	—·018
Jubbulpore	—·005
Nowgong	—·004
Chaibassa	—·002

The excess was greatest along the West Coast (0·040″), was slight over the south of the Peninsula and in Burma and was least and less than 0·020″ over the interior of India and of the Peninsula.

This general excess of pressure was accompanied with a fairly general deficiency of temperature, but it is worthy of note that the greatest local excess of atmospheric pressure accompanied the least local deficiency of temperature.

The following pressure and temperature departure data for the larger provinces are given in illustration :—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure, January 1905.	Departure from normal of mean temperature, January 1905.
	″	″
Burma Coast and Bay Islands	+·030	—0·7
Burma Inland	+·036	—1·9
Assam	+·011	—2·1
Bengal and Orissa	+·019	—1·3
Gangetic Plain and Chota Nagpur	+·013	—2·2
Upper Sub-Himalayas	+·012	—3·3
Indus Valley and North-West Rajputana	+·020	—3·7
East Rajputana, Central India and Gujarat	+·015	—2·4
Deccan	+·009	—0·7
West Coast	+·035	—0·7
South India	+·023	+0·5

The actual distribution of the mean 8 A.M. pressure of the month is shown in Plate I. Pressure was highest (30·10″ to 30·15″) over the extreme north-west of the Indian region and was lowest (29·950″) in the extreme south. The barometric gradient was slighter than usual.

Allowing for the general excess and thus obtaining the departures of pressure from the geographical mean the figures show that pressure was locally in defect over the North-West Frontier Province, the greater part of the Punjab and the whole of the interior districts of India and of the Peninsula. The local deficiency was greatest at Peshawar, but exceeded 0·02″ at a few central stations. The following gives data :—

STATION.	Departure from normal of mean 8 A.M. pressure of January 1905.	Pressure anomaly January 1905.
	″	″
Peshawar	—·018	—·037
Jubbulpore	—·005	—·024
Nowgong	—·004	—·023
Chaibassa	—·002	—·021

Over Sind, over the coast districts of the Peninsula, over Ceylon, over Burma and over part of north-west

India the mean pressure was in local excess and at the following stations this excess equalled or exceeded 0·02″:—

STATION.	Departure from normal of mean 8 A.M. pressure of January 1905.	Pressure anomaly January 1905.
	″	″
Trivandrum	+·047	+·028
Hyderabad Sind	+·044	+·025
Karwar	+·043	+·024
Pamban	+·042	+·023
Thayetmyo	+·042	+·023
Surat	+·041	+·022
Ratnagiri	+·040	+·021
Mormugao	+·039	+·020
Veraval	+·039	+·020

The pressure conditions prevailing at the level of the hill stations were, except in the extreme south, in marked contrast with those prevailing on the neighbouring plains. There was a general deficiency in the higher atmospheric strata. The deficiency was greatest in the north-west where apparently it increased with elevation and was as much as 0·113″ at Leh (11,503 feet). The vertical pressure gradient was consequently much steeper than usual. The following gives data for ten pairs of stations :—

HILL STATION.	Departure from normal pressure.	PLAIN STATION.	Departure from normal pressure.	Departure of pressure difference.
	″		″	″
Quetta	—·033	Jacobabad	+·039	+·072
Leh	—·113	Lahore	+·007	+·120
Murree	—·053	Peshawar	—·018	+·035
Simla	—·041	Ludhiana	+·016	+·057
Chakrata	—·033	Roorkee	+·018	+·051
Ranikhet	—·027	Bareilly	+·020	+·047
Darjeeling	—·029	Dhubri	+·013	+·042
Mount Abu	—·021	Deesa	+·013	+·034
Pachmarhi	—·021	Khandwa	+·006	+·027
Wellington	+·013	Coimbatore	+·022	+·009

The excess in the Leh-Lahore district was as much as ·120.″

The slight high pressure conditions which prevailed over north-west India did not extend westward into Persia or northern Arabia, where the mean pressure of the month was in trifling defect. On the other hand, the more marked excess which prevailed over the west and south of the Indian region extended westward over the Indian Ocean to southern Arabia and the Sudan and southward over Ceylon into the south-east Trades region. The following comparative data indicate the extent and area of these departures :—

STATION.	Departure from normal of mean 8 A.M. pressure of January 1905.
	″
Trincomalee	+·038
Colombo	+·026
Amini Divi	
Bushire	—·006
Jask	—·040
Muscat	—·005
Baghdad	+·043
Aden	+·017
Perim	+·028
Zanzibar	+·022
Seychelles	+·024
Mauritius	—·036

The most important abnormal features of the pressure distribution in the Indian area may be summed up as follows :—

(1) There was a general excess of pressure over the plains of India.

(2) Relatively to the general condition there was a deficiency of pressure over the inland districts of India and an excess over the coast districts and in Burma.

(3) There was a general deficiency at the level of the hill stations increasing towards north-west.

(4) The vertical pressure gradient was greater than usual generally and in the Lahore-Leh region the departure of pressure difference was +0·120″.

The following table gives the mean pressure departures and anomalies of the month for the eleven meteorological provinces of India :—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of January 1905.	Pressure anomaly, January 1905.
	″	″
Burma Coast and Bay Islands	+·030	+·011
Burma Inland	+·036	+·017
Assam	+·011	—·008
Bengal and Orissa	+·019	0
Gangetic Plain and Chota Nagpur	+·013	—·006
Upper Sub-Himalayas	+·012	—·007
Indus Valley and North-West Rajputana	+·020	+·001
East Rajputana, Central India and Gujarat	+·015	—·004
Deccan	+·009	—·010
West Coast	+·035	+·016
South India	+·023	+·004

Temperature.

The mean temperature data are given in Table I and Table II under the heading "Temperature of air." In Table I they are based upon observations of the dry bulb thermometers recorded at 8 A.M. and the maximum and minimum thermometers. The departures of the mean maximum and mean minimum temperatures from the corresponding normal means for the month are given in Table I for all stations, for which twenty two years' trustworthy temperature observations are available. With few exceptions (chiefly in Bengal), the normal mean maximum and minimum temperatures of the month have been obtained for all stations from the observations of the same period, *viz.* 1878 to 1899, and are hence fairly comparable with each other. The mean of daily mean temperature in this table is taken as the mean of the maximum and minimum. It differs from the true mean of the day by small amounts which vary from month to month.

It should be noted that the mean temperature of the day in Table I really denotes the mean temperature of the 24 hours preceding 8 A.M. of the day in question, and the month for which the means are given in this table hence terminates at 8 A.M. of the last day of the month.

In Table II the mean of daily mean temperature for each month is obtained by taking the mean of the maximum and minimum temperatures and applying a correction given in Table A, pages XV to XXI, of Vol. XVII of the "Indian Meteorological Memoirs." This correction was determined from the hourly observation data given in Volumes V, IX, and X of the "Indian Meteorological Memoirs." The data at once furnish the necessary corrections for the stations at which these observations were recorded. At the remaining stations the corrections were determined from the values of the nearest stations of similar conditions of exposure, etc., at which the hourly observations were recorded. For the station of Madras the means are those given in the registers sent by that observatory.

The methods of exposing thermometers will be found fully described in the hand-book of instructions to observers in India or briefly in the Annual Report on the Meteorology of India for the year 1886, page 37. All thermometers in use have been verified by comparison with Kew standard thermometers at Calcutta, and all thermometer readings are corrected to their true readings, and are hence strictly comparable.

The departures from normal of the mean of daily mean temperature of the month given in Table II have been obtained by a comparison of the actual means with normal means calculated in the same manner. The normal means derived from all the available trustworthy temperature data for each station are given in the "Indian Meteorological Memoirs," Volume XVII, pages 16 to 20. It should be noted that the day or 24 hours period in Table II terminates at midnight (and not at 8 A.M. as in Table I), and hence the monthly means are for monthly periods ending at midnight of the last day of the month in question.

The mean distribution of temperature in India in each month is exhibited by means of three charts, which show the departures of the mean maximum, mean minimum, and mean daily temperature from their normal values for the month. These charts are Nos. 1 and 2 of Plate III, and No. 1 of Plate IV. In these charts equal departures of temperature are indicated by lines, the lines being drawn for differences of 2° of departure. A continuous line indicates that the temperature was in excess by the amount indicated by the number given near the line, and a broken line that it was in defect by the amount indicated by the number placed near the line. The line of no departure, separating areas of excessive from areas of deficient temperature, consists of a continuous and of a broken line placed parallel and near to each other, the broken line being on the side of deficient temperature, and the continuous line on that of excessive temperature. The departures of the temperature of the month from the normal at the hill stations are given in figures with a positive or negative sign to indicate excess or defect.

Tables of normal mean maximum, minimum and mean of daily mean temperature for each month and for the whole year are given in pages 1 to 10 and pages 16 to 20 of the "Indian Meteorological Memoirs", Vol. XVII, based on the data for twenty five years, 1875 to 1899.

The mean maximum or day temperature of the month under review slightly exceeded the normal over the Madras, Deccan, Mysore and the extreme south of the Peninsula. The excess was more than 1°0 at the stations for which comparative data are given below:—

Station.	Mean maximum temperature.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	°	°	°
Cuddapah	90·3	88·4	+1·9
Negapatam	83·6	81·8	+1·8
Bangalore	81·8	80·2	+1·6
Hassan	83·0	81·5	+1·5
Tinnevelly	89·0	87·7	+1·3
Mysore	85·2	84·0	+1·2
Coimbatore	87·9	86·8	+1·1

In all other parts of the Indian region the mean maximum temperatures were lower than usual. The deficiency was generally larger and more marked in the west and north-west than in the east and north-east and the departures

from the normal exceeded 5° at the following large number of stations :—

STATION.	MEAN MAXIMUM TEMPERATURE.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	°	°	°
Lahore	60·9	69·0	−8·1
Jacobabad	66·3	73·6	−7·3
Sirsa	64·0	71·0	−7·0
Agra	66·8	73·5	−6·7
Delhi	64·1	70·7	−6·6
Bikaner	65·3	71·8	−6·5
Rawalpindi	56·6	63·1	−6·5
Montgomery	62·1	68·5	−6·4
Roorkee	63·2	69·6	−6·4
Ludhiana	61·0	67·2	−6·2
Dera Ismail Khan	62·9	69·1	−6·2
Sialkot	60·1	66·2	−6·1
Multan	64·3	70·2	−5·9
Bareilly	64·9	70·6	−5·7
Dehra Dun	60·7	66·2	−5·5
Jaipur	69·1	74·6	−5·5
Hyderabad Sind	71·4	76·8	−5·4
Pachpadra	73·1	78·4	−5·3
Peshawar	58·4	63·5	−5·1
Meerut	65·3	70·4	−5·1
Ratnagiri	82·6	87·7?	−5·1?
Goa	81·1	96·9	−5·8

The greatest deficiency in the day temperature was thus shown over the Central and South Punjab and upper Sind.

The mean day temperature was also lower than usual at all the hill stations except Wellington where it was in trifling excess. The deficiency exceeded 5° at the following places :—

HILL STATION.	MEAN MAXIMUM TEMPERATURE.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	°	°	°
Murree	38·6	47·2	−8·6
Ranikhet	47·5	54·5	−7·0
Chakrata	44·3	50·6	−6·3
Quetta	45·7	51·3	−5·6

The departures of the mean minimum temperatures from the normal were smaller than those of the mean maximum and were more irregular. The mean night temperature exceeded the average over Lower Burma, Orissa and south-west Bengal, the Deccan, Mysore and the south of the Peninsula and parts of the Gangetic Plain, of the Central and north Punjab, of the North-West Frontier Province and of upper Sind. The departures were generally small but equalled or exceeded 2° at the following places :—

PROVINCE OR DIVISION.	STATION.	MEAN MINIMUM TEMPERATURE.		
		Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
		°	°	°
CHOTA NAGPUR	Chaibassa	55·4	53·1	+2·3
DECCAN	Kurnool	62·1	58·7	+3·4
DECCAN	Cuddapah	66·4	64·4	+2·0

In all other parts of the country the mean night temperature was lower than usual, the largest departures (exceeding 2°) from the average having been as follows:—

PROVINCE OR DIVISION.	STATION.	MEAN MINIMUM TEMPERATURE.		
		Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
		°	°	°
NORTH-WEST INDIA.	Bikaner	45·4	49·6	−4·2
NORTH-WEST INDIA.	Hyderabad Sind	47·8	51·1	−3·3
NORTH-WEST INDIA.	Bhavnagar	53·4	56·1	−2·7
NORTH-WEST INDIA.	Bhuj	52·0	54·4	−2·4
NORTH-WEST INDIA.	Neemuch	46·3	48·7	−2·4
NORTH-WEST INDIA.	Dehra Dun	42·7	44·8	−2·1
NORTH-EAST INDIA	Dhubri	49·7	53·1	−3·4
NORTH-EAST INDIA	Gaya	49·4	51·6	−2·2
MADRAS COAST	Madras	65·2	67·4	−2·2

The western desert was hence the centre of the greatest defect of night temperature. The lowest night temperatures of the month were recorded almost everywhere, both in North-West India and in the countries to the westward, between the 20th and the 31st. The following gives the more important minima recorded during the month

under review and the lowest readings hitherto recorded at the same stations:—

Station.	Lowest minimum temperature recorded in January 1905.	Date on which recorded.	Lowest minimum temperature recorded in January previous to 1905.	Year in which recorded.
	°		°	
Baghdad	20·8	27th	24·0	1894
Teheran	3·0	28th	7·0	1904
Ispahan	−2·8	29th	−4·2	1898
Meshed	−1·0	22nd	−11·0	1895
Chaman	13·1	23rd	15·1	1897
Kalat	0	23rd	−6·4	1897
Murree	12·0	30th	18·0	1897
Srinagar	20·6	24th	6·1	1893
Simla	18·2	23rd	19·2	1893
Peshawar	27·9	31st	28·8	1878 and 1880.
Montgomery	27·5	23rd	30·5	1902
Multan	29·0	30th and 31st.	29·0	1878
Sirsa	29·0	31st	30·0	1878
Jacobabad	25·0	23rd	30·3	1885
Hyderabad	33·5	30th	36·0	1900
Bikaner	33·1	30th	35·0	1878
Jaipur	28·1	31st	33·0	1900
Jodhpur	28·1	31st	34·6	1897
Indore	31·1	24th	36·1	1900
Neemuch	29·8	24th	37·0	1899

The preceding data show that at Baghdad, Teheran, Chaman, Murree, Simla, Peshawar, Montgomery, Sirsa, Jacobabad, Hyderabad, Bikaner, Jaipur, Jodhpur, Indore and Neemuch, the temperatures were lower than any previously recorded at those stations.

The mean temperature of the month slightly exceeded the normal over the inland districts of the southern half of the Peninsula, but was lower than usual in all other parts of the country. The excess, though everywhere unimportant, was greatest at Cuddapah (+2°·0); at Kurnool (+1°·7); and at Salem (+1°·6), while the deficiency was considerable over northern India and was largest over the western desert. The departures from the normal exceeded −4°·0 at the following places:—

Station.	Mean temperature.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	°	°	°
Bikaner	55·4	60·8	−5·4
Hyderabad (S)	59·6	64·0	−4·4
Sirsa	52·8	57·1	−4·3
Montgomery	51·3	55·4	−4·1

With the exception of Wellington and Srinagar, the mean temperature was below the normal at all the hill stations. The deficiency was greatest at the stations on the outer ranges of the Himalayas and exceeded 4° at the following places:—

Hill Station.	Mean temperature.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	°	°	°
Murree	33·5	41·7	−8·2
Ranikhet	41·4	47·3	−5·9
Chakrata	37·8	43·4	−5·6
Quetta	36·2	40·3	−4·1

These relatively low mean temperatures appear to have been largely attributable to the cold of the period from the 20th to the 31st. The observer at Kabul states that "up to the 16th of January the temperature had not been very low, but on the 20th a very piercing wind began to blow which did not cease before the end of the month." A similarly sudden change seems to have occurred in north Persia where at Meshed the minimum temperatures were 32° on the 17th, 18th and 19th January, 29° on the 20th, 5° on the 21st and −1° on the 22nd. This appears to have been also the experience of the greater part of northern India, etc., where the temperature of the first-half of the month was of about the normal character, while in the latter half it was abnormally low. The following gives comparative data in illustration:—

Mean temperature of

Stations.	Baghdad.	Kabul.	Quetta.	Peshawar.	Murree.	Lahore.	Simla.	Jaipur.	Jacobabad.	Allahabad.
	°	°	°	°	°	°	°	°	°	°
First-half of month.	50·5	34·1	42·8	52·6	37·5	54·6	39·6	60·3	59·1	59·7
Second-half of month.	40·9	24·2	30·7	45·8	29·2	49·2	33·6	55·9	50·8	58·5
Normal temp. of month.	49·2	31·5	40·3	51·6	41·7	54·9	39·6	61·3	58·4	61·2

The following gives temperature departure data for the extra-Indian stations:—

Station.	Mean temperature. Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	°	°	°
Trincomalee	78·1	79·0	—0·9
Colombo	79·5	79·9	—0·4
Kashgar	24·4	22·4	+2·0
Kabul	29·0	31·5	—2·5
Teheran	34·2	34·3	—0·1
Ispahan	32·8	34·8	—2·0
Bushire	56·1	57·9	—1·8
Jask	65·5	67·1	—1·6
Muscat	69·5	69·8	—0·3
Baghdad	45·5	49·2	—3·7
Aden	74·3	75·7	—1·4
Perim	76·7	77·1	—0·4
Zanzibar	82·6	81·9	+0·7
Seychelles	79·3	78·5	+0·8
Mauritius	78·7	78·9	—0·2

The preceding data show that except at Kashgar, Zanzibar and Seychelles the mean temperature of the month was everywhere below the normal and that the deficiency was considerable at Kabul, Ispahan and Baghdad.

The following table gives the mean temperature data of the month for the 57 meteorological divisions of the empire:—

Province.	Division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during the month.	Departure from normal of month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	87·4	66·7	77·1	20·7	29·6	—0·9	+0·7	—1·6
	Lower Burma (Deltaic)	83·3	66·7	75·0	16·7	23·7	—2·9	+1·1	—4·0
	Central do.	84·4	53·8?	69·1?	30·6?	39·1?	—1·2	—1·8?	+0·6?
	Upper do.	80·2	53·5	66·9	26·7	37·3	—3·4	—0·3	—3·1
	Arakan	78·9	59·3	69·1	19·6	32·8	—2·5	0	—2·5
Bengal and Assam	Eastern Bengal	74·9	52·9	63·9	22·0	34·8	—1·9	—0·6	—1·3
	Assam (Surma)	75·3	51·9	63·6	23·4	38·9	—2·5	—0·4	—2·1
	Do. (Hills)	57·7	40·8	49·3	16·9	32·4	...	...	...
	Do. (Brahmaputra)	70·4	49·2	59·9	21·2	31·1	—2·4	—2·5	+0·1
	Deltaic Bengal	75·8	55·3	65·6	20·5	36·0	—1·9	—0·2	—1·7
	Central do.	74·2	52·6	63·4	21·5	37·7	—2·6	—0·3	—2·3
	North do.	71·9	49·2	60·6	22·7	33·9	—2·1	—1·6	—0·5
	Bengal Hills	42·1	25·5	33·8	16·6	29·4	—2·8	—2·2	—0·6
	Orissa	79·2	59·8	69·5	19·4	34·3	—2·2	+0·4	—2·6
	Chota Nagpur	73·7	50·8	62·3	22·9	40·4	—3·3	+0·1	—3·4
	Bihar (South)	71·3	49·7	60·5	21·6	39·5	—3·5	—1·3	—2·2
	Do. (North)	70·5	47·6	59·1	23·0	37·2	—2·7	—0·6	—2·1
United Provinces of Agra and Oudh.	United Provinces (East)	70·1	47·6	58·8	22·6	41·8	—4·3	—0·5	—3·8
	Oudh (South)	69·9	46·1	58·0	23·8	46·1	—4·1	—0·6	—3·5
	Do. (North)	68·9	46·4	57·7	22·5	43·5	—3·5	—0·7	—2·8
	United Provinces (Central)	70·1	47·8	58·9	22·3	45·9	—3·9	—0·4	—3·5
	Do. (West)	66·1	46·5	56·3	19·6	43·2	—5·9	—0·4	—5·5
	Do. (East Submontane).	68·5	47·7	58·1	20·8	36·1	—4·4	—1·5	—2·9
	Do. (West Submontane).	62·9	43·8	53·4	19·1	41·3	—5·9	—1·3	—4·6
	Do. (Hills)	44·8	32·7	38·8	12·0	31·9	—6·7	—4·8	—1·9
Punjab	Punjab (South-East)	64·1	46·0	55·1	18·1	37·7	—6·6	—1·9	—4·7
	Do. (South)	62·9	42·6	52·8	20·4	42·2	—7·0	—1·5	—5·5
	Do. (Central)	60·9	42·7	51·8	18·3	37·7	—8·1	+2·0	—10·1
	Do. (Submontane)	60·2	42·4	51·4	17·8	36·4	—5·9	+0·4	—6·3
	Do. (Hills)	35·9	20·4	28·2	15·5	39·6	—3·5	—1·7	—1·8
	Do. (West)	63·0	41·3	52·2	21·7	45·3	—5·8	—1·0	—4·8

Province.	Division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Departure from normal of month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
N.-W. F. Province	North-West Frontier Province	60·6	39·5	50·1	21·1	42·3	—5·7	—0·5	—5·2
Bombay and Malabar Coast Districts (Madras).	Malabar	86·7	71·3	79·0	15·4	21·7	—0·5	+0·5	—1·0
	Madras (South Central)	88·9	65·2	77·1	23·7	34·3	+1·4	+1·4	0
	Coorg	77·5	56·0	66·8	21·5	28·9	—0·2	—0·6	+0·4
	Mysore	83·6	58·4	71·0	25·3	32·1	+1·2	+0·5	+0·7
	Konkan	82·2	67·6	75·0	14·6	26·8	—2·7	—0·7	—2·0
	Bombay Deccan	84·1	56·5	70·3	27·6	35·8	—1·6	—0·2	—1·4
	Hyderabad (North)	82·2	56·5	69·4	25·7	35·2	...	...	...
	Khandesh	83·7	51·7	67·7	32·0	46·6	—1·2	+0·4	—1·6
Central Provinces and Berar.	Berar	84·4	55·2	69·8	29·2	42·7	—0·6	—0·1	—0·2
	Central Provinces (West)	82·1	52·7	67·4	29·4	44·6	—0·5	—0·6	+0·1
	Do. (Central)	79·0	50·6	64·8	28·4	47·6	—0·8	—0·7	—0·1
	Do. (East)	77·3	53·2	65·3	24·1	39·6	—3·1	—0·3	—2·8
Bombay (North)	Gujarat (East)	82·3	54·1	68·2	28·1	51·5	—2·9	—0·7	—2·2
	Kathiawar and Cutch	78·2	53·9	66·1	24·3	44·8	—3·6	—1·8	—1·8
	Sind	70·2	48·1	59·1	22·1	47·2	—5·6	—1·5	—4·1
	Baluchistan Hills	47·5	28·8	38·2	18·7	54·3	—4·3	—2·6	—1·7
Rajputana and Central India.	Central India (East)	73·5	47·5	60·6	26·0	48·7	—3·3	—0·8	—2·5
	Rajputana (East), Central India (West)	70·8	46·9	58·9	23·9	50·1	—4·6	—0·1	—4·5
	Do. (West)	70·2	45·8	58·0	24·5	50·5	—5·9	—2·9	—3·0
Madras	East Coast (North)	80·3	65·1	72·7	15·2	24·4	—0·4	+0·6	—1·0
	Hyderabad (South)	85·5	61·2	73·3	24·3	33·4	—0·4	+1·1	—1·5
	Madras (Central)	89·1	63·6	76·4	25·5	36·4	+0·9	+2·4	—1·5
	East Coast (Central)	84·2	65·1	74·7	19·1	28·0	—0·6	—0·7	+0·1
	Do. (South)	84·3	66·6	75·5	17·7	28·5	+0·3	—0·5	+0·8
	Madras (South)	87·1	69·4	78·3	17·7	26·7	+0·8	—0·7	+1·5

The hottest areas were South Madras with a mean temperature of 78°·3 and Malabar with a mean of 79°·0, while the coolest area on the plains was the North-West Frontier Province with a mean of 50°·1. Both the mean maximum and the mean minimum temperatures were lower than usual over nearly the whole country and the mean daily range was less than usual almost everywhere. In the Central Punjab the mean daily range was 10° less than the average and in the west of the United Provinces, in the South Punjab, the Submontane Punjab and the North-West Frontier Province it was more than 5° less.

The following summarises the chief features of the mean temperature conditions of the month:—

(1) Lower temperatures than usual, both by day and night, prevailed over the greater part of the country.

(2) The day temperature was in moderate to large defect along the West Coast and over the whole of north-west India and of the Gangetic Plain, but was in slight excess in the south Deccan, Mysore and the extreme south of the Peninsula.

(3) The mean day temperature was lower than usual at all the hill stations except Wellington.

(4) The mean minimum temperature was lower than usual except over Lower Burma, south-west Bengal and Orissa, the Deccan, the extreme south of the Peninsula, part of the Gangetic Plain, upper Sind, the submontane districts of the North-West Frontier Province and the Central and north Punjab.

The following table gives mean comparative data of temperature for the eleven meteorological provinces or divisions into which India is divided :—

Meteorological Province.	Departure from normal of Mean maximum temperature, January 1905.	Mean minimum temperature, January 1905.	Mean temperature, January 1905.
	°	°	°
Burma Coast and Bay Islands	—1·8	+0·4	—0·7
Burma Inland	—3·4	—0·3	—1·9
Assam	—2·4	—1·8	—2·1
Bengal and Orissa	—2·1	—0·5	—1·3
Gangetic Plain and Chota Nagpur	—3·7	—0·6	—2·2
Upper Sub-Himalayas	—6·2	—0·4	—3·3
Indus Valley and North-West Rajputana.	—5·7	—1·6	—3·7
East Rajputana, Central India and Gujarat.	—3·9	—0·8	—2·4
Deccan	—1·2	—0·1	—0·7
West Coast	—1·4	0	—0·7
South India	+0·6	+0·4	+0·5

The following gives a brief account of the more important temperature changes during the month :—

During the first twenty days of the month the daily temperature changes were irregular. On the first three days the mean temperature was low except over north Bombay and the adjoining districts of Central India, Rajputana, etc. The deficiency was greatest over the Gangetic Plain, where both the day and night temperatures were from 5° to 9° lower than usual. On the 3rd, 4th and 5th scattered showers of snow on the hills and of rain on the plains, occurred in the north-west and the high temperatures disappeared from north Bombay, etc. Between the 6th and the 9th the temperature changes and the distribution of the departures from the normal were irregular, the principal features of the distribution having been the low temperatures over the western desert and over north-east India. The following gives data for all divisions from the 6th to the 9th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	6th January.	7th January.	8th January.	9th January.
	°	°	°	°
Burma	+0·6	+0·2	−0·3	−0·5
Assam	0	−0·2	−1·7	−1·8
Bengal	+0·7	+0·2	−0·3	−1·5
Orissa	−2·9	−2·2	−2·2	−1·5
Bihar	+0·3	+1·3	+0·8	−3·7
Chota Nagpur	−0·2	−0·1	+0·1	−2·4
United Provinces of Agra and Oudh.	−1·7	+1·0	−1·7	−2·8
Punjab	−1·1	−0·4	−1·1	−0·6
North-West Frontier Province	+0·1	+0·7	+1·1	0
Sind	−3·7	−3·6	−3·0	−0·2
Baluchistan	−3·3	−2·9	+0·6	+4·9
Rajputana	−1·5	−2·3	−3·9	−2·2
Gujarat	−2·5	−1·1	+0·2	+2·7
Central India	+0·1	+2·1	−1·7	−2·3
Central Provinces	+0·2	+0·1	−1·8	−0·4
Berar	+1·3	−1·8	−0·5	+0·7
West Coast	−1·6	+0·1	+1·0	+2·0
Bombay Deccan	−2·4	+0·9	+1·4	−0·6
Mysore	+1·2	+2·6	+4·8	+0·6
Madras Coast	+0·2	+0·7	0	−1·1
Madras Deccan	−1·1	+0·7	+1·1	−0·2
South India	+1·7	+1·9	+2·5	−0·9

Between the 10th and the 17th the weather was feebly unsettled over northern India, showers of snow falling occasionally over the north-west Himalayas and showers of rain over north-west and north-east India. In consequence the mean temperature was unsteady. It was, however, generally low over the coasts of the Peninsula and over north-east India and Burma and generally high elsewhere, though the departures from the normal were not large or important. The following gives departure data for all districts for each alternate day from the 11th to the 17th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	11th January.	13th January.	15th January.	17th January.
	°	°	°	°
Burma	−1·9	−0·7	−1·1	−0·1
Assam	−3·0	−0·3	−2·9	−1·0
Bengal	−2·1	+0·8	−2·0	−0·3
Orissa	+0·7	+2·2	−2·3	−0·9
Bihar	−3·6	−0·5	−1·0	−3·3
Chota Nagpur	−1·4	+1·1	−3·5	−3·7
United Provinces of Agra and Oudh.	−2·3	−1·3	+0·9	−3·1
Punjab	+0·4	+1·3	−1·4	−0·4
North-West Frontier Province	+1·6	+0·8	−3·2	−0·5
Sind	+2·9	+3·0	+4·3	+5·1
Baluchistan	+6·9	+7·1	−0·1	+7·0
Rajputana	+1·1	+1·5	+2·2	+2·5
Gujarat	+1·1	+0·9	+0·7	+2·7
Central India	+0·9	−1·7	+1·3	−1·9
Central Provinces	+2·0	+0·0	+1·5	−2·7
Berar	+1·8	−0·1	+2·3	−0·1
West Coast	−0·7	−1·7	+1·4	−1·0
Bombay Deccan	+0·9	−0·2	+1·4	+1·0
Mysore	+0·1	+1·6	+0·8	+1·4
Madras Coast	−0·7	−1·3	−1·0	−0·3
Madras Deccan	+0·6	+0·7	+3·1	+2·9
South India	+2·0	+1·3	−0·6	−0·8

On the 17th when the sky was cloudy the minima were high in parts of north-west India and of Baluchistan and were more than 7° above the normal at the following stations :—

Date.	Station.	Minimum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
17th January	Jacobabad	55·5	43·5	+12·0
	Quetta	38·8	29·6	+ 9·2
	D. I. Khan	49·6	40·7	+ 8·9
	Multan	50·9	43·4	+ 7·5
	Kurrachee	61·7	54·4	+ 7·3

On the 18th and 19th showers of snow occurred on the north-west Himalayas and of rain on the plains of northern India, and from the 18th to the 20th temperature was low over northern India—more particularly in Sind, Gujarat, the United Provinces and Bihar—and high over the Peninsula. The following gives data for all districts :—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	18th January.	19th January.	20th January.
	°	°	°
Burma	−0·3	−0·2	−1·3
Assam	−1·4	−1·6	−1·6
Bengal	−1·4	−0·1	−1·1
Orissa	−2·2	0	−0·4
Bihar	−2·6	−6·4	−3·1
Chota Nagpur	−1·7	−2·3	−1·4
United Provinces of Agra and Oudh	−0·5	−4·0	−4·2
Punjab	+0·2	−2·0	−1·0
North-West Frontier Province	−1·7	−0·4	+1·3
Sind	−3·8	−3·1	−0·5
Baluchistan	−2·2	+3·2	+4·6
Rajputana	−1·5	−1·2	−2·7
Gujarat	−0·7	−3·8	−4·8
Central India	−0·3	−2·0	−4·8
Central Provinces	+1·3	+1·5	−1·8
Berar	+3·3	+0·5	−2·9
West Coast	−1·1	−0·9	−1·8
Bombay Deccan	+1·9	−0·4	−2·3
Mysore	+0·8	−0·1	+3·0
Madras Coast	−0·2	−0·5	+0·5
Madras Deccan	+2·4	+0·7	+3·1
South India	−0·6	−1·0	+1·0

The effect of this disturbed weather was most strongly marked in the case of the day temperatures, which were more than 12° below the normal at the following places on the following days :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
18th January	Jacobabad	57·5	72·9	−15·4
19th "	Kanikhet	35·5	54·0	−18·5
	Ambala	50·7?	67·9?	−17·2?
	Gaya	59·4	76·5	−17·1
	Chakrata	33·5	50·1	−16·6
	Dehra Dun	50·0	66·1	−16·1
19th January	Benares	59·4	74·8	−15·4
	Allahabad	59·9	74·7	−14·8
	Gorakhpur	59·4	73·4	−14·0
	Roorkee	56·0	69·9	−13·9
	Patna	60·0	73·4	−13·4
	Darbhanga	60·2	73·0	−12·8
	Bikaner	59·1	71·4	−12·3
20th "	Sambalpur	65·1	83·0	−17·9
	Sutna	57·4	75·2	−17·8
	Jhansi	59·7	76·6	−16·9
	Allahabad	57·9	74·7	−16·8
	Benares	60·9	74·7	−13·8
	Raipur	69·6	82·3	−12·7

On the 21st, a deepish depression entered north-west India from the westward, and moderate to heavy rain and snow fell over north-west India and the surrounding mountains and continued during the 22nd. This precipitation was followed by a very intense cold wave. It appeared on the North-west Frontier on the 21st and had extended as far as Gujarat, western Rajputana and the east Punjab by the morning of the 22nd; the West Coast, the west of the Central Provinces and the west of the United Provinces by the 23rd; Chota Nagpur by the 24th; the whole of northern and central India by the 25th; and Upper Burma by the 26th. Madras and Lower Burma were thus the only regions unaffected. The following gives temperature departure data for all districts from the 22nd to the 26th :—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	22nd January.	23rd January.	24th January.	25th January.	26th January.
	°	°	°	°	°
Burma	−1·6	−2·3	−0·3	−0·7	−2·7
Assam	−2·4	+0·1	−1·0	−6·0	−7·5
Bengal	+0·2	+1·1	+0·1	−7·9	−9·5
Orissa	+1·7	+3·1	+3·7	−2·9	−8·0
Bihar	+0·7	+2·0	−3·5	−11·2	−9·9
Chota Nagpur	+1·7	+2·8	−3·1	−9·7	−9·6
United Provinces of Agra and Oudh.	+1·2	−3·7	−11·7	−12·3	−8·5
Punjab	−6·4	−12·2	−14·2	−12·2	−7·5
N.-W. Frontier Province	−8·3	−14·8	−11·6	−10·1	−6·1
Sind	−9·3	−16·3	−15·6	−9·8	−5·8

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	22nd January.	23rd January.	24th January.	25th January.	26th January.
	°	°	°	°	°
Baluchistan	−19·9	−25·4	−17·8	−6·9	−3·2
Rajputana	−1·2	−13·0	−17·2	−13·4	−5·6
Gujarat	+1·1	−10·5	−15·5	−10·4	−2·1
Central India	+2·3	−3·7	−14·9	−11·2	−6·4
Central Provinces	+1·2	+1·4	−7·4	−9·5	−6·0
Berar	+0·7	+0·2	−7·3	−6·9	−3·3
West Coast	−1·6	−0·9	−2·1	−1·7	−0·7
Bombay Deccan	−1·7	−1·0	−3·8	−2·3	−1·1
Mysore	+3·1	+1·9	+2·2	+0·6	+1·9
Madras Coast	+1·7	+1·1	+1·1	+1·8	+0·8
Madras Deccan	+3·3	+2·9	+3·1	+2·8	+2·0
South India	+3·3	+3·2	+2·8	+3·0	+2·4

Intense cold, both by day and night, was experienced during the existence of this cold wave. The maximum or day temperatures were from 12° to 32° and the night temperatures from 8° to 26° below the normal. Severe frost was experienced both on the hills and plains and the minimum temperatures of 13·°1 at Chaman; 8·°5 (?) at Murree, 18·°2 at Simla, 25° at Jacobabad, 27·°5 at Montgomery and 35·°5 at Hyderabad (Sind) on the 23rd; 30° at Jaipur; 29·°8 at Neemuch and 31·°1 at Indore on the 24th; were lower than any readings hitherto reported from those stations. The following gives examples of a few of the more important low maximum and minimum temperatures and their departures from the normal recorded during this period:—

Date.	Hill or Plain Station.	Actual maximum of date.	Departure from normal.	Actual minimum of date.	Departure from normal.
		°	°	°	°
22nd January	Quetta	27·5	−22·9	12·8	−16·7
	Srinagar	40·4	+ 1·7	2·6?	−23·1?
	Jacobabad	56·0	−17·1	37·1	− 6·7
	Bikaner	67·0	− 4·4	39·1	−10·5
23rd "	Quetta	17·5	−32·8	8·8	−20·7
	Murree	22·0	−24·2	8·5	−26·0
	D. I. Khan	47·7	−20·7	33·0	− 8·1
	Jacobabad	54·6	−18·5	25·0	−18·8
24th "	Chaman	32·1	−20·5	16·6	−17·7
	Quetta	37·1	−13·1	9·8	−19·6
	Bikaner	49·1	−22·3	35·6	−14·0
	Neemuch	58·0	−19·7	29·8	−19·4
25th January	Leh	11·0	−18·1	0·9	− 7·1
	Murree	34·5	−11·6	24·0	−10·2
	Rawalpindi	42·9	−19·4	29·0	− 9·9
	Jaipur	60·2	−14·0	32·5	−15·5
26th "	Quetta	37·6	−12·5	32·8	+ 3·5
	Murree	43·6	− 2·4	26·0	− 8·1
	Multan	55·3	−14·3	41·0	− 2·9
	Chanda	84·1	− 2·9	43·1	−12·2

On the 27th and 28th a fresh fall of snow and rain occurred in the north-west where, owing to the previous cold weather, the snowfall descended to exceptionally low elevations. A fresh cold wave entered north-west India from the westward on the morning of the 27th and a very interesting temperature distribution resulted.

The cold wave which traversed northern India between the 22nd and the 26th had its trough over north-east India where the mean temperature was between 8° and 10° below the normal, while the fresh cold wave was appearing over the Indus Valley where the mean temperature was between 8·°7 and 9·°7 below the normal. Between these two areas of low temperature there existed a band of relatively high readings and over the west o the Peninsula, Gujarat, the west of Central India and the east of Rajputana the mean temperature was higher than usual. The reports of the 28th showed that the area of excessive temperature had moved northward and covered the Central India plateau and the Gangetic Plain, while the cold wave in the north-west had intensified and that in the north-east become slighter. Between the 29th and the 31st the whole system moved eastward, the eastern cold wave disappearing over Burma, the area of excessive temperature travelling from Rajputana to Bengal and the western cold wave advancing as far eastward as Bihar and Chota Nagpur. The following gives departure data for all divisions for the 27th to the 31st:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	27th January.	28th January.	29th January.	30th January.	31st January.
	°	°	°	°	°
Burma	−5·1	−5·1	−4·1	−2·4	−1·6
Assam	−7·6	−5·1	−3·8	−2·0	−0·4
Bengal	−8·1	−4·5	−0·1	+2·3	+0·7
Orissa	−5·8	−1·4	+1·7	+3·2	+2·8
Bihar	−5·9	−2·7	+1·5	+1·0	−2·1
Chota Nagpur	−6·0	−1·2	+4·6	+3·3	−0·9

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	27th January.	28th January.	29th January.	30th January.	31st January.
	°	°	°	°	°
United Provinces of Agra and Oudh.	−2·6	+1·2	+3·4	−2·7	−9·6
Punjab	−4·8	−4·3	−4·5	−11·5	−14·3
North-West Frontier Province.	−4·6	−8·9	−7·9	−12·3	−11·7
Sind	−7·3	−8·9	−10·7	−15·1	−16·0
Baluchistan	−2·2	−12·1	−19·1	−21·3	−19·6
Rajputana	−0·9	+2·9	−3·7	−11·7	−18·3
Gujarat	+1·6	+0·9	−5·5	−12·2	−15·2
Central India	−1·4	+3·8	+1·1	−5·0	−12·2
Central Provinces	−1·7	+2·0	+3·0	−0·5	−5·4
Berar	0	+3·2	+3·4	−3·4	−6·9
West Coast	+0·7	+0·2	−1·0	−2·4	−3·5
Bombay Deccan	+1·2	+1·9	+1·0	−3·3	−5·2
Mysore	+0·5	−1·1	−1·8	−1·3	+0·3
Madras Coast	−0·9	−0·6	−1·7	−1·4	−0·7
Madras Deccan	+0·2	+0·1	−0·8	−0·3	+0·3
South India	−0·1	+0·4	−2·1	−1·5	−0·1

The second cold wave was almost as intense as its predecessor and both the day and night temperatures on the hills and plains of north-west India between the 27th and 31st were as low and in some cases lower, than those recorded between the 22nd and 26th. Thus on the 30th the minimum temperature at Murree was 12°; at Simla 21·°3; at Khushab 27·°9; at Multan 29°; and at Montgomery 29·°3 and on the 31st 13° at Murree; 18·°8 at Simla; 26° at Sambhar; 26° at Jacobabad; 27·°9 at Peshawar; 28·°1 at Jaipur; 28·°1 at Jodhpur; 28·°4 at Khushab; 29·° at Multan; 29° at Sirsa and 29° at Montgomery. For Rajputana these are the lowest temperatures on record.

The following gives examples of a few of the more important low maximum and minimum temperatures and their departures from normal recorded during the second cold wave:—

Date.	Hill or Plain Station.	Actual maximum of date.	Departure from normal.	Actual minimum of date.	Departure from normal.
		°	°	°	°
27th January	Quetta	37·6	−12·4	33·8	+ 4·6
	Murree	38·1	− 7·8	25·0	− 9·0
	Multan	50·3	−19·4	45·9	+ 2·0
	Barisal	68·8	− 9·5	45·2	− 9·6
28th "	Chaman	40·2	−12·6	16·1	−18·3
	Murree	34·0	−11·8	25·5	− 8·3
	Jacobabad	50·1	−23·2	39·1	− 5·0
	Dhubri	70·1	− 4·3	46·3	− 7·2
29th "	Chaman	30·6	−22·3	15·6	−18·9
	Murree	32·0	−13·7	19·0	−14·7
	Jacobabad	59·5	−13·8	35·5	− 8·7
	Hyderabad (Sd.)	71·0	− 6·4	37·0	−14·1
30th "	Quetta	24·0	−25·7	12·8	−16·2
	Murree	23·5	−22·2	12·0	−21·6
	Jacobabad	55·5	−17·9	33·0	−11·3
	Hyderabad (Sd)	62·5	−15·0	33·5	−17·6
31st "	Murree	20·5	−25·1	13·0	−20·5
	Quetta	27·5	−22·1	11·3	−17·6
	Bikaner	49·6	−22·3	34·1	−16·0
	Sambhar	55·3	−17·9	26·0	−21·1

The preceding data, together with those given in the table on page 19, show how intense was the cold prevailing over northern India during the last ten days of January 1905. In many cases the minimum temperatures are the lowest on record and no such period of intense and prolonged cold has been experienced during the past 20 or 30 years.

Winds.

The 8 A.M. wind data, consisting of observations of the direction of the wind and of the air movement as registered by Robinson anemometers, are given in Table I under the headings "Wind direction" and "Wind velocity." In these columns are shown the number of days the wind at 8 A.M. blew from each of eight points, the resultant direction of wind, and also the mean hourly air movement. The wind resultant is calculated in all cases by the use of Lambert's formula, in which equal values are given to each wind observation. The mean wind directions are shown in Plate I by means of arrows in the usual manner.

The wind data for 10 and 16 hours are given in a similar form in Table II. Under the heading "Wind direction," are shown the number of times that each of eight wind directions was observed at the hours of record, and the direction of the resultant of winds of unit strength in these directions: the ratio of the magnitude of the resultant so obtained to that which it would have if the wind always blew in the same direction (*i.e.*) to the total number of observations) is called the wind steadiness, and is given as a percentage, with a table of normals, under the heading "Wind steadiness." The mean diurnal movement of the air at each station and average monthly value are to be found under the heading "Wind velocity."

The mean wind directions of the month for the second class stations are indicated in the small chart No. 2 of Plate IV by means of arrows flying with the wind. In this chart the lengths of the arrows are drawn so as to indicate

the comparative wind prevalence in the mean direction on a scale such that five-eighths of an inch would represent a wind blowing continuously throughout the month from the mean direction.

Winds during January 1905 blew from north-east at Port Blair, while at Diamond Island and Rangoon the wind was more westerly and at Cocos Island and Akyab more northerly than the average. At Akyab the mean steadiness and velocity were about normal while at the other stations, except Rangoon, both were above the average. The following gives data :—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
				°	°			
Port Blair	92	76	+16	N 42 E	N 39 E	157	156	+ 1
Cocos Island	93	83	+10	N 3 E	N 15 E	324	...	...
Diamond Island	74	69	+ 5	N 15 W	N 1 W	281	190	+91
Akyab	43	44	— 1	N 3 E	N 18 W	55	67	—12
Rangoon	69	36	+33	N 21 W	N 27 E	34	91	—57

Around the head of the Bay the mean wind directions varied irregularly from the average. At Chittagong and Saugor Island the direction was slightly more northerly than usual, and at Calcutta more westerly while at False Point the mean wind direction was east-south-east instead of the normal north-east. The following gives data :—

Station.	Mean wind direction.	
	Actual, January, 1905.	Normal, January.
	°	°
Chittagong	N 5 W	N 24 W
Saugor Island	N 1 E	N 6 W
Calcutta	N 39 W	N 30 W
False Point	S 87 E	N 57 E

The velocity was lower than usual except at Saugor Island while the steadiness varied irregularly from the average.

In Chota Nagpur and the Gangetic Plain the wind, though unsteady, blew from about the normal direction and with the normal velocity. Similar conditions prevailed in the upper sub-Himalayas where the winds, though exhibiting some local variations, were generally approximately normal as regards direction, steadiness and velocity.

The winds were very variable over the Indus Valley, Rajputana, and Gujarat, but the velocity was about the average and the unsteadiness was not greater than usual.

The following gives data of the mean air movement in northern India :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
Bay Islands	93	80	+13	157	156	+ 1
Burma	62	50	+12	123	116	+ 7
Bengal	46	38	+ 8	101	103	— 2
Chota Nagpur	32	49	—17	155	139	+16
Orissa	23	22	+ 1	132	142	—10
United Provinces of Agra and Oudh.	24	27	— 3	42	57	—15
Punjab	29	25	+ 4	33	41	— 8
North-West Frontier Province.	13	4	+ 9	25	60	—35
Rajputana	19	18	+ 1	102	79	+23
Sind	34	22	+12	123	137	—14
Gujarat	34	37	— 3	241	204	+37

The preceding data show that the wind's velocity was less than usual except in Gujarat, Rajputana, Chota Nagpur, the Bay Islands and Burma while the steadiness was generally normal or in slight excess.

The mean wind direction was unusually westerly over a large part of the Deccan, but the wind blew from about the normal south-easterly direction at Hyderabad and Sholapur. Both the steadiness and velocity varied irregularly from the normal, and at some stations the departures from the average were large and important. This is shown below :—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
				°	°			
Belgaum	21	42	—21	N 50 W	S 75 E	114	240	—126
Sholapur	30	56	—26	S 49 E	S 60 E	237	187	+50
Akola	14	26	—12	N 7 W	N 48 E	77	89	—12
Buldana	21	12	+ 9	N 81 W	N 68 E	156	137	+19
Khandwa	45	23	+22	N 58 W	N 24 E	83	79	+ 4
Nagpur	60	30	+30	N 39 E	N 72 E	96	84	+12
Hyderabad (Deccan)	32	55	—23	S 53 E	S 54 E	54	86	—32

Along the West Coast also the mean wind was unusually

westerly and at Karwar both the steadiness and velocity exceeded the normal. The following gives data :—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
Bombay . . .	48	58	—10	N 10 W	N 6 E	232	238	— 6
Karwar . . .	62	52	+10	N 53 W	N 20 W	106	84	+22

In South India the mean wind was slightly more southerly, more unsteady and lighter than usual. This is shown below :—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Actual January 1905.	Normal, January.	Departure from normal January 1905.
Salem . . .	60	65	— 5	E	N 81 E	110	115	— 5
Chitaldroog .	47	72	—25	S 87 E	S 88 E	107	161	—54
Bangalore . .	64	78	—14	S 88 E	N 88 E	159	127	+32
Hassan . .	48	77	—29	S 65 E	N 87 E	43	70	—27
Mysore . .	45	81	—36	S 79 E	N 83 E	166	211	—45
Madras . .	76	76	0	N 83 E	N 51 E	126	137	—11
Bellary . .	39	61	—22	S 36 E	S 69 E	48	86	—38

The following gives data of the mean air movement over the Peninsula :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
Central Provinces . .	53	27	+26	90	82	+ 8
Berar	18	19	— 1	117	113	+ 4
Bombay Deccan . .	26	49	—23	176	214	—38
Madras Deccan . .	36	58	—22	51	86	—35
West Coast . . .	55	55	0	169	161	+ 8
Mysore . . .	51	77	—26	119	142	—23
Madras Coast . .	76	76	0	126	137	—11
South India . .	60	65	— 5	110	115	— 5

The preceding data show that both the velocity and steadiness were generally normal or below the normal.

At Quetta the wind was more southerly, more unsteady and lighter than usual. This is shown below :—

Hill station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
Quetta . . .	16	24	— 8	S 61 W	N 84 W	56	70	—14

At the Himalayan hill stations the winds varied irregularly from the average, but there was, on the whole, slightly more northing in the wind directions than usual. The wind in several places was very unsteady and the mean velocity varied irregularly from the average. The wind was moderate from north-east and east-north-east at the southern hill stations, and was more westerly than usual at the central hill stations. The following gives data :—

Hill station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual January 1905.	Normal January.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
Leh . . .	62	32	+30	S 34 W	S 13 W	49	24	+25
Srinagar . .	13	4	+ 9	N 49 W	S 21 E	57	74	—17
Simla . . .	40	20	+20	S 5 E	S 18 E	133	120	+13
Chakrata . .	23	6	+17	N 10 E	S 51 W	103	137	—34
Ranikhet . .	13	17	— 4	N 48 W	S 60 W	40	50	—10
Darjeeling . .	24	20	+ 4	N 66 W	N 81 W	116	89	+27
Mount Abu . .	25	12	+13	N 88 W	N 61 W	170	125	+45
Pachmarhi . .	48	10	+38	N 83 W	N 75 W	74	84	—10
Chikalda . .	23	21	+ 2	S 83 W	S 44 W	188	132	+56
Kodaikanal . .	19	...	...	N 85 E	...	267	...	...
Dodabetta . .	18	...	...	N 57 E	...	288	...	...

The mean wind was fairly normal over the Gulf of Aden though at Perim the mean direction was somewhat more southerly than usual and at Aden the velocity was low. The following gives data :—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
				°	°			
Aden . . .	71	70	+2	S 85 E	S 89 E	254	324	—70
Perim . . .	76	80	—4	S 34 E	N 86 E	493	475	+18

In the south-east Trades region also the mean wind conditions were approximately normal at Zanzibar and the Seychelles while at Mauritius the direction was north-easterly instead of east-south-easterly and the velocity was below the normal. This is shown below :—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, January 1905.	Normal percentage, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
				°	°			
Zanzibar . .	68	70	—2	N 33 E	N 33 E	183	187	— 4
Seychelles . .	64	65	—1	N 20 W	N 42 W	147	144	+ 3
Mauritius . .	...	...	...	N 34 E	S 86 E	192	266	—74

The air movement over India during the month exhibited various departures from the normal. Only one serious storm entered north-west India during the month though the weather was unusually rainy and unsettled, so that the wind directions were not disturbed by passing cyclonic circulations. In Baluchistan the wind was more southerly while, on the contrary, at the Himalayan hill stations the mean directions were more northerly than usual, and on the plains of northern India were approximately normal. Over the Peninsula the departures from the normal were somewhat more important ; thus along the West Coast and over a large part of the Deccan, the directions were unusually westerly while over South India there was an abnormal amount of southing in the winds' directions.

Humidity and Cloud.

The hygrometric data of the month registered at certain stations are given in Table II. In that table are columns giving the means of the wet bulb readings at 10 and 16 hours and of the minimum wet bulb readings, the mean vapour tension and humidity at the same hours, and also the mean of daily means of these elements. The hygrometric data are taken from the tables accompanying "*The Indian Meteorologist's Vade Mecum*," which were computed by means of Regnault's modification of August's formula. The means of daily means are obtained by taking the means of the minimum, 10 A.M. and 4 P.M. observations, and reducing them to true means, by applying in case of vapour tension the corrections given in Table E, page XXXVIII and in case of humidity the corrections given in Table F, page XLIV of Vol. XVII of the "Indian Meteorological Memoirs." These corrections were determined from the hourly observation data given in Volumes V, IX, and X of the "Indian Meteorological Memoirs." The normal values, by means of which the departures have been derived, are the means calculated in the same way.

The distribution of humidity in each month in India is exhibited by means of two charts in Plate V. The first chart shows the departure of 8 A.M. absolute humidity and the second that of the relative humidity from normal.

The proportion of cloud is estimated in tenths of the sky expanse, an overcast sky being denoted by 10 and a cloudless sky by 0. The monthly means in Table II are the arithmetical means of the cloud amounts at 10 and 16 hours, and the normal means, with which the actual monthly means are compared, are derived from the available cloud data for the same hours.

The mean distribution of cloud amount at 8 A.M. in each month in India is shown in Chart No. 1 of Plate VI and the discussion of this and of the hygrometric features are based on the data given in Table I.

The departures of the mean vapour tension values from the normal for the month of January 1905 were generally smaller than those for the two preceding months. The air was semewhat drier than usual over the Burma coast ; over Upper Burma, Assam and the greater part of Bengal and Bihar, and also within a large area which included the Central and South Punjab, West Rajputana, lower Sind, Gujarat, the west of Central India, the west and centre of the Central Provinces, the Deccan and the Madras Coast. The departures from the normal were, however, as mentioned above, generally moderate or small and only

exceeded —·030″ at the stations for which comparative data are given below :—

Station.	Absolute Humidity.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	″	″	″
Bhamo	3·06	·383	—·077
Malegaon	·249	·307	—·058
Tinnevelly	·647	·698	—·051
Khandwa	·227	·275	—·048
Seoni	·291	·339	—·048
Madras	·642	·689	—·047
Nagpur	·307	·348	—·041
Sholapur	·289	·325	—·036
Moulmein	·567	·602	—·035
Kurrachee	·296	·329	—·033
Cuddapah	·550	·581	—·031

The air was damper than usual (1) over the upper Indus Valley (2) within a broad band which stretched from the east Punjab through east Rajputana, the United Provinces, the east of Central India, the east of the Central Provinces and Orissa, across the head of the Bay to Central Burma and (3) over the west and south-west of the Peninsula. The departures from normal were somewhat larger in the case of the areas of excess than in the case of the areas of defect and were more than +·030″ at the following considerable number of stations:—

Station.	Absolute humidity.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	″	″	″
Rangoon	·662	·568	+·094
Cocanada	·632	·542	+·090
Mangalore	·670	·601	+·069
Belgaum	·415	·356	+·059
Madura	·683	·632	+·051
Goa	·611	·567	+·044
Jhansi	·338	·294	+·044
Karwar	·572	·533	+·039
Chaibassa	·416	·378	+·038
Ratnagiri	·514	·479	+·035
Sutna	·326	·292	+·034
Minbu	·457	·425	+·032
Barisal	·500	·469	+·031

The departures of the mean relative humidity from the normal exhibited the same general distribution as that of mean absolute humidity, but the great cold introduced certain changes—more particularly in the north-west. Both the mean absolute and mean relative humidities were below the normal on the Burma coast. This is shown below :—

Station.	Absolute Humidity.			Relative Humidity.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	″	″	″	%	%	
Moulmein	·567	·602	—·035	80	85	—5
Bassein	·564	·577	—·013	85	87	—2

Both the absolute and relative humidities were below the normal over part of north-east India, but the area of deficiency of mean relative humidity was much smaller than that of mean absolute humidity. The following gives data :—

Station.	Absolute humidity.			Relative humidity.		
	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.	Actual, January 1905.	Normal, January.	Departure from normal, January 1905.
	″	″	″	%	%	
Mymensingh	·400	·420	—·020	81	91	—10
Dinajpur	·367	·377	—·010	85	87	— 2
Purnea	·350	·350	0	89	91	—2
Jessore	·425	·435	—·010	85	87	— 2
Chittagong	·466	·460	+·006	86	88	— 2

The mean relative humidity was also below the average over the greater part of the Central Provinces, the Deccan,

the Carnatic and the extreme south of the Peninsula. The following gives data:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
	"	"	"	%	%	
Bijapur	·349	·455	—·106?	56	68	—12
Raichur	·399	·449	—·050	53	63	—10
Cuddapah	·550	·581	—·031	66	75	— 9
Malegaon	·249	·307	—·058	49	58	— 9
Khandwa	·227	·275	—·048	48	56	— 8
Seoni	·291	·339	—·048	61	67	— 6
Hoshangabad	·300	·313	—·013?	62	67	— 5
Indore	·271	·298	—·027	57	62	— 5
Akola	·277	·298	—·021	50	55	— 5
Sholapur	·289	·325	—·036	43	48	— 5

In all other parts of the country the mean relative humidity was in excess of the average, and owing to the low temperature prevailing the small excess in mean absolute humidity was converted into a considerable excess of mean relative humidity. This is shown below:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
	"	"	"	%	%	
Jhansi	·338	·294	+·044	79	62	+17
Chaibassa	·416	·378	+·038	90	74	+16
Delhi	·289	·259	+·030	80	68	+12
Sutna	·326	·292	+·034	82	70	+12
Gaya	·356	·345	+·011	84	73	+11
Ranchi	·313	·300	+·013	74	63	+11
Cocanada	·632	·542	+·090	84	73	+11
Sirsa	·268	·251	+·017	86	76	+10
Jacobabad	·248	·218	+·030	72	62	+10

At most of the hill stations in the north-west Himalayas, as well as at Wellington in the extreme south, the absolute humidity was in excess of the normal, while at Chaman, Gilgit, Ranikhet, Darjeeling and at the central hill stations the absolute humidity was in slight defect. The mean temperature was, however, below the normal, and the mean relative humidity consequently equalled or exceeded the average even at those stations where the mean vapour tension was in defect. The following gives data:—

Hill station.	Absolute humidity.			Relative humidity.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
	"	"	"	%	%	
Quetta	·153?	·148	+·005?	91?	79	+12?
Chaman	·153	·165	—·012	73	68	+ 5
Chakrata	·144	·131	+·013	74	58	+16
Murree	·137	·136	+·001	76	62	+14
Simla	·127	·122	+·005	64	53	+11
Ranikhet	·164	·176	—·012	71	63	+ 8
Leh	·042	·036	+·006	55	53	+ 2
Srinagar	·164	·149	+·015	92	91	+ 1
Gilgit	·138	·143	—·005	67	67	0
Darjeeling	·174	·190	—·016	82	82	0
Mount Abu	·203	·205	—·002	50	44	+ 6
Pachmarhi	·276	·288	—·012	62	58	+ 4
Wellington	·330	·275	+·055	81	64	+17

At Aden both the absolute and relative humidities were in excess and at Perim both were in defect. This is shown below:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
	"	"	"	%	%	
Aden	·706	·642	+·064	80	72	+8
Perim	·634	·693	—·059	66	73	—7

At Zanzibar the absolute humidity was in trifling defect and the mean temperature in trifling excess, so that the mean relative humidity was also in slight defect. At the Seychelles and Mauritius the absolute humidity was more

or less in excess and at the latter station the mean relative humidity was in excess :—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
	"	"	"	%	%	
Zanzibar . .	·855	·862	—·007	75	77	— 2
Seychelles . .	·865	·833	+·032	84	84	0
Mauritius . .	·833	·737	+·096	85	75	+10

The following sums up the chief features of the mean humidity conditions of the month :—

(1) The departures of absolute humidity from normal were much smaller in January, 1905, than in November and December, 1904.

(2) The air was drier than usual over the Peninsula, north-east India and the western desert and damper elsewhere.

(3) Owing to the prevailing low temperature the mean relative humidity was in considerable excess over the greater part of northern India.

(4) The mean relative humidity was in defect over the inland parts of the Peninsula and the greater part of the Central Provinces.

The following table gives departure data of the mean aqueous vapour pressure and of mean humidity of the nine meteorological provinces for the month of January, 1905 :—

METEOROLOGICAL PROVINCE.	MEAN ABSOLUTE HUMIDITY.		MEAN RELATIVE HUMIDITY.	
	Average actual, January, 1905.	Departure from normal, January, 1905.	Average actual, January, 1905.	Departure from normal, January, 1905.
	"	"	%	
Burma Coast and Bay Islands .	·669	—·012	75	+ 1
Bengal and Orissa . . .	·492	—·003	74	— 1
Gangetic Plain and Chota Nagpur	·339	+·031	72	+10
Upper Sub-Himalayas . .	·298	+·019	78	+ 9
Indus Valley and North-West Rajputana.	·275	+·003	63	+ 5
East Rajputana, Central India and Gujarat.	·239	—·013	47	+ 1
Deccan	·312	—·032	47	— 3
West Coast	·622	+·013	75	+ 2
South India	·481	+·002	62	+ 1

The mean 8 A.M. cloud amount during January, 1905, exceeded the average over by far the greater part of the country, but there was slightly less cloud than usual in the following regions :—

(1) Part of the Burma coast, as is shown below :—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
Bassein	0·1	1·8	—1·7
Diamond Island	1·6	2·3	—0·7
Mergui	2·3	3·0	—0·7

(2) Part of East Bengal, Cachar and Upper Burma. The following gives data :—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
Silchar	2·7	3·5	—0·8
Mymensingh	1·0	1·5	—0·5
Akyab	0·2	0·7	—0·5
Bhamo	3·0	3·1	—0·1

(3) The Carnatic, where the most marked deficiency of cloud occurred. Comparative data for the stations in this area are given below :—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
Cuddalore	2·5	4·2	—1·7
Nellore	2·1	3·7	—1·6
Madras	2·1	3·4	—1·3
Negapatam	4·6	5·5	—0·9

In all other parts of the Indian region, with a few local exceptions, the sky, on the mean of the month, was more cloudy than usual. The excess was greatest, not in the north-west, where the weather was actually most disturbed, but in the north-east, where an unusual amount of cloudy,

showery weather prevailed during the month. The following gives data for the stations at which the excess was 2·0 or more in amount:—

Station.	Mean cloud amount. Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
Mandalay	6·9	1·1	+5·8
Sibsagar	9·9	5·4	+4·5
Sutna	5·4	1·2	+4·2
Calcutta	4·0	1·1	+2·9
Waltair	4·2	1·4	+2·8
Raipur	4·1	1·4	+2·7
Berhampore	4·0	1·4	+2·6
Jalpaiguri	3·7	1·1	+2·6
Chittagong	3·4	1·1	+2·3
Indore	3·7	1·4	+2·3
Narayanganj	3·5	1·3	+2·2
Burdwan	3·7	1·5	+2·2
Balasore	3·7	1·5	+2·2
Belgaum	3·1	0·9	+2.2
Kurrachee	4·6	2·5	+2·1
Allahabad	4·0	1·9	+2·1
Gaya	3·8	1·7	+2·1
Saugor Island	3·6	1·5	+2·1

The following table gives comparative data for the stations at which the mean cloud amount of the month was more than 5·0 and less than 1·2, and hence defines the areas of greatest and least serenity on the mean of the month:—

Station.	Mean cloud amount more than 5·0.	Station.	Mean cloud amount less than 1·2.
Sibsagar	9·9	Thayetmyo	1·1
Gauhati	7·8	Amraoti	1·1
Dibrugarh	7·0	Gulbarga	1·1
Mandalay	6·9	Minbu	1·0
Motihari	6·7	Maymyo	1·0
Rawalpindi	6·0	Mymensingh	1·0
Peshawar	5·8	Ahmednagar	1·0
Sutna	5·4	Chaibassa	1·0
Dehra Dun	5·3	Gopalpur	1·0
Delhi	5·2	Surat	0·9
		Malegaon	0·6
		Akyab	0·2
		Bassein	0·1

At nearly all the hill stations the skies were clouded to a greater extent than usual, but the excess was, on the whole, less marked than over the neighbouring plains. The following gives data:—

Hill Station.	Mean cloud amount. Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
Gilgit	8·8	6·9	+1·9
Ranikhet	4·5	3·5	+1·0
Srinagar	8·7	7·9	+0·8
Leh	7·4	6·7	+0·7
Simla	5·3	4·7	+0·6
Chakrata	4·7	4·1	+0·6
Murree	5·4	5·3	+0·1
Darjeeling	4·1	4·2	−0·1
Mount Abu	3·0	1·7	+1·3
Pachmarhi	1·5	1·9	−0·4
Wellington	2·8	1·8	+1·0

At both Aden and Perim the sky was unusually clear of cloud. This is shown below:—

Station.	Mean cloud amount. Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
Aden	2·1	4·0	−1·9
Perim	1·1	2·4	−1·3

In the south-east Trades region the departures of the mean cloud amount from the normal were irregular. At Zanzibar and Mauritius there was some excess and at the Seychelles some deficiency.

The following gives data for the stations in this area:—

Station.	Mean cloud amount. Actual, January, 1905.	Normal, January.	Departure from normal, January, 1905.
Zanzibar	5·7	4·7	+1·0
Seychelles	6·3	7·0	−0·7
Mauritius	8·4	6·5	+1·9

The principal features of the abnormal cloud distribution were as follows:—

(1) With a few local exceptions the mean cloud amount of the month exceeded the normal, except over parts of Cachar and of Burma.

(2) The excess was most marked over Central Burma, the Brahmaputra Valley and Deltaic Bengal.

(3) The mean cloud amount exceeded the average at nearly all the hill stations.

The following table gives departure data of the mean cloud amount of the nine meteorological provinces of India for the month of January, 1905:—

Meteorological Province.	Mean cloud amount.	
	Average actual, January, 1905.	Departure from normal, January, 1905.
Burma Coast and Bay Islands	2·2	−0·1
Bengal and Orissa	3·0	+1·2
Gangetic Plain and Chota Nagpur	3·9	+1·5
Upper Sub-Himalayas	4·3	+0·5
Indus Valley and North-West Rajputana	4·4	+1·0
East Rajputana, Central India and Gujarat	3·2	+0·5
Deccan	2·4	+0·7
West Coast	1·7	+0·8
South India	3·0	+0·3

Rainfall.

Rainfall observations are made at upwards of 2,500 stations in India. The hour of observation is 8 A.M. The rainfall data for each province are tabulated in the office of the Meteorological Reporter, Director of Land Records, or other office in the province, and published in the provincial gazettes.

The charts illustrating the distribution of rainfall in the month under discussion are based in part upon the rainfall data of the meteorological observatories throughout India, and in part upon the rainfall statements of the month published by the Local Governments.

The first rainfall chart (Plate VII) shows the actual distribution of the rainfall of the month so far as it is indicated by the returns of upwards of 200 meteorological stations. The distribution of rainfall is shown on this chart by means of isoetic lines or lines of equal amounts of rainfall, the numbers attached to each line stating the rainfall in inches. The second chart (Plate VIII) shows the normal average rainfall and the departure of the rainfall from the normal of the month of the 57 meteorological or rainfall divisions, over each of which the meteorological conditions (more especially the rainfall) are fairly uniform and the staple crops similar in character.

The distribution of the total number of rainy days in each month is exhibited in Chart No. 2 of Plate VI. A rainy day is one on which 0·10 inch or more of rain is received within 24 hours.

Northern India usually receives slight to moderate rain in the month of January from cold weather cyclonic storms. The precipitation is generally heaviest in the hill districts, and decreases in amount southwards from the foot of these hills. Rain is also occasionally received in the south Madras coast districts, usually under the same conditions as in December. This rainfall is, however, exceptional in occurrence.

The mean relative humidity of the month of January, 1905, was in slight to large excess of the normal over northern India. This part of the country was traversed during the month under review by a succession of small depressions, and the rainfall of the month was in excess of the average over the whole of this area. Over the Peninsula, on the other hand, the mean relative humidity was in defect of the normal, and the rainfall of this area was confined to the Madras Coast and to Ceylon.

The principal periods of rainfall over India were as follows:—

(1) The 2nd to the 5th, when rain or snow fell over Baluchistan, the north-west Himalayas, the submontane districts of the North-west Frontier Province and of the Punjab and the western districts of the United Provinces.

(2) The 6th to the 9th, when showers were received over the south of the Peninsula and Ceylon.

(3) The 13th, when showers were received over north-east India.

(4) The 14th to the 20th, when scattered showers fell over a large part of northern India.

(5) The 21st to the 24th, when heavy rain and snow were received in the north-west and showers in north-east India.

(6) The 27th to 29th, when showers again fell in the north-west.

The preceding data show that rain fell fairly continuously over northern India during the month.

The actual distribution of rain, as shown by the meteorological observatories, is given in Plate VII. Practically no rain fell over Kathiawar, Eastern Gujarat, the west of Central India and of the Central Provinces, the west and centre of the Peninsula and Burma. On the other hand, rain was general over northern India, and light to moderate rain was received over the Madras Coast and Ceylon. The month's precipitation was heaviest in the north-west, where Murree reported 9·90″ and Sialkot 6·03″, but in west Bengal and at the head of the Assam Valley the month's fall was more than 2·00″.

The following were the chief features of the rainfall distribution of the month:—

(1) Little or no rain fell over the west, centre and south-west of the Peninsula and Burma.

(2) General rain was received over northern India and the Madras Coast districts.

(3) The month's rainfall exceeded the normal over the greater part of Bengal, the west of the United Provinces, the Punjab, the North-west Frontier Province, Baluchistan and the east of the Central Provinces.

(4) Elsewhere the rainfall was normal or below the normal.

The following table gives comparative rainfall data for the eleven meteorological provinces:—

METEOROLOGICAL PROVINCE.	RAINFALL. Mean actual for January, 1905.	Mean normal for January.	Mean departure from normal,	Percentage departure from normal.
	Inch.	Inch.	Inch.	
Burma Coast and Bay Islands	0·21	0·35	−0·29*	−83
Burma Inland	0·04	0·15	−0·15*	−100
Assam	0·74	0·89	−0·15	−17
Bengal and Orissa	0·72	0·43	+0·29	+ 67
Gangetic Plain and Chota Nagpur	0·87	0·65	+0·22	+34
Upper Sub-Himalayas	2·76	1·67	+1·07*	+64
Indus Valley and North-West Rajputana.	0·90	0·57	+0·32	+56
East Rajputana, Central India and Gujarat.	0·18	0·26	−0·09*	−35
Deccan	0·31	0·24	+0·03*	+13
West Coast	0·01	0·22	−0·20	−91
South India	0·27	0·37	−0·10	−27

* A reference to Table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

The following table gives comparative rainfall data for the 57 meteorological divisions of the empire:—

PROVINCE.	DIVISION.	NUMBER OF RAINY DAYS. Average actual, January, 1905.	Average normal, January.	RAINFALL. Average actual, January, 1905.	Average normal, January.	Departure from normal, January, 1905.
				Inches.	Inches.	Inches.
BURMA	Tenasserim	0·1	0·3	0·05	0·14	−0·09
	Lower Burma (Deltaic)	0	0·1	0	0·05	−0·05
	Central do.	0	0	0	0·02	−0·02
	Upper do.	0	0·3	0·01	0·11	−0·10
	Arakan	0·5	0·1	0·17	0·03	+0·14
BENGAL AND ASSAM	Eastern Bengal	0·9	0·9	0·32	0·43	−0·11
	Assam (Surma)	0·5	1·2	0·12	0·45	−0·33
	Do. (Hills)	1·1	1·4	0·36	0·62	−0·26
	Do. (Brahmaputra)	2·9	2·2	1·04	0·86	+0·18
	Deltaic Bengal	2·3	0·7	1·28	0·35	+0·93
	Central do.	2·2	1·0	0·86	0·48	+0·38
	North do.	0·6	1·1	0·22	0·48	−0·26
	Bengal Hills	1·8	1·8	0·89	0·83	+0·06
	Orissa	2·6	0·5	1·23	0·25	+0·98
	Chota Nagpur	3·9	1·1	1·71	0·50	+1·21
	Bihar (South)	2·6	1·4	0·68	0·74	−0·06
	Do. (North)	1·5	1·3	0·47	0·68	−0·21
UNITED PROVINCES OF AGRA AND OUDH.	United Provinces (East)	2·7	1·5	0·73	0·72	+0·01
	Oudh (South)	2·1	1·5	0·45	0·76	−0·31
	Do. (North)	2·3	1·6	0·65	0·80	−0·15
	United Provinces (Central)	2·1	1·4	0·56	0·62	−0·06
	Do. do. (West)	3·0	1·4	1·23	0·58	+0·65
	Do. do. (East Submontane)	1·9	1·3	0·44	0·71	−0·27
	Do. do. (West do.)	5·2	2·6	2·47	1·39	+1·08
	Do. do. (Hills)	7·0	3·9	3·96	2·31	+1·65
PUNJAB	Punjab (South-East)	3·8	1·7	1·60	0·77	+0·83
	Do. (South)	4·3	1·7	1·69	0·86	+0·83
	Do. (Central)	5·5	2·4	2·52	1·17	+1·35
	Do. (Submontane)	5·8	3·1	2·86	1·86	+1·00
	Do. (Hills)	8·7	4·8	4·38	3·49	+0·89
	Do. (West)	3·2	1·3	1·11	0·55	+0·56
NORTH-WEST FRONTIER PROVINCE.	North-west Frontier Province	4·3	2·5	2·71	1·38	+1·33

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, January, 1905.	Average normal, January.	Average actual, January, 1905.	Average normal, January.	Departure from normal, January, 1905.
				Inches.	Inches.	Inches.
Bombay and Malabar Coast Districts (Madras).	Malabar	0	0	0·05	0·17	−0·12
	Travancore	0·2	...	0·07	...	...
	Madras (South Central)	0·4	0·1	0·11	0·13	−0·02
	Coorg	0	...	0	...	...
	Mysore	0·2	0·1	0·08	0·07	+0·01
	Konkan	0	0·2	0	0·13	−0·13
	Bombay Deccan	0	0·2	0	0·08	−0·08
	Hyderabad (North)	0·1	0·2	0·02	0·08	−0·06
	Khandesh	0	0·3	0	0·13	−0·13
Central Provinces and Berar.	Berar	0·4	0·6	0·13	0·29	−0·16
	Central Provinces (West)	0·8	0·8	0·27	0·50	−0·23
	Do. (Central)	1·1	1·1	0·44	0·54	−0·10
	Do. (East)	3·2	0·9	2·10	0·38	+1·72
Bombay (North)	Gujarat East	0	0·1	0·01	0·04	−0·03
	Kathiawar and Cutch	0·1	0·1	0·02	0·04	−0·02
	Sind	0·7	0·8	0·27	0·28	−0·01
	Baluchistan Hills	7·0	2·9	3·88	1·29	+2·59
Rajputana and Central India.	Central India (East)	1·0	1·0	0·48	0·44	+0·04
	Rajputana (East), Central India (West)	1·0	1·0	0·27	0·39	−0·12
	Do. (West)	0·5	0·5	0·12	0·16	−0·04
Madras	East Coast (North)	0·3	0·1	0·14	0·16	−0·02
	Hyderabad (South)	0	0·2	0	0·08	−0·08
	Madras (Central)	0·1	0	0·05	0·07	−0·02
	East Coast (Central)	0·4	0·7	0·18	0·42	−0·24
	East Coast (South)	1·3	0·9	0·45	0·45	0
	Madras (South)	0·5	1·1	0·17	0·56	−0·39

The preceding data show that in thirty-four of the rainfall divisions, which included Burma (except Arakan), East Bengal, Cachar, the Assam Hills, North Bengal, Bihar, Oudh, the central and east submontane divisions of the United Provinces, the Bombay and Malabar coast districts (except Mysore), the Central Provinces (except the east), North Bombay, Rajputana, Central India, (except east) and Madras, the rainfall of the month was below the normal. In one division, *viz.*, the East Coast (south) the month's rainfall was normal. In twenty divisions, which included Arakan, the Brahmaputra Valley, the greater part of Bengal, the west, east and hills divisions of the United Provinces, the Punjab, the North-west Frontier Province, the east of the Central Provinces and of Central India, Baluchistan and Mysore, the rainfall of the month was more or less excessive.

The excess was, relatively to the normal, large over Arakan, a considerable part of Bengal, the greater part of the Punjab, the North-west Frontier Province and the east of the Central Provinces and amounted to over 100 per cent. in the divisions for which comparative data are given below :—

Division.	Rainfall.			
	Average actual, January, 1905.	Average normal, January.	Departure from normal, January, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Arakan	0·17	0·03	+0·14	+467
Deltaic Bengal	1·28	0·35	+0·93	+266
Orissa	1·23	0·25	+0·98	+392
Chota Nagpur	1·71	0·50	+1·21	+242
United Provinces (West)	1·23	0·58	+0·65	+112
South-East Punjab	1·60	0·77	+0·83	+108
Central Punjab	2·52	1·17	+1·35	+115
West Punjab	1·11	0·55	+0·56	+102
Central Provinces (East)	2·10	0·38	+1·72	+453
Baluchistan Hills	3·88	1·29	+2·59	+201

The departure of the general rainfall of the whole Indian area, as determined from the fifth figure column of the table on pages 29 and 30 (excluding the hill divisions), was +0·18″.

With the exception of a shower at Mergui on the 14th and of light showers in the northern districts of Upper Burma and in Arakan between the 20th and the 25th, the whole of Burma was rainless throughout the month.

In the Surma Valley and the hill divisions of Assam scattered showers occurred between the 17th and the 24th, but the total of the month was small and considerably less than the normal. In the Brahmaputra valley, on the other hand, there was a considerable rainfall. It mainly occurred on the 13th and 14th, between the 17th and 21st and on the 23rd and 24th, and falls exceeding 1·00″ in 24 hours were registered at a few places on the 14th, 20th and 24th, and the average actual fall of the division was 1·04″ instead of the normal 0·86″.

In Bengal practically all the rain fell during the middle of the month, *i.e.*, between the 13th and the 24th. The fall of the 13th was associated with the passage of a large shallow depression and was remarkably general, all parts of the province having received rain, except Orissa. Amounts exceeding 1·00″ in 24 hours were reported from several stations, and Katikund in the Sonthal Parganas reported 2·05″. Other general or fairly general falls were recorded on the 16th, 19th and 23rd, and all were associated with the passage from west to east over north-east India, of shallow depressions which had advanced from north-west India. In East and North Bengal and Bihar the month's rainfall was normal or less than normal, but in all other divisions it was excessive and in some cases largely so.

In the United Provinces there were four rainfall periods during the month, *viz.*, between the 3rd and the 5th, the 14th and 15th, the 18th and 19th and the 22nd and 23rd. On each occasion the rainfall was well distributed throughout the whole area of the United Provinces, but the falls were lighter in Oudh and in the east than in the west, so that while the month's rainfall of Oudh and the east submontane and centre of the United Provinces was below the normal, that of the west divisions was in moderate to large excess. Falls of over 1·50″ in 24 hours were reported from the following places :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Dehra Dun	Chakrata (Obsty.)	4th January	1·52
Saharanpur	Kuankhera	5th „	2·07
Dehra Dun	Dehra (Asylum)	21st „	3·00
Almora	Chaukuri	„ „	2·96
Dehra Dun	Chakrata (Obsty.)	22nd „	4·47
	Mussooree	„ „	2·40
Almora	Almora	„ „	2·25
Garhwal	Srinagar	22nd January	1·98
	Okhimath	„ „	1·95
Dehra Dun	Chakrata Tahsil	„ „	1·95
	Ambari	„ „	1·92
Almora	Lohaghat	„ „	1·82
	Champawat	„ „	1·80
	Pithoragarh	„ „	1·77
Garhwal	Karauprayag	„ „	1·77
Almora	Ranikhet (Obsty.)	„ „	1·70
Garhwal	Lansdowne	„ „	1·65
Dehra Dun	Chakrata Tahsil	23rd „	2·15

In the Punjab there occurred five rainfall periods during the month, *viz.*, the 3rd to the 5th, the 14th and 15th, the 17th and 18th, the 21st and the 22nd and 27th to 29th. The rainfall periods were thus generally one day in advance of those over the United Provinces. The falls were very general throughout the province, and that of the 21st and 22nd, which was associated with the deepest storm of the month, was heavy. In all parts of the province—but more so on the plains than on the hills—the precipitation was heavier than usual. As mentioned above, the heaviest rainfall and snowfall occurred on the 21st and 22nd, as will be seen from the following table, which gives the largest amounts, exceeding 2·00″ in 24 hours, recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kangra	Palampur	22nd January	3·67
	Dharmsala	„ „	2·70
Gurdaspur	Shakargarh	„ „	2·51
Amritsar	Buchar	„ „	2·40
Kangra	Kulu	„ „	2·18
Sialkot	Zafarwal	„ „	2·01

The North-west Frontier Province received rain during four periods during the month, *viz.*, between the 3rd and

5th, the 14th and 17th, the 20th and 23rd and the 27th and 30th. The two later falls were the heavier and more important. The total rainfall of the province was twice as heavy as usual, and the following amounts of 2·00″ or more in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kohat	Thal	20th January	2·01
Dera Ismail Khan	Tank	21st ,,	2·57
Peshawar	Swabi	,, ,,	2·14
Kohat	Hangu	,, ,,	2·03
Hazara	Abbottabad	28th ,,	2·87
	Haripur	,, ,,	2·30
	Oghi	,, ,,	2·17

In Baluchistan general rain fell on the 1st and 2nd, light scattered showers on the 13th and 14th and general rain again between the 17th and 21st and between the 24th and the 28th. The rainfall during the two later periods was heavy and general, and the average actual fall for the month was three times as heavy as usual. The third rainfall period was, on the whole, the heaviest, and the following amounts of 2·00″ or more in 24 hours were recorded during this fall:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Thal Chotiali	Shahrig	20th January	2·86
Quetta-Pishin	Sanzal	,, ,,	2·00

Kashmir reported three periods of general rain and snow, *viz.*, between the 2nd and 4th, the 20th and 22nd and the 26th and the 29th, but during the intervals the weather over the State was showery and unsettled. The total rainfall and snowfall were, as far as can be ascertained, considerably heavier than usual, and the following falls exceeding 2·00″ in 24 hours were recorded during the month:—

State.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Jummoo	Manamor	3rd January	2·70
	Kampore Rajauri	,, ,,	2·55
	Kathua	4th ,,	5·70
	,,	17th	3·20
	Manamor	20th ,,	3·20
	Jasmairgarh	,, ,,	2·24
	Sri Ranbir Singh Pora	21st ,,	2·45
	Ramnagar	,, ,,	2·22
	Sambha	,, ,,	2·22
	Rampore Rajauri	,, ,,	2·11
Kashmir	Baramula	,, ,,	2·07
	Sonemarg	22nd ,,	5·07
Jummoo	Bhimber	,, ,,	2·40
	Kathua	26th ,,	4·50
	,,	27th ,,	2·50
Kashmir	Sonemarg	,, ,,	2·41
	Utar Machhipore	,, ,,	2·03
	Sonemarg	29th ,,	5·12

In Rajputana two showery periods were experienced during the month, *viz.*, between the 2nd and the 5th and the 15th and 22nd. The falls were not heavy, and the total rainfall of the month, though irregularly distributed, was generally lighter than usual. The following gives data for the larger States:—

State.	Rainfall.			
	Average actual, January, 1905.	Average normal, January.	Departure from normal, January, 1905.	Percentage departure from normal.
	Inch.	Inch.	Inch.	
Jaisalmer	0·12	0·12	0	0
Jodhpur	0·12	0·16	—0·04	—25
Bikaner	0·66	0·38	+0·28	+74
Jaipur	0·16	0·49	—0·33	—67
Alwar	0·62	0·56	+0·06	+11
Bharatpur	0·80	0·47	+0·33	+70
Dholpur	0·19	0·34	—0·15	—44
Kotah	0·13	0·34	—0·21	—62
Karauli	0·16	0·37	—0·21	—57
Jhalawar	0·22	0·21	+0·01	+ 5
Ajmer-Merwara	0·04	0·25	—0·21	—84

Central India received scattered showers during the first week and again about the middle of the month. The total fall was less than usual, as is shown by the following comparative data of the larger states :—

STATE.	RAINFALL.			
	Average actual, January 1905.	Average normal, January.	Departure from normal, January 1905.	Percentage departure from normal.
	Inches.	Inch.	Inch.	
Indore	0	0·25	—0·25	—100
Bhopal Agency	0·12	0·32	—0·20	—63
Gwalior	0·09	0·19	—0·10	—53
Rewah	1·25	0·97	+0·28	+29
BundelKhand	0·56	0·81	—0·25	—31

All the rainfall received over the Central Provinces occurred during the middle of the month and generally between the 16th and the 23rd. The fall was more general and heavier than usual over the east division, but was light in the central division and very light in the west and in Berar. The following amounts exceeding 1·50″ in 24 hours were recorded during the month all in the east division :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
FEUDATORY STATES	Khairagarh	16th January	1·66
RAIPUR	Balada	,, ,,	1·60
FEUDATORY STATES	Khairagarh	18th ,,	1·80
BILASPUR	Korba	19th ,,	3·00
	Janjgir	,, ,,	1·87
FEUDATORY STATES	Rampur	,, ,,	1·71
BILASPUR	Bilaspur	,, ,,	1·51
RAIPUR	Drug	20th ,,	1·87
BILASPUR	Korba	,, ,,	1·60
FEUDATORY STATES	Rampur	22nd ,,	3·18

The month was rainless or practically rainless in all parts of the Bombay Presidency except Sind where a few local showers occurred between the 16th and the 27th.

No rain fell in the Nizam's dominions during the month, and in Mysore the only rainfall was some showers which occurred in the Kolar and Tumkur districts on the 6th and 7th.

The rainfall over the Madras Presidency was very light and generally less than the small normal amount. In the north division of the East Coast there were showers on the 15th, 16th, 17th, and 20th and in other parts of the province there were showers on the 6th, 7th and 8th, but at other times the weather was practically rainless. The following gives comparative data of the 23 collectorates of the Presidency :—

COLLECTORATE.	RAINFALL.			
	Average actual, January 1905.	Average normal, January.	Departure from normal, January 1905.	Percentage departure from normal.
	Inches.	Inch.	Inches.	
Ganjam	0·38	0·18	+0·20	+111
Vizagapatam	0·20	0·20	0	0
Godavari	0·02	0·11	—0·09	—82
Kistna	0·01	0·14	—0·13	—93
Guntur	0	0·21	—0·21	—100
Nellore	0·18	0·42	—0·24	—57
Madras	1·92	0·84	+1·08	+129
Chingleput	0·86	0·42	+0·44	+105
North Arcot	0·43	0·25	+0·18	+72
South Arcot	0·50	0·46	+0·04	+ 9
Tanjore	0·25	0·72	—0·47	—65
Trichinopoly	0·22	0·24	—0·02	— 8
Madura	0·04	0·39	—0·35	—90
Tinnevelly	0·30	0·76	—0·46	—61
Malabar	0·05	0·18	—0·13	—72
South Canara	0	0·15	—0·15	—100
Salem	0·18	0·15	+0·03	+20
Coimbatore	0·03	0·11	—0·08	— 73
Nilgiris	0·66	0·37	+0·29	+78
Cuddapah	0·08	0·14	—0·06	—43
Anantapur	0·10	0·03	+0·07	+233
Bellary	0	0·04	—0·04	—100
Kurnool	0	0·07	—0·07	—100

Although the month's rainfall was thus in most places deficient the showers were occasionally and locally moderately heavy. The following is a record of the falls exceeding 1·50″ in 24 hours during the month :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
NILGIRIS	Kilkundah	8th January	1·84
	Kotagiri	,, ,,	1·62
GANJAM	Chatrapur	16th ,,	1·84
	Do.	20th ,,	2·09

The rainfall at the extra-Indian stations was as follows:—

Station.	Rainfall. Average actual, January 1905.	Average normal. January.	Departure from normal. January 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee	2·25	5·38	—3·13	— 58
Colombo	3·85	3·20	+0·65	+20
Minicoy	2·45	2·09	+0·36	+17
Kabul	0	1·24	—1·24	—100
Kashgar	0·42	0·27	+0·15	+56
Meshed	1·11	0·41	+0·70	+171
Teheran	1·75	1·29	+0·46	+36
Ispahan	0·93	0·26	+0·67	+258
Bushire	0·32	3·12	—2·80	—90
Jask	0·39	0·87	—0·48	—55
Muscat	1·24	1·28	—0·04	— 3
Baghdad	0·48	1·38	—0·90	—65
Aden	0	0·32	—0·32	—100
Perim	0·39	0·34	+0·05	+15
Zanzibar	2·36	3·37	—1·01	—30
Seychelles	15·08	18·57	—3·49	—19
Mauritius	21·16	7·89	+13·27	+168

The preceding data show that the month's rainfall was generally light except in north Persia and Kashgaria and locally at Mauritius.

Snowfall.

Heavy general snow occurred over the mountain districts surrounding the north-west of India during the month under review.

I.—Afghan Mountain Districts.

(1) *Kabul*:—Snow fell as follows:—

January 1st = 2½ inches
" 11th = ¼ "
" 13th = melted as it fell.
" 14th = ditto.
" 16th = ditto.
" 17th = ditto.
" 19th = 5½ inches.
" 26th = 9½ do.

The total snowfall in the town was thus 17¾ inches, but it is believed that on the surrounding hills the snowfall was 3 feet. The total fall was less than last year, but heavier than that of the Januaries of several preceding years. The area covered with snow was unusually large.

(2) *Wano*:—Snow fell as follows:—

14th:—Marwattai, Pirghal, Bosh, Dre Nashter (11,000 ft.) 6 inches.
Kundighar, Janimela (8,000 ft.) 4 inches.
Kotkun (7,900 ft.) 1 inch.

20th:—A heavy fall of snow occurred extending down to 3,500 feet. This fall was heavier and more extensive than any since the British occupation of Wano in 1894. Snow lay on the Wano plain (4,500 feet) between 1 and 2 feet deep.

25th:—Another fall of snow as heavy as that on the 20th. The fall continued during the 26th and 27th.

All the hills were covered with snow at the close of the month, the snow having extended over the whole of the South Waziristan Agency. The snow was lying in heavy drifts on all the hills down to 3,500 feet.

(3) *Kurram*:—Snow fell on the Sufed-i-koh on the 12th, 14th, 16th, 20th, 21st, 26th, 27th and 28th. The snowfalls between midnight of 19th—20th and the morning of the 21st and again during the 27th were unprecedentedly heavy. The snow on these occasions was about 4 feet deep at Parachinar. The falls extended as far as Manduri and the whole valley, at the close of the month, was under snow. Three men who were proceeding from Parachinar to Peiwar died on the way. from exposure to the heavy snow storms and cold. All the passes were closed at the end of the month and 9 to 12 feet of snow were lying on the higher passes. The total fall of snow this month is said to have been heavier than any fall for many years.

(4) *Kohat*:—On the Samana range snow fell as follows during January:—

	Feet.	Inches.
1st, 2nd	slight fall	
15th	0	3
16th	0	4
19th	0	6
20th	2	6
21st	1	0
26th	1	6
27th	0	6
Total	6	7

On the 21st and 22nd snow fell heavily throughout the Miranzai Valley. On the 22nd it snowed practically all day and on that, as well as on the previous day, snow lay at Hangu to a depth of 2 inches. On the night of the 28th-29th snow again fell and lay to a depth of 4 inches at low elevations. The snow lay very deep at Togh and Doaba and at the western end of the valley generally. These snowfalls are the heaviest which have occurred for the last 40 or 50 years and the snow was accompanied with intense cold.

(5) *Hazara* :—The following gives the snowfall on the Siran range during January 1905 :—

		Feet.	Inches.
January	2nd to 4th 1905 . .	1	10
„	15th „ . .	0	5
„	20th to 22nd . .	4	8
	TOTAL	6	11

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Leh* :—Snow fell at Leh during January as follows :—

		Feet.	Inches.
January	8th	0	¼
„	9th	sprinkle	
„	10th	0	¼
„	11th	0	1½
„	12th	0	1
„	17th	0	⅓
„	22nd	0	1
„	25th	0	¼
„	26th	0	⅝
„	27th	0	½
„	28th	0	1

Many of the falls melted quickly but at Leh there are about 4 inches of snow lying in the shade.

(2) *Kulu* :—Snow fell on the 3rd, 4th, 12th, 14th, 15th, 18th, 19th, 21st, 22nd, and 23rd in the Kulu Tehsil and on the 3rd, 4th, 5th, 6th, 12th, 15th, 18th, 19th, 22nd and 23rd in the Seoraj Tehsil. The snowfall descended to an elevation of 4,000 feet. Fifteen inches of snow fell on one day at Naggar and had not melted by the close of the month. The depth of snow on the higher passes of the sub-division was as follows at the close of January :—

Kulu.		Seoraj.	
Rotang Pass . .	14 Feet.	Sirikhand . .	9 Feet.
Lamta . .	17 „	Chul . . .	5 „
Manandar Khani . .	10 „	Maghin . . .	5 „
Parsai . . .	7¼ „	Dundku . . .	6 „
Beja Dhar . .	6¼ „	Tikar . . .	5 „
Bhriachri . .	7 „	Ramgarh . .	1 „
Chubu . . .	11 „	Nuhnu . . .	3 „
Rajhang . . .	2 „	Raghopur . .	5 „
Pastari . . .	7 „	Jalori . . .	5 „
Siri	15 „	Sambri . . .	5 „
		Sakiran . . .	5 „
		Gargarasan . .	7 „
		Supakun . . .	6 „
		Bashleo . . .	5 „
		Plach . . .	6 „
		Tirath . . .	7 „

The snowfall of the month was in excess of that of past years.

(3) *Bashahr, Simla* :—Snow fell as follows during January :—

			Feet.	Inches.
3rd	descending to	6,000 ft. . .	0	½
4th	ditto	5,750 „ . .	0	2
5th	ditto	6,000 „ . .	0	1
12th	ditto	6,000 „ . .	0	½
15th	ditto	6,000 „ . .	0	2
18th	ditto	6,000 „ . .	0	½
19th	ditto	6,000 „ . .	0	3
21st	ditto	5,750 „ . .	0	2
22nd	ditto	5,750 „ . .	0	4
27th	ditto	5,750 „ . .	0	½
28th	ditto	6,000 „ . .	0	1

All the passes were closed and snow lay to the following depths :—

Rupan Pass	15 Feet.
Bruin „	5 „
Harang „	5 „
Shatul „	14 „
Buldar „	15 „
Runang „	8 „

The total snowfall was lighter than in the corresponding month of the previous year.

(4) *Dalhousie* :—Snow fell as follows :—

		Feet.	Inches.
January	3rd	0	2
„	4th	1	0
„	5th	0	2
„	15th	0	11
„	18th	0	4
„	20th	0	½
„	21st	0	10
„	22nd	0	9
„	23rd	0	8
„	28th	0	2
	TOTAL	5	½

Snow fell at Kala Top, Dainkund, lower and upper Bakrotta, Kathlaq, Barikhet, Balun, Chamba, Khajiar, and Bakloh. At Khajiar, Kala Top, and Dainkund the fall is reported to be very heavy and is probably twice as much as that measured at Dalhousie. The total fall was heavier than in the same month last year.

(5) *Chamba* :—The following is the record of snowfall at various recording stations in the Chamba forest division :—

Kilar	(8,400 ft.)	Total fall during month	3 ft. 4 ins.
Khangu and Chhatri		ditto ditto	7 „ 9 „
Alwas		ditto ditto	12 „ 0 „
Kala Top		ditto ditto	15 „ 5 „
Bakani		ditto ditto	0 „ 10 „
Sno		ditto ditto	0 „ 11 „
Chatuani		ditto ditto	4 „ 2 „
Bre		ditto ditto	5 „ 6 „
Tisa		ditto ditto	4 „ 7 „
Langera	(8,000)	ditto ditto	19 „ 1 „
Bhent	(7,000 ft.)	ditto ditto	13 „ 6 „
Bhandal	(6,000)	ditto ditto	7 „ 11 „
Deur	(5,500 ft.)	ditto ditto	4 „ 1 „

The Sach Pass and Padri Pass were closed to travellers at the end of the month and on the other passes the accumulated snow varied between 1 foot and 8 feet.

III.—UNITED PROVINCES HIMALAYAS.

(1) *Almora*:—The following gives the snowfalls measured in the Almora district:—

		Feet.	Inches.
Malla Johar	3rd	3	0
	4th	2	0
	5th	4	0
	11th	2	0
	12th	2	6
	14th	3	6
	20th	3	0
	21st	5	0
	22nd	5	0
	27th	1	6
	TOTAL	32	0

		Feet.	Inches.
Malla Danpur	3rd to 6th	5	0
	14th	0	6
	19th to 23rd	5	0
	27th	1	0
	TOTAL	11	6

		Feet.	Inches.
Malla Darma	4th	0	3
	13th	0	6
	14th	0	3
	15th	0	3
	18th	0	9
	21st	4	0
	22nd	2	0
	TOTAL	8	0

		Feet.	Inches.
Byans	3rd	2	0
	4th	3	0
	5th	4	0
	14th	4	0
	15th	3	0
	18th	4	0
	21st	5	0
	22nd	6	0
	27th	4	0
	28th	2	0
	TOTAL	37	0

The snow accumulation on the passes and ranges is reported to be as follows:—

	Feet.	Inches.
Untdhura Range	21	0
Ralamdhura „	19	6
Millam Dhura „	15	0
Pindari, Kapini and Kaunela peaks	24	0
Nirwe Pass	27	0
Lipu „	37	0

The snowfall of the month has been greater than usual.

(2) *Garhwal*:—The principal falls of snow were those on the 3rd, 4th, 5th, and 12th to 22nd. The heaviest were those of the 21st and 22nd which descended to the valley only 2,000 feet above M. S. L. The weather throughout the month was very cold.

Crop Report.

Madras:—There was light rain in parts of the Presidency during the month, but in places there was no rain and in others much less than usual. Irrigation supplies were insufficient except in the Circars and in the hills and the standing crops, at the close of the month, were withering except in the above divisions. Harvests continued with poor to fair outturn. Pasture was insufficient and fodder, though procurable, was reported to be scanty in parts of Kistna, Guntur, the Deccan, Chingleput, South Arcot, Salem and Madura. Cattle were in good condition.

Bombay:—There was little or no rain over the Bombay Presidency during the month. The standing crops were slightly damaged during the month, by blight in parts of Poona, and by frost in parts of Sind, the Panch Mahals and Baroda, and at the close of the month were suffering from insufficient moisture in parts of Gujarat, the Deccan and the Carnatic. Elsewhere they were generally in good condition. Relief works were opened in the Kaira district during the month.

Bengal:—Light showers fell during the latter half of the month and were generally beneficial to the standing crops, but slight damage was done by hail in a few places. There was no want of fodder or water.

United Provinces:—Rain fell generally on the plains and snow on the hills during the month while hail occurred in Bahraich, Cawnpore, and Basti. The standing crops were, during the month, slightly damaged by frost in seven districts and by rust and insects in places. The prospects were otherwise favourable at the end of the month.

Punjab:—During the month and in most parts of the province there was rain which benefited the standing crops, the condition of which was good to average at the close of the month.

North-West Frontier Province:—The condition of cattle and of the standing crops was average in Dera Ismail Khan and fair elsewhere at the close of the month.

Burma:—The crop prospects were good at the close of the month.

Central Provinces:—At the close of the month the spring crops were generally in good condition and reaping had commenced in places. Slight damage had been caused by frost in parts of Saugor, Damoh, Jubbulpore, Narsinghpur, Hoshangabad, Betul, Chhindwara and Balaghat; by rust in Jubbulpore; by cloudy weather in Raipur and by hail in Nagpur, Bhandara and Balaghat. Scarcity of fodder and water continued in Amraoti and of water in the Katol Tehsil of Nagpur.

Assam:—The prospects of mustard, pulses and sugarcane were fair at the close of the month.

Mysore:—The prospects of the season at the close of

the month were fair in Bangalore and Shimoga, but indifferent in other parts of the province. Cattle were healthy and water and fodder available except in parts of the Tumkur, Mysore, Hassan and Chitaldroog districts, where they were getting scarce.

Hyderabad:—At the close of the month the spring crops were in bad condition in ten taluks and were withering in three.

Rajputana:—The standing crops and their prospects were reported to be fair, except in some parts of the Agency. Damage by frost was reported from several States. Fodder was sufficient and agricultural stock generally in fair condition.

Central India:—The crops had been slightly damaged by hail storms and by cold in Indore, Bhopal, Baghelkhand, Bundelkhand and Bhopawar. Pasturage was indifferent in parts of Indore.

Kashmir Jummoo:—The condition of the standing crops was fair.

Nepal:—The standing crops were doing well.

W. L. DALLAS.

TABLE I.—Abstract of Observations taken at 8 A.M. at 231 Stations in India, Burma, etc., in January, 1905.

Tab

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	I.—Burma Coast and Bay Islands.			+ 030								84·9	—1·8	67·9	+0·4	77·1	—0·7	16·6					
1	Car-Nicobar (*a*) .	25	29·926		29·881	30·009	6th	29·868	11th	·141	79·6	85·2		76·6		80·9		8·6	86·4	4 days	70·5	29th	1
	Port Blair . .	61	29·994	+·057	29·986	30·106	1st	29·928	24th	·178	76·4	84·9	—1·5	74·1	—1·5	79·5	—1·5	10·8	88·0	21st	68·6	27th	1
	Mergui . . .	96	29·932	+·025	29·961	30·069	1st	29·804	24th	·265	74·2	86·5	—1·6	68·4	+1·5	77·5	—0·1	18·1	90·4	5th	62·3	29th	2
	Tavoy . . .	26	30·021	+·026	29·978	30·167	1st	29·913	24th	·254	68·3	88·0	—1·5	61·2?	—3·0?	74·6?	—2·3?	26·8?	91·7	19th	54·5?	28th & 29th.	3
	Moulmein . .	94	29·947	?	29·982	30·129	1st	29·851	26th	·278	68·8	88·3	—0·1	65·0	—0·2	76·7	—0·2	23·3	91·5	7th & 19th.	60·4	28th	3
2	Rangoon* . .	57	29·958	+·033	29·954	30·152	5th	29·917	30th	·235	69·3	87·1	—2·0	64·4	+0·3	75·8	—0·8	22·7	89·0	15th	58·7	27th & 28th.	3
	Bassein . . .	27?	30·026	+·024	29·991	30·197	1st	29·939	24th	·258	67·0	84·2	—1·5	63·6	+1·9	73·9	+0·2	20·6	86·1	4 days	59·0	27th	2
	Diamond Island .	41	30·009	+·022	29·985	30·180	1st	29·921	24th	·259	74·8	80·6	—3·4	71·9	+0·9	76·3	—1·3	8·7	83·9	22nd	70·2	3rd	1
5	Akyab . . .	20	30·052	+·018	30·016	30·225	1st	29·947	24th	·278	62·9	78·9	—2·5	59·3	0	69·1	—1·3	19·6	83·9	6th	51·1	27th	3
3	Toungoo . . .	183	29·877	+·032	30·010	30·076	1st	29·773	31st	·303	62·6	84·0	—1·3	54·4?	—3·2?	69·2?	—2·3?	29·4?	88·3	6th	49·1?	26th	3
	II.—Burma Inland.			+ ·036								79·2	—3·4	52·7	—0·3	66·0	—1·9	26·5					
3	Thayetmyo . .	130	29·953	+·042	30·031	30·154	5th	29·824	26th	·330	62·2	84·8	—1·1	49·4?	—4·1?	67·0?	—0·8?	31·8?	89·0	24th	50·0?	3rd, 15th & 23rd.	3
4	Minbu . . .	*165*	29·918	+·031	30·036	30·124	5th	29·767	24th	·357	62·3	82·1	—3·6	56·5	+0·4	69·3	—1·6	25·6	88·7	25th	51·0	10th & 28th.	3
	Yamethin . .	657	29·393	+·031	30·034	29·585	5th	29·260	26th	·325	61·1	83·2	—4·0	55·1	+0·5	69·2	—1·8	28·1	86·3	21st	50·2	27th	3
	Monywa . .	*280*	29·812		30·031	30·022	1st	29·618	24th	·404	60·2	80·6		53·5		67·1		27·1	87·3	25th	46·8	27th	
	Mandalay . .	250	29·806?	+·025?	30·022?	30·026	5th	29·635	24th	·391	60·2	81·8	—2·3	55·2	—0·8	68·5	—1·6	26·6	86·0	31st	50·2	27th	3
	Myitkyina . .	458	29·599		30·044	29·842	5th	29·374	24th	468	57·0	73·8		48·8		61·3		25·0	79·5	10th	42·9	16th	
	Bhamo . . .	*381*	29·698	+·038	30·061	29·943	5th	29·483	24th	·460	52·0	73·5	—3·7	47·2	—1·3	60·4	—2·5	26·3	78·5	25th	42·2	3rd & 4th,	4
											48·9	69·2		38·3		53·8		30·9	73·2	7th	32·6	11th & 12th.	9
4(*a*)	Maymyo . . .	3,545									48·2	72·1	—3·0	43·8	—1·2	58·0	—2·1	28·3	74·6	6th & 25th.	40·1	22nd	
	Lashio . . .	*2,751*																					
	III.—Assam.			+ ·011								71·3	—2·4	49·7	—1·8	60·5	—2·1	21·6					
7	Silchar . . .	104	30·000	+·020	30·064	30·214	1st	29·868	30th	·346	56·6	75·3	—2·5	51·9	—0·4	63·6	—1·5	23·4	81·9	6th	43·0	27th	
9	Sibsagar . .	333	29·770	+·001	30·082	30·010	1st	29·514	24th	·496	51·7	67·3	—2·8	48·0	—1·5	57·7	—2·2	19·3	71·3	6th	42·9	15th	
	Dhubri . . .	115	29·977	+·013?	30·057	30·216	1st	29·784	24th	·432	54·5	72·1†	—1·9†	49·7	—3·4	60·9†	—2·7	22·4	75·1	5th	43·3	25th	
	Gauhati . . .	195	29·910		30·076	30·142	1st	29·694	24th	·448	53·4	72·2		49·4		60·8		22·8	76·6	5th	43·1	25th & 31st.	
	Tezpur . . .	252	29·833		30·062	30·058	1st	29·603	24th	·455	53·4	71·5		51·0		61·3		20·5	75·5	2nd	45·0	25th	
	Dibrugarh . .	353	29·737		30·077	29·991	1st	29·481	24th	·510	51·3	69·1		48·0		58·6		21·1	74·1	2nd, 4th & 6th.	42·9	15th	
	IV.—Bengal and Orissa.			+ ·019								74·9	—2·1	53·4	—0·5	64·2	—1·3	21·5					
6	Chittagong . .	87	30·001	+·025	30·041	30·190	1st	29·862	24th	·328	60·8	76·9	—1·4	54·7	—0·6	65·8	—1·0	22·2	79·9	6th, 30th & 31st.	46·6	27th	
	Noakhali . .	43	30·037		30·029	30·239	1st	29·903	29th	·336	59·0	75·5		52·7		64·1		22·8	78·6	31st	44·6	26th	
	Comilla . . .	36	30·055		30·040	30·250	1st	29·918	30th	·332	57·0	76·1							81·9	30th			
	Sirajganj . .	49	30·051		30·053	30·268	1st	29·903	30th	·365	54·9	73·6		51·4		62·5		22·2	79·8	31st	42·6	26th	
	Narayanganj . .	26	30·076	+·034	30·052	30·293	1st	29·937	29th	·356	58·3	75·1	—2·8	54·6	—0·6	64·8	—1·7	20·5	80·6	30th	46·3	25th	
	Barisal . . .	13	30·083	+·026	30·041	30·292	1st	29·941	30th	·351	60·9	75·9	—1·7	52·9	—1·5	64·4	—1·6	23·0	80·3	29th & 30th,	43·7	26th	
	Mymensingh . .	63	30·042	+·024	30·060	30·263	1st	29·894	30th	·369	55·7	73·4	—1·6	51·6	—0·9	62·2	—1·3	21·8	78·2	31st	43·6	25th & 26th.	
	Faridpur . . .	46	30·057		30·055	30·272	1st	29·915	29th	·357	57·4	73·9		51·5		62·7		22·4	81·4	30th	43·0	26th	
10	Jessore . . .	33	30·068	+·023	30·049	30·294	1st	29·919	29th	·365	58·7	74·0	—3·9	52·9	—0·1	63·5	—2·0	21·1	80·6	30th	43·1	26th	
	Calcutta . . .	21	30·086	+·021	30·054	30·317	1st	29·934	30th	·383	59·1	75·8	—1·3	55·2	—0·1	65·5	—0·7	20·6	83·9	30th	47·9	27th	
	Saugor Island . .	25	30·063	+·008	30·033	30·292	1st	29·915	30th	·377	62·7	76·2	—0·4	58·7	—0·6	67·5	—0·5	17·6	83·9	30th	51·9	25th, 26th & 27th.	

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any station, the data for t
NOTE 2.—The data from which divisional means of the figure columns Nos. 49, 42, and 44 are deri

* Mean of 27 days. † Mean of 30 days. (*a*) Observation of 29 days.

ations in India, Burma, etc., in January, 1905.

Wind Direction. Number of winds from ...	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1904, to 31st Jan., 1905.	Normal rainfall for period, 1st Dec. to 31st Jan.	Departure from normal of period 1st Dec., 1904, to 31st Jan., 1905.	Heaviest rainfall during month.	Station.
3	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													84	+2	·631	+·002	2·1	0				0·21	0·35	−0·29					I.—Burma Coast and Bay Islands.
1	11	6	3				1	1 N 63° E	** 6·3			** 6·3	75		·762		6·2		5			1·59			5·25			0·86	Car Nicobar.
5	17							9 N 15° E	5·8	7·0	−17	6·5	83	+2	·755	−·026	4·9	+0·8	0			0·05	1·02	− 0·97	1·63	7·64	−6·01	0·05	Port Blair.
1	1	3	1					N 77° E	3·2	2·0	+60	2·8	85	+4	·706	−·004	2·3	−0·7	1	1·40	−0·40	0·48	0·91	− 0·43	0·56	1·29	−0·73	0·48	Mergui.
								Calm	1·2				91	+4	·631	−·014	2·4	+0·4	0	0·20	−0·20	0	0·21	− 0·21	1·32	0·27	+1·05	0	Tavoy.
4	7	1	2		1			N 41° E	2·5	2·4	+ 4	2·8	80	−5	·597	−·035	2·6	+1·3	0	0·40	−0·40	0	0·36	− 0·36	0	0·41	−0·41	0	Moulmein.
2						6	9	N 56° W	4·0‡	4·3	− 7	3·4	92	+9	·662	+·094	2·1	+0·6	0	0·20	−0·20	0	0·12	− 0·12	0·04	0·21	−0·17	0	Rangoon.
8	6	1	1		2	5	8	N 18° W	8·1*	2·9	+179?		85	−2	·564	−·013	0·1	−1·7	0	0·10	−0·10	0	0·14	− 0·14	0·12	0·27	−0·15	0	Bassein.
8	13	1					8	N 21° E	11·7	6·6	+77	11·7	74	+1?	·645	−·008	1·6	−0·7	0	0·44	−0·44	0	0·21	− 0·21	0·05	0·91	−0·86	0	Diamond Island.
6	4							N 6° E	2·4	2·6	− 8	2·3	89	+2	·519	+·025	0·2	−0·5	0	0·10	−0·10	0	0·06	− 0·06	0·03	0·76	−0·73	0	Akyab.
8							6	N 19° W	1·4	1·9	−26	1·4	87	−1	·501	0	1·2	+0·1	0	0·20	−0·20	0	0·08	− 0·08	0·22	0·25	−0·03	0	Toungoo.
													83	+3	·414	−·006	2·5	+1·5				0·04	0·15	−0·15					II.—Burma Inland.
0	2	4		4		11		N 37° W	9·5	2·4	+296		77	+3	·435	+·018	1·1	+0·5	0	0·10	−0·10	0	0·02	− 0·02	0·10	0·17	− 0·07	0	Thayetmyo.
2				4	6	1	14	N 77° W	3·5			4·2	81	+7	·457	+·032	1·0	+0·3	0	0·10	−0·10	0	0	0	0·54	0·63	− 0·09	0	Minbu.
7			5	2			5	N	2·3			2·4	80	+3	·431	+·002	1·6	+1·1	0	0·20	−0·20	0	0·08	− 0·08	0·28	0·57	− 0·29	0	Yamethin.
1				1		6	7	N 65° W	2·3			2·4	82		·436		1·9		0	0	0	0	0	0	0·33	0·15	+ 0·18	0	Monywa.
1				3	1		1	S 34° W	3·1			3·1	84	+1	·433	−·026?	6·9	+5·8	0	0·10	−0·10	0	0·05	− 0·05	0·60	0·34	+ 0·26	0	Mandalay.
	2	4	2	1				S 82° E	1·2			1·3	86		·404		2·3		1			0·29			0·29			0·17	Myitkyina.§
6	5	4		7		1		N 68° E	11·5			13·5	92	−1	·306	−·077	3·0	−0·1	0	1·20	−1·20	0	0·72	− 0·72	0·75	1·14	− 0·39	0	Bhamo.
	1			1	1		1	S 70° W	1·5				91		·319		1·0		0	0·20	−0·20	0	0·06	− 0·06	0·80	0·51	+ 0·29	0	Maymyo.
1	1	1	8	8	8	2	1	S 3° W	2·2				96	+6	·330	−·008	2·7	−1·8	0			0·04	0·39	− 0·35	1·18	1·05	+ 0·13	0·04	Lashio.
													93	−1	·387	−·018	5·6	+1·5				0·74	0·89	−0·15					III.—Assam.
								Calm	0·1	2·0	−95	0·2	90	−1	·417	−·014	2·7	−0·8	1	1·90	−0·90	0·15	0·72	− 0·57	0·23	1·18	− 0·95	0·15	Silchar.
								Calm	1·1	1·8	−39	1·0	99	0	·385	−·019	9·9	+4·5	3	3·70	−0·70	1·39	1·31	+ 0·08	1·46	1·88	− 0·42	0·75	Sibsagar.
3	4	11	2	4	2			S 86° E	4·1	3·9	+ 5	4·8	90	−1	·387	−·022	2·6	+0·7	0	0·90	−0·90	0·07	0·43	− 0·36	0·07	0·50	− 0·43	0·07	Dhubri.
	1	1	1	3		1		S 24° E	1·3			1·5	94		·389		7·8		2	1·70	+0·30	0·50	0·64	− 0·14	0·54	0·88	− 0·34	0·33	Gauhati.
	14	7			1			N 61° E	2·8			3·0	90		·378		3·4		2	1·80	+0·20	0·28	0·65	− 0·37	0·37	1·08	− 0·71	0·16	Tezpur.
5	6	4	1	1		1		N 45° E	1·3			1·2	95		·363		7·0		4	4·00	0	2·06	1·57	+ 0·49	2·12	2·33	− 0·21	0·85	Dibrugarh.
													86	0	·424	−·001	2·8	+1·7				0·72	0·43	+0·29					IV.—Bengal and Orissa.
4	22	2	3					N 50° E	3·0	3·7	−19	2·7	86	−2	·466	+·006	3·4	+2·3	1	0·68	+0·32	0·11	0·30	− 0·19	0·19	1·15	− 0·96	0·10	Chittagong.
4	2		2	1		12	10	N 58° W	1·5			1·7	90		·458		2·8		0	0·97	−0·97	0·10	0·44	− 0·34	0·16	0·82	− 0·66	0·05	Noakhali.
1	2	1	1	4			1	S 45° E	1·5			1·3	92		·431		2·5		0	1·29	−1·29	0·03	0·54	− 0·51	0·03	0·76	− 0·73	0·02	Comilla.
		1	1	2	2			S 5° E	0·6			0·7	93		·397		3·7		1	1·07	−0·07	0·29	0·47	− 0·18	0·46	0·58	− 0·12	0·22	Sirajganj.
4	3	1	2	2	1	1	6	N 9° W	2·1	2·1	0	1·8	89	+ 2	·441	−·008	3·5	+2·2	1	1·00	0	0·15	0·38	− 0·23	0·28	0·54	− 0·26	0·15	Narayanganj.
3	3				1		4	N 8° W	1·4			1·3	93	+ 6	·500	+·031	2·1	+1·3	2	1·00	+1·00	0·44	0·67	− 0·23	0·56	1·27	− 0·71	0·20	Barisal.
		3	2			1	1	S 72° E	1·2			1·0	81	−10	·400	−·020	1·0	−0·5	0	1·00	−1·00	0·08	0·50	− 0·42	0·24	0·55	− 0·31	0·07	Mymensingh.
4			1	1		1	3	N 27° W	1·3			1·1	90		·429		2·2		3	0·97	+2·03	0·85	0·49	+ 0·36	0·90	0·57	+ 0·33	0·50	Faridpur.
4						1		N 11° W	1·0	1·6	−38	1·0	85	− 2	·425	−·010	3·1	+1·9	2	0·90	+1·10	1·69	0·46	+ 1·23	1·69	0·64	+ 1·05	1·56	Jessore.
5	1	1	1	2	1		4	N 11° W	2·1	3·0	−30		87	+ 3	·441	+·003	4·0	+2·9	2	0·78	+1·22	0·94	0·32	+ 0·62	0·94	0·54	+ 0·40	0·80	Calcutta.
11	13			3	1	1	2	N 18° E	7·8	6·3	+24		89	− 1	·506	−·020	3·6	+2·1	2	0·74	+1·26	1·19	0·21	+ 0·98	1·24	0·54	+ 0·70	0·77	Saugor Island.

ion are not utilized in calculating the provincial departures from normal.
ncomplete.

‡ Mean of 24 days.
** " 28 "

§ Wind direction for 30 days.

Tab

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	Krishnagar	47	30·051		30·050	30·280	1st	29·898	29th	·382	55·8	75·1		53·3		64·2		21·8	82·6	30th	44·4	26th	3
	Midnapore	149	29·946		30·051	30·180	1st	29·804	29th	·376	60·4	78·0		56·3		67·2		21·7	85·3	29th	49·2	25th & 26th.	3
11	Bankura	298	29·784		30·067	30·016	1st	29·645	23rd	·371	58·8	75·5		54·5		65·0		21·0	84·1	30th	47·1	26th	3
	Raniganj	334	29·773		30·084	30·002	1st	29·631	29th	·371	56·3	75·3		52·6		64·0		22·7	84·0	30th	44·7	26th	3
	Burdwan	99	30·005	+·016	30·059	30·230	1st	29·852	23rd	·378	58·6	76·6	−2·2	55·4	+0·5	66·0	−0·9	21·2	83·8	30th	46·3	26th	3
	Naya Dumka	489	29·595		30·077	29·832	1st	29·443	29th	·389	56·7	73·4		51·0		62·3		22·4	82·9	30th	41·9	26th	4
	Berhampore	67	30·034	+·016	30·054	30·264	1st	29·880	29th	·384	56·6	73·6	−3·2	53·3	−0·1	63·5	−1·7	20·3	82·2	30th	45·1	25th, & 26th.	3
	Rampur Boalia	70	30·034		30·057	30·269	1st	29·875	23rd	·394	56·5	73·3		51·5		62·4		21·8	79·6	30th	43·1	26th	3
	Malda	72	30·027		30·057	30·267	1st	29·852	30th	·415	55·6	71·8		52·1		61·9		19·7	77·1	30th	42·1	26th	3
	Bogra	61	30·024?	+·031?	30·042?	30·253	1st	29·860	24th	·393	54·9	73·8	−2·3	50·6	−1·3	62·2	−1·8	23·2	79·8	31st	41·7	26th	3
12	Dinajpur	123	29·974	+·024	30·062	30·210	1st	29·801	24th & 30th.	·409	54·7	72·9	−2·8	47·7	−1·7	60·4	−2·3	25·2	77·3	31st	39·0	26th	3
	Rangpur	123	29·980		30·067	30·213	1st	29·784	24th	·429	55·3	72·4		49·6		61·0		22·8	76·3	6th	43·8	9th & 10th.	3
	Jalpaiguri	284	29·806	+·017	30·068	30·050	1st	29·589	24th	·461	53·8	70·7	−1·3	49·3	−1·5	60·1	−1·4	21·4	75·4	6th	43·1	31st	3
	Cooch Behar	156	29·938		30·062	30·190	1st	29·735	24th	·455	53·1	71·5		50·1		60·8		21·4	76·2	7th	43·7	26th	3
17	Purnea	125	29·974	+·020	30·068	30·223	1st	29·800	24th	·423	51·5	72·0	−2·7	47·9	−0·4	60·0	−1·6	24·1	76·2	6th & 8th.	40·0	26th	3
14	Balasore	50	30·053	+·007	30·049	30·295	1st	29·899	29th	·396	60·3	79·3	−2·0	55·6	−0·1	67·5	−1·1	23·7	86·9	29th	47·4	2nd	3
	False Point	21	30·075	+·014	30·039	30·291	1st	29·934	31st	·357	64·7	77·6	−1·5	58·7	+0·4	68·1	−0·6	18·9	85·4	30th	50·0	3rd	3
	Cuttack	80	30·013	+·011	30·041	30·246	1st	29·853	31st	·393	62·7	81·5	−3·0	60·2	+0·4	70·9	−1·3	21·3	90·4	30th & 31st.	55·1	6 days	3
	Puri	24	30·077		30·040	30·302	1st	29·933	30th	·369	67·1	78·3		64·1		71·2		14·2	83·7	25th	56·6	3rd & 26th.	2
	V.—Gangetic Plain and Chota Nagpur.			+·013								71·0	−3·7	48·5	−0·6	59·8	−2·2	22·5					4
15	Hazaribagh	2,007	28·009	0	30·075	28·222	1st	27·896	23rd	·326	53·8	70·5	−2·6	49·1	−1·4	59·8	−2·0	21·4	79·7	29th	39·3	25th	4
	Ranchi	2,128	27·894	+·011	30·087	28·114	1st	27·772	24th	·342	53·8	70·8	−3·6	50·2	−0·7	60·5	−2·2	20·6	78·6	29th	41·5	25th	3
	Daltonganj	*730*	29·350		30·093	29·578	1st	29·211	22nd	·357	52·8	74·3		46·3		60·3		28·0	85·0	29th	38·0	2nd	4
	Purulia	*816*	29·253		30·066	29·478	1st	29·112	29th	·366	57·6	75·3		52·7		64·0		22·6	84·5	29th	44·4	25th	4
	Chaibassa	*760*	29·290	−·002	30·048	29·489	1st	29·160	23rd	·329	56·1	77·5	−3·6	55·4*	+2·3*	66·8*	−0·7	22·1	85·4	13th	48·0	26th	3
16	Gaya	375	29·718	+·011	30·075	29·949	1st	29·536	28th	·413	54·2	71·7	−4·2	49·4	−2·2	60·6	−3·2	22·3	85·9	30th	42·0	25th & 26th.	4
	Dehri	351	29·732		30·065	29·970	1st	29·595	29th	·375	54·8	72·1		50·9		61·5		21·2	82·3	29th	43·1	24th	3
	Patna	183	29·920	+·007	30·070	30·164	1st	29·764	29th	·400	53·6	70·3	−2·7	49·9	−0·3	60·1	−1·5	20·4	79·0	30th	40·3	25th	3
	Arrah	190	29·916		30·074	30·151	1st	29·769	29th	·382	52·2	70·9		50·3		60·6		20·6	79·8	30th	43·1	25th	3
	Buxar	239	29·855		30·070	30·097	1st	29·708	29th	·389	52·5	71·3		47·9		59·6		23·4	80·6	29th	41·5	26th	2
17	Bhagalpur	160	29·948		30·070	30·181	1st	29·779	29th	·402	57·0	71·0		49·6		60·3		21·4	77·3	30th	39·7	25th	3
	Darbhanga	166	29·918?	+·005?	30·050?	30·152	1st	29·765	30th	·387	52·2	71·1	−1·6	47·6	−4·5?	59·4	−3·1?	23·5	76·1	6th, 7th & 30th.	39·2	25th	3
	Muzaffarpur	178	29·922		30·070	30·152	1st	29·779	28th	·373	53·0	69·4		47·9		58·7		21·5	74·2	31st	40·3	25th	3
	Motihari	224	29·876		30·079	30·106	1st	29·722	29th	·384	49·7	69·7		44·9		57·3		24·8	75·3	6th, 7th & 31st.	36·1	25th	3
	Chapra	181	29·900?		30·050?	30·135	1st	29·751	28th & 29th.	·384	51·7	70·5		48·0		59·3		22·5	79·3	30th	40·2	25th	3
18	Benares	267	29·836	+·022	30·076	30·072	1st	29·683	22nd	·389	53·2	70·3	−4·0	47·0	−1·2	58·6	−2·6	23·3	80·0	29th	37·5	25th	4
	Allahabad	309	29·785	+·012	30·074	30·006	1st	29·625	22nd	·381	52·4	69·9	−4·5	48·0	+0·1	59·0	−2·2	21·9	80·2	29th	39·1	24th	4
23	Gorakhpur	257	29·813?	+·004?	30·048?	30·042	1st	29·664	28th	·378	53·0	68·5	−4·4	47·7	−1·5	58·1	−3·0	20·8	76·1	30th	40·0	24th, 25th & 26th.	3
19	Lucknow	368	29·714	+·015	30·072	29·935	1st	29·570	22nd	·365	50·7	69·9	−4·1	46·1	−0·6	58·0	−2·4	23·8	82·7	29th	36·6	31st	4
20	Bahraich	401	29·668	+·016	30·063	29·884	5th	29·518	28th	·366	50·3	68·9	−3·5	46·4	−0·7	57·7	−2·1	22·5	80·1	29th	36·6	25th	4
21	Cawnpore	416	29·671	+·023	30·081	29·886	1st	29·531	28th	·355	50·9	70·2	−3·7	46·5	−0·6	58·4	−2·2	23·7	81·3	29th	35·6	25th	4
	Mainpuri	516	29·571	+·028	30·089	29·780	1st	29·438	28th	·342	49·5	67·7	−4·0	45·9	−0·2	56·8	−2·2	21·8	80·3	29th	33·3	31st	4

N. B.—Elevations in italics indicate barometrical determinations.

* Mean of 19 days.

Note 1.—When a query is inserted against any rea

Note 2.—The data from which divisional means o

ntinued.

ons in India, Burma, etc., in January, 1905—continued.

Wind Direction. Number of winds from							Wind Velocity.			Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1904, to 31st January, 1905.	Normal rainfall for period, 1st Dec. to 31st January.	Departure from normal of period, 1st Dec., 1904, to 31st January, 1904.		
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
1		1	1	2	5	N 36° W	1·5			1·7	90		·404		2·7		2	0·81	+1·19	2·11	0·43	+ 1·68	2·11	0·53	+ 1·58	1·80	Krishnagar.
1		1			5	N 3° W	2·1			1·9	74		·389		3·1		5	0·94	+4·06	2·23	0·55	+ 1·68	2·23	0·75	+ 1·48	1·40	Midnapore.
2			1	7	2	N 45° W	2·5			2·2	77		·387		2·4		5	1·06	+3·94	1·20	0·34	+0·86	1·20	0·47	+ 0·73	0·54	Bankura.
2				1	3	N 14° W	1·6				80		·366		2·8		4	0·97	+3·03	1·11	0·43	+0·68	1·11	0·51	+ 0·60	0·53	Raniganj.
1					3	N 13° E	1·4	1·8	−22	1·4	79	+ 7	·395	+·026	3·7	+2·2	2	0·81	+1·19	1·46	0·29	+1·17	1·46	0·40	+ 1·06	1·19	Burdwan.
	1				1	Calm	1·2			1·3	79		·371		2·0		3	1·17	+1·83	0·75	0·59	+0·16	0·75	0·75	0	0·36	Naya Dumka.
1				2	2	N 34° W	1·4	1·8	−22	1·2	88	0	·409	−·006	4·0	+2·6	2	1·06	+0·94	0·84	0·41	+0·43	0·84	0·52	+ 0·32	0·55	Berhampore.
						Calm	0·8			0·8	85		·394		1·6		2	0·85	+1·15	0·78	0·35	+0·43	0·78	0·41	+ 0·37	0·37	Rampur Boalia.
2	2	2		11	6	N 40° W	4·1			3·8	89		·396		2·7		3	0·97	+2·03	1·38	0·68	+0·70	1·38	0·92	+ 0·46	0·86	Malda.
			1	1		S 27° W	1·2			1·0	84	− 1	·372	−·024	1·8	+0·6	1	1·06	−0·06	0·27	0·57	−0·30	0·27	0·59	− 0·32	0·18	Bogra.
6	4	1		5	7	6	N 45° W	1·7			1·6	85	− 2	·367	−·010	2·5	+1·4	1	0·84	+0·16	0·15	0·51	−0·36	0·15	0·55	− 0·40	0·12	Dinajpur.
6	1	2		8		5	N 72° W	1·8			1·7	?	?		2·0		0	0·90	−0·90	0·06	0·49	−0·43	0·06	0·58	− 0·52	0·06	Rangpur.
2	1			1	3	N 9° W	1·2			1·5	90	− 1	·383	−·013	3·7	+2·6	0	0·97	−0·97	0·16	0·50	−0·34	0·20	0·54	− 0·34	0·09	Jalpaiguri.
3	2	1		1	1	1	N 63° E	1·1			1·1	93		·379		2·5		0	0·90	−0·90	0	0·43	−0·43	0	0·51	− 0·51	0	Cooch Behar.
3	1			3	4	1	N 76° W	2·0	1·7	+18	1·8	89	− 2	·350	0	1·8	+0·6	1	0·90	+0·10	0·21	0·47	−0·26	0·24	0·57	− 0·33	0·12	Purnea.
2		1	1	2	3	9	N 21° W	2·9‡			2·2‡	81	0	·431	−·011	3·7	+2·2	3	0·61	+2·39	0·84	0·27	+0·57	1·22	0·45	+ 0·77	0·31	Balasore.
			2	1	4	5	N 25° W	5·5	6·0	− 8	5·7	89	+ 1	·548	+·009	2·7	+1·2	2	0·71	+1·29	0·92	0·46	+0·46	1·36	1·15	+ 0·21	0·79	False Point.
2	4			2	2		E	1·7	1·4	+21		81	+ 3	·466	+·011	3·2	+1·7	1	0·55	+0·45	0·31	0·16	+0·15	0·51	0·43	+ 0·08	0·14	Cuttack.
4				5	1	5	N 18° W	10·7			10·5	83		·583		1·9		2	0·43	+1·57	1·04	0·26	+0·78	1·29	0·91	+ 0·38	0·76	Puri.
												84	+ 8	·343	+·007	3·1				0·87	0·65	+ 0·22					V.—Gangetic Plain and Chota Nagpur.
	2	9	6	4	5	S 51° W	7·2	4·9	+47	6·4	69	+ 5	·292	−·008	3·7	+1·8	3	1·45	+1·55	1·40	0·48	+0·92	1·40	0·68	+ 0·72	0·55	Hazaribagh.
1	2	3	1	6	10	N 58° W	5·8			6·8	74	+11	·313	+·013	3·5	+1·9	4	1·35	+2·65	2·39	0·29	+2·10	2·53	0·38	+ 2·15	0·86	Ranchi.
4	1		1	1	1	S 63° E	2·9			2·4	84		·334		2·8		4	1·63	+2·37	2·01	0·76	+1·25	2·05	1·05	+ 1·00	0·85	Daltonganj.
1	2			15	9	N 75° W	2·3			2·9	76		·371		3·0		5	1·35	+3·65	2·42	0·44	+1·98	2·42	0·62	+ 1·80	1·26	Purulia.
				1		W	1·6			1·4	90	+16	·416	+·038	1·0	−0·4	3	1·23	+1·77	1·66	0·14	+1·52	1·66	0·24	+ 1·42	0·90	Chaibassa.
1		4	6	6		S 50° W	4·6	1·6	+188	3·7	84	+11	·356	+·011	3·8	+2·1	4	1·32	+2·68	1·31	0·59	+0·72	1·31	0·76	+ 0·55	0·48	Gaya.
3	1	5	8	6	1	S 39° W	4·5			4·0	79		·345		3·7		3	1·35	+1·65	0·57	0·59	−0·02	0·57	0·91	− 0·34	0·31	Dehri.
5	3	1	8	8	3	S 56° W	4·0	2·0	+100	4·5	84	+ 7	·350	−·006	2·6	+0·9	1	1·32	−0·32	0·23	0·56	−0·33	0·23	0·66	− 0·43	0·10	Patna.
	2	1	6			S 18° W	1·8			1·8	85		·335		1·8		2	1·58	+0·42	0·30	0·88	−0·58	0·33	1·01	− 0·68	0·14	Arrah.
7	3	6	7	3		S 45° W	5·5			5·2	81		·330		3·9		1	1·65	−0·65	0·40	0·78	−0·38	0·83	0·98	− 0·15	0·25	Buxar.
	2	1	1	5	2	S 79° W	2·7			2·5	80		·374		2·6		3	1·32	+1·68	0·71	0·55	+0·16	0·71	0·62	+ 0·09	0·37	Bhagalpur.
1	1		2	7	1	S 82° W	2·0	2·3	−13	1·7	92	+ 6	·370	−·010	3·1	+1·8	0	1·30	−1·30	0·18	0·62	−0·44	0·18	0·69	− 0·51	0·09	Darbhanga.
1	1		1	1		S 45° E	1·9				91		·366		2·5		2	1·33	+0·67	0·77	0·79	−0·02	0·77	0·86	− 0·09	0·43	Muzaffarpur.
1			5	2		S 56° W	4·0			3·8	93		·328		6·7		1	1·32	−0·32	0·32	0·59	−0·27	0·96	0·73	+ 0·23	0·30	Motihari.
5	2		6	1		S 45° E	2·2			2·0	89		·342		3·4		1	1·48	−0·48	0·30	0·74	−0·44	0·32	0·83	− 0·51	0·15	Chapra.
4	3		6	3	1	S 19° W	1·8	2·9	−38	2·1	84	0?	·349	+·008	3·2	+1·3	2	1·40	+0·60	0·73	0·67	+0·06	1·44	0·88	+ 0·56	0·46	Benares.
5	3	2	4	4	1	S 23° E	3·8	3·4	+12	3·2	87	+ 8	·352	+·019	4·0	+2·1	2	1·60	+0·40	0·67	0·76	−0·09	1·63	1·00	+ 0·63	0·47	Allahabad.
2	1		2	5	3	N 21° W	1·2	1·7	−29		85	+ 3	·346	−·004	1·8	0	3	1·50	+1·50	0·54	0·76	−0·22	1·29	0·90	+ 0·39	0·21	Gorakhpur.
1	2	1		6	4	N 60° W	1·7	2·4	−29	1·9	86	+ 4	·318	−·002	3·4	+0·9	2	1·90	+0·10	0·31	0·96	−0·65	1·07	1·34	− 0·27	0·13	Lucknow.
1				2		W	0·4			0·4	94	+ 7	·351	+·013	3·0	+1·6	3	1·90	+1·10	0·64	0·92	−0·28	1·66	1·26	+ 0·40	0·23	Bahraich.
3		1	1	4	2	N 29° W	2·3				85	+ 6	·321	+·001	2·3	+0·4	3	1·60	+1·40	0·53	0·68	−0·15	1·44	0·85	+0·59	0·22	Cawnpore.
3	1	2	2	4	3	N 39° W	1·2			1·2	84	+ 8	·297	+·012	2·4	−0·2	3	1·50	+1·50	0·65	0·73	−0·08	3·01	1·07	+ 1·94	0·22	Mainpuri.

‡ returns of any station, the data for that station are not utilized in calculating the provincial departures from normal.
Columns Nos. 40, 42 and 44 are derived are incomplete.

‡ Mean of 30 days.

Tab

Abstract of Observations taken at 8 A.M. at 2

Number of District	Station	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
	VI.—Upper Sub-Himalayas.			+·012								62·2	−6·2	43·3	−0·4	52·7	−3·3	18·9					39
24	Bareilly	568	29·497	+·020	30·077	29·732	5th	29·356	28th	·376	49·3	64·9	−5·7	45·6	−0·5	55·3	−3·1	19·3	76·3	29th	33·1	31st	43
	Dehra Dun	2,233	27·767	+·005	30·101	27·980	5th	27·641	22nd	·339	45·5	60·7	−5·5	42·7	−2·1	51·7	−3·8	18·0	69·0	29th	32·0	24th & 31st.	37
	Roorkee	899	29·146	+·018	30·090	29·385	5th	29·007	21st & 22nd.	·378	46·7	63·2	−5·4	43·0	−1·3	53·2	−3·9	20·2	74·3	29th	30·7	31st	43
22	Meerut	738	29·315	+·007	30·084	29·522	5th	29·170	21st	·352	46·9	65·3	−5·1	44·7	−0·3	55·0	−2·7	20·6	73·4	29th	31·1	31st	42
26	Delhi	718	29·345	+·009	30·088	29·549	5th	29·169	21st	·380	49·1	64·1	−6·6	46·0	−1·9	55·1	−4·3	18·1	70·2	29th	32·5	31st	37
28	Lahore	702	29·356	+·007	30·096	29·608	6th	29·047	21st	·561	44·6	60·9	−8·1	42·3	+1·6	51·6	−3·3	18·6	68·8	10th	31·1	31st	37
27	Sirsa	662	29·415	+·021	30·105	29·644	6th	29·175	21st	·469	45·5	64·0	−7·0	41·6	−1·5	52·8	−4·3	22·4	77·2	11th	29·0	31st	48
	Patiala	*818*	29·239		30·095	29·474	5th	29·061	21st	·413	47·3	61·8		43·5		52·7		18·3	68·1	13th	32·0	31st	36
29	Ludhiana	812	29·242	+·016	30·094	29·464	6th	29·016	21st	·448	46·3	61·0	−6·2	44·1	−0·2	52·6	−3·2	16·9	66·7	13th	32·0	24th & 31st.	39
	Sialkot	830	29·220	+·017	30·097	29·466	5th	28·957	21st	·509	46·4	60·1	−6·1	44·1	+1·3	52·1	−2·4	16·0	67·5	13th	32·5	31st	35
	Ambala	892	29·160	?	30·098	29·396	5th	29·010	22nd	·386	47·5	63·2	−4·6	43·3	0	53·3	−2·3	19·9	71·5	29th	33·2	24th & 31st.	38
	Rawalpindi	1,674	28·346	0	30·140	28·611	6th	28·000	21st	·611	41·1	56·6	−6·5	38·2	+0·3	47·4	−3·1	18·4	66·4	10th	29·0	25th	37
	VII.—Indus Valley and North-West Rajputana.			+·020								66·5	−5·7	43·9	−1·6	55·2	−3·7	22·6					46
32	Peshawar	1,110	28·959	−·018	30·151	29·225	6th	28·597	21st	·638	42·5	58·4	−5·1	38·6	−1·0	48·6	−3·1	19·8	68·2	9th & 10th	27·9	31st	40
	D. I. Khan	590	29·522	+·015	30·121	29·798	6th	29·147	21st	·651	43·2	62·9	−6·2	39·2	−1·2	51·1	−3·7	23·7	74·3	8th	30·0	31st	44
31	Khushab	612	29·471	+·016	30·115	29·738	6th	29·097	21st	·641	44·1	62·6	−5·0	40·9	−0·4	51·8	−2·7	21·7	73·3	9th	27·9	30th	43
	Montgomery	558	29·531	+·023	30·110	29·786	6th	29·166	21st	·620	44·5	62·1	−6·4	40·5	−1·7	51·3	−4·1	21·6	71·8	11th	27·5	23rd	44
	Multan	420	29·687	+·013	30·113	29·943	6th	29·312	21st	·631	46·3	64·3	−5·9	42·5	−0·8	53·4	−3·4	21·8	75·3	10th	29·0	30th & 31st.	46
47	Jacobabad	186	29·957	+·039	30·123	30·208	6th	29·692	21st	·516	47·6	66·3	−7·3	43·4	+0·1	54·8	−3·6	22·9	77·4	11th	25·0	23rd	52
	Hyderabad	96	30·057	+·044	30·115	30·301	6th & 7th.	29·792	21st	·509	51·4	71·4	−5·4	47·8	−3·3	59·6	−4·4	23·6	82·0	11th & 16th.	33·5	30th	48
	Kurrachee	30	30·116	+·035	30·098	30·347	5th & 6th.	29·887	21st	·460	56·3	72·9	−4·0	52·6	−1·9	62·8	−3·0	20·3	80·9	2nd, 13th & 14th.	40·2	24th	46
51	Bikaner	*771*	29·302	+·014	30·106	29·495	1st	29·007	21st	·488	48·4	65·3	−6·5	45·4	−4·2	55·4	−5·4	19·9	75·1	11th	33·1	30th	42
	Pachpadra†	*380*	29·714	+·016	30·085	29·903	6th	29·492	21st	·411	49·1	73·1	−5·3	43·5	−1·6	58·3	−3·5	29·5	81·6	15th	24·2	31st	57
	Jodhpur	782	29·295		30·119	29·497	6th	29·086	21st	·411	51·6	72·3		48·4		60·4		23·9	80·1	15th	28·1	31st	52
	VIII—East Rajputana, Central India and Gujarat.			+·015								75·2	−3·9	50·4	−0·8	62·8	−2·4	24·7					49
50	Jaipur	1,431	28·627	+·012	30·120	28·830	1st	28·476	21st	·354	50·8	69·1	−5·5	46·9	−1·1	58·0	−3·3	22·2	78·7	28th	28·1	31st	50
	Bharatpur	585	29·492		30·087	29·685	6th	29·352	21st	·333	49·2	68·0		45·8		56·9		22·2	77·9	22nd	36·1	24th	4
	Kotah	819?	29·234		30·110	29·430	1st	29·091	11th	·339	53·5	74·0		50·0		62·0		24·0	88·0	28th	35·5	31st	52
	Sambhar	1,254	28·801	+·014	30·118	29·001	6th	28·627	21st	·374	48·2	69·8	−3·8	44·9	−0·5	57·4	−2·2	24·9	80·9	28th	26·0	31st	54
	Ajmer	1,611	28·443	+·001	30·129	28·647	1st	28·271	21st	·376	49·4	69·6	−4·5	46·7	+1·2	58·2	−1·7	22·9	80·4	28th	31·0	31st	49
	Udaipur	1,925	28·115		30·107	28·312	1st	27·978	21st	·334	52·8	74·2		46·8		60·5		27·4	83·0	10th	31·2	24th & 31st.	51
46	Bhuj	395	29·704	+·027	30·078	29·901?	6th	29·514	21st	·387?	57·5	75·7	−4·7	52·0	−2·4	63·9	−3·6	23·7	85·3	2nd	39·9	31st	45
	Jamnagar	61	30·046		30·052	30·201	6th	29·883	21st	·318	58·2	76·7		53·1		64·9		23·6	83·5	1st	36·7	24th	46
	Rajkot	429	29·642	+·012	30·050	29·775	6th	29·519	21st	·256	57·4	80·3	−3·7	49·8	−1·3	65·1	−2·5	30·5	90·4	27th	33·1	24th	57
	Veraval	*18*	30·080	+·039	30·040	30·198	5th	29·963	26th	·235	61·8	79·0	−2·5	57·2	−1·6	68·1	−2·1	21·8	87·6	1st	40·2	24th	47
	Dwarka	37?	30·070		30·055	30·245	6th	29·913	21st	·332	64·4	74·9		58·1		66·5		16·8	83·9	1st	45·6	24th	38
	Bhavnagar Para	55	30·048	+·007	30·047	30·174	5th	29·932	26th	·242	58·7	82·6	+0·1?	53·4	−2·7	68·0	−1·3?	29·2	50·6	28th	39·0	25th	51
49	Nowgong	757	29·312	−·004	30·086	29·539	1st	29·158	11th	·381	51·2	70·4	−4·7	47·7	+0·7	59·1	−2·0	22·7	80·5	28th	36·0	24th	44
	Indore	1,823	28·219	+·013	30·090	28·402	1st	28·120	11th	·282	56·7	78·4	−1·0	48·2	−1·6	63·3	−1·3	30·2	85·6	29th	31·1	24th	54
	Neemuch	1,630	28·423	+·013	30·120	28·610	1st	28·290	18th	·320	51·5	74·5	−3·1	46·3	−2·4	60·4	−2·8	28·2	84·0	28th	29·8	24th	54
45	Surat	39	30·053	+·041	30·039	30·201	1st	29·935	26th	·266	61·7	83·8	−3·1	56·2	−0·3	70·0	−1·7	27·6	92·2	27th	43·9	31st	48

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading

Note 2.—The data from which divisional means of the figu

ntinued.

ns in India, Burma, etc., in January, 1905—continued.

Wind Direction.							Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
er of winds from																											
E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1904, to 31st January, 1905.	Normal rainfall for period, 1st Dec. to 31st January.	Departure from normal of period, 1st Dec., 1904, to 31st January, 1905.		
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
											86	+ 6	·280	+ ·014	4·4	+ 0·6				2·76	1·67	+1·07					VI.—Upper Sub-Himalayas.
2				8		N 81° W	1·5	2·8	− 46	1·4	89	+ 6	·321	+ ·024	2·9	+0·2	5	2·36	+2·64	1·77	1·05	+0·72	3·13	1·38	+1·75	0·53	Bareilly.
1	2	1		3	2	S 63° W	0·8	1·8	− 56		84	+ 5	·264	+ ·001	5·3	+0·6	7	3·50	+3·50	3·37	2·38	+0·99	5·39	3·18	+ 2·21	1·03	Dehra Dun.
1	3				9	N 39° W	2·9	2·2	+ 32		88	+ 3	·286	+ ·009	4·1	+1·1	6	2·80	+3·20	2·80	1·68	+1·12	5·09	2·29	+ 2·80	1·17	Roorkee.
3			1	6	2	N 82° W	0·8	2·1	− 62	0·8	83	+ 6	·274	+ ·011	3·3	+0·2	3	2·30	+0·70	2·07	1·35	+0·72	2·74	1·83	+ 0·91	1·07	Meerut.
3	2	1	2	9	4	N 85° W	3·8	3·0	+ 27	3·3	80	+12	·289	+ ·030	5·2	+1·6	5	2·40	+2·60	1·53	1·23	+0·30	2·54	1·76	+ 0·78	0·75	Delhi.
	1	1		3	3	S 29° W	1·6	1·9	− 16		91	+ 9	·278	+ ·023	4·7	+0·7	5	1·90	+3·10	1·86	1·12	+0·74	1·86	1·50	+ 0·36	0·56	Lahore.
4	2		1	2	1	E	2·3	2·6	− 12	2·6	86	+10	·268	+ ·017	4·0	−0·2	3	1·50	+1·50	1·77	0·84	+0·93	1·87	1·15	+ 0·72	0·90	Sirsa.
3	5	2	1	8	7	N 72° W	4·3			4·3	86		·289		4·7		4			2·97			4·06			2·06	Patiala.
	4		1	2	1	S 20° W	1·4	1·1	+ 27	1·2	89	+ 7	·286	+ ·013	3·6	−0·9	3	2·60	+0·40	2·19	1·84	+0·35	3·25	2·62	+ 0·63	1·58	Ludhiana.
4		2	2	3	1	N 23° E	2·2	1·4	+ 57	1·9	82	0	·268	− ·001	3·7	+0·3	6	3·40	+2·60	6·03	2·51	+3·52	6·17	3·03	+ 3·14	1·96	Sialkot.
	5				11	N 45° W	2·9			2·6	91	+ 4	·303	+ ·019	4·7	+1·3	5	2·80	+2·20	2·68	1·62	+1·06	4·05	2·44	+ 1·61	1·12	Ambala.
1	2				1	N 77° E	2·2	1·9	+16	2·0	88	+ 4	·234	+ ·004	6·0	+1·3	6	4·20	+1·80	4·05	2·74	+1·31	5·60	3·48	+ 2·12	1·33	Rawalpindi.
											68	+ 3	·233	− ·004	4·1	+0·6				0·90	0·57	+0·32					VII.—Indus Valley and North-West Rajputana.
1	2	1	2	1		S 82° E	1·0	2·5	−60	1·1	74	+ 1	·210	+ ·006	5·8	+1·1	3	2·90	+0·10	1·60	1·60	0	1·79	1·93	− 0·14	0·95	Peshawar.
				1	5	N 52° W	1·2†	1·4	−14	1·3†	74	+ 5	·220	+ ·015	4·5	+1·2	3	1·40	+1·60	0·97	0·44	+0·53	1·04	0·65	+ 0·39	0·55	D. I. Khan.
1		1	6	1	1	S 63° W	4·5			4·3	71	+ 1	·210	− ·003	4·1	+0·9	2	1·50	+0·50	1·27	0·82	+0·45	1·40	1·36	+ 0·04	1·00	Khushab.
2	2	1		6	4	N 8° W	4·7			4·4	74	− 1	·227	− ·019	4·5	+0·7	4	1·30	+2·70	1·14	0·84	+0·30	1·54	1·26	+ 0·28	0·36	Montgomery.
	2		2	1		N 2° W	1·5	1·7	−12	1·4	73	+ 2	·237	− ·007	3·8	+0·6	3	1·10	+1·90	0·95	0·45	+0·50	1·36	0·64	+ 0·72	0·43	Multan.
3	1	1		1	5	N 5° E	3·1	2·1	+62	3·5	72	+10	·248	+ ·030	3·5	0	3	1·00	+2·00	0·85	0·27	+0·58	0·86	0·36	+ 0·50	0·36	Jacobabad.
1	1		1	1	9	N 8° W	7·5	7·2	+ 4	6·7	65	+ 7	·255	− ·003	3·3	+0·1	2	0·70	+1·30	0·69	0·24	+0·45	0·69	0·29	+ 0·40	0·33	Hyderabad.
2				3		N 35° E	7·5	10·0	−25	6·6	63	− 1	·296	− ·033	4·6	+2·1	4	1·10	+2·90	1·50	0·66	+0·84	1·50	0·79	+ 0·71	0·86	Kurrachee.
4	4	2	2	2	2	N 55° E	5·3	2·9	+83		58	+ 1	·208	− ·021	4·1	+0·8	2	1·10	+0·90	0·75	0·39	+0·36	1·50	0·56	+ 0·94	0·58	Bikaner.
4	2	1	1		2	N 42° E	6·3*	2·8	+125	5·5*	63	+ 2	·234	− ·004	1·8	−1·2	0	1·00	−1·00	0·03	0·38	−0·35	0·03	0·50	− 0·47	0·03	Pachpadra.
1			1		1	N 39° E	5·2			4·7	56		·220		4·8		0	0·90	−0·90	0·11	0·23	−0·12	0·18	0·38	− 0·20	0·07	Jodhpur.
											64	+ 3	·294	+ ·002	2·8	+1·0				0·18	0·26	−0·09					VIII.—East Rajputana, Central India and Gujarat.
2	1				6	N 20° E	4·3	3·9	+10		69	+ 3	·273	+ ·008	4·2	+1·1	0	1·50	−1·50	0·17	0·60	−0·43	1·46	0·79	+ 0·67	0·09	Jaipur.
3	1			9		N 76° W	2·5			2·3	82		·296		3·2		1			0·75			2·48			0·63	Bharatpur.
1	1			2	5	N 18° W	2·3			1·8	64		·273		2·9		0	0·70	−0·70	0·02	0·15	−0·13	0·37	0·44	− 0·07	0·02	Kotah.
1	1	1			2	N 30° E	4·5	4·5	0		71	+ 5	·252	+ ·009	4·1	+1·4	0	1·10	−1·10	0·16	0·39	−0·23	0·83	0·74	+ 0·09	0·08	Sambhar.
	2		3		9	N 38° W	4·1	1·9	+116	3·6	73	0	·272	+ ·008	4·3	+1·8	0	1·30	−1·30	0·15	0·44	−0·29	0·75	0·71	+ 0·04	0·05	Ajmer.
				2	1	N 37° W	1·9			1·7	63		·261		3·0		0	0·30	−0·30	0·01			0·10			0·01	Udaipur.
	1		3	2	1	N 26° E	8·1	6·0	+35	6·8	60	+ 5	·304	− ·011	1·8	+0·2	1	0·10	+0·90	0·16	0·07	+0·09	0·16	0·14	+ 0·02	0·16	Bhuj.
6	1	3	5	3	1	N 58° E	12·1			14·6	59		·307		2·0		0			0			0			0	Jamnagar.
4	4	1			2	N 57° E	5·4	5·2	+ 4	5·3	53	0	·280	− ·010	2·3	+1·3	0	0·20	−0·20	0	0·04	−0·04	0	0·08	− 0·08	0	Rajkot.
3					1	N 23° E	8·4	5·1	+ 65	8·4	58	0	·332	+ ·010	1·2	−0·1	0	0	0	0	0	0	0	0·09	− 0·09	0	Veraval.
3	1		1	2	3	N 20° E	13·0				71		·448		2·5		0			0·01			0·01			0·01	Dwarka.
	1	1	3	8	12	N 60° W	3·5			3·2	47	?	·241	?	2·7	+1·6	0	0·10	−0·10	0	0·07	−0·07	0	0·14	− 0·14	0	Bhavnagar Para.
10	1			3	4	N 44° E	1·7	1·4	+21	1·7	82	+ 6	·318	+ ·010	3·5	+1·2	3	1·70	+1·30	0·69	0·71	−0·02	1·45	1·26	+ 0·19	0·41	Nowgong.
4	2	1	1	1	3	N 53° E	3·2	2·5	+28	2·6	57	− 5	·271	− ·027	3·7	+2·3	0	0·40	−0·40	0	0·13	− 0·13	0·08	0·33	− 0·25	0	Indore.
4	1				5	N 30° E	6·0	8·1	−26	5·0	63	+ 6	·257	− ·007	2·8	+1·2	0	0·40	−0·40	0	0·21	−0·21	0·04	0·49	− 0·45	0	Neemuch.
6	2	3			1	N 49° E	4·5	5·2	−13	4·2	64	0	·368	− ·008	0·9	+0·2	0	0·20	−0·20	0	·005	−0·05	0·08	0·06	+ 0·02	0	Surat.

turns of any station, the data for that station are not utilized in calculating the provincial departures from normal.
Nos. 40, 42 and 44 are derived are incomplete.

* Mean of 29 days. † Mean of 30 days.

Ta

Abstract of Observations taken at 8 A.M. at

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Ahmedabad .	163	29·924	+·016	30·046	30·069	1st	29·802	21st	·267	61·9	82·6	−1·4?	55·7	−1·3	69·2	−1·4?	26·9	90·2	27th	39·1	31st
	Deesa . . .	466	29·609	+·013	30·062	29·745	7th	29·470	21st	·275	56·2	80·4	−2·7	50·5	−1·0	65·5	−1·9	29·9	90·1	27th	35·0	31st
22	Agra . . .	555	29·517?	P	30·079?	29·721	1st	29·382	21st	·339	50·5	66·8	−6·7	48·2	−0·4	57·5	−3·6	18·6	78·0	29th	33·9	31st
21	Jhansi . . .	858	29·224	+·010	30·102	29·446	1st	29·082	11th	·364	54·1	72·3	−4·1	50·9	−0·2	61·6	−2·2	21·4	84·2	28th	39·1	31st
	IX.—Deccan . . .			+·009								81·7	−1·2	54·6	−0·1	68·2	−0·7	27·1				
38	Belgaum . .	2,539	27·482	+·007	30·011	27·637	1st	27·411	26th	·226	65·6	81·9	−1·6	56·6	−0·9	69·2	−1·3	25·3	84·3	17th, 30th & 31st.	52·9	3rd & 22nd.
	Sholapur . .	1,590	28·450	+·004	30·040	28·628	1st	28·371	11th	·257	66·9	86·1	−1·5	59·4	+1·2	72·8	−0·2	26·7	89·2	18th & 29th.	54·6	31st
	Poona . .	1,840	28·208	+·012	30·089	28·378	1st	28·129	11th	·249	56·8	84·5	−1·4	53·5	−0·8	69·0	−1·1	31·0	88·5	12th	47·0	31st
	Bijapur . .	*1,948*	28·087	+·011	30·036	28·264	1st	28·025	11th	·239	66·3	85·2	0						88·4	17th		
40	Malegaon . .	1,480	28·615	P	30·073	28·785	1st	28·520	11th	·265	58·2	84·4	−1·2	51·3	−0·6	67·9	−0·9	33·1	90·4	11th & 28th.	40·7	30th
	Ahmednagar .	2,154	27·902	+·026	30·079	28·086	1st	27·823	11th	·263	62·3	82·9	−1·1	52·0	+1·3	67·5	+0·1	30·9	88·9	14th	45·4	31st
41	Akola . . .	930	29·130	+·011	30·058	29·348	1st	29·029	11th	·319	61·3	84·9	−0·3	52·9	−0·5	69·0	−0·4	32·0	90·0	28th	44·9	24th
	Amraoti . .	1,215	28·841	+·019	30·062	29·057	1st	28·740	11th	·317	63·2	83·8	−0·8	57·5	−0·3	70·7	−0·6	26·3	88·7	28th & 29th.	48·5	24th
42	Khandwa (*a*) .	1,044	29·007	+·006	30·071	29·207	1st	28·896	11th	·311	56·3	83·9	0	51·1	−0·7	67·5	−0·4	32·8	90·2	28th	40·2	25th
	Hoshangabad .	1,006	29·073	+·022	30·100	29·293	1st	28·957	11th	·336	57·2	79·0	−1·3	52·0	−0·3	65·5	−0·8	27·0	81·7	5th, 15th & 28th.	40·2	24th
	Nagpur . .	1,025	29·027	+·006	30·062	29·255	1st	28·925	11th	·330	59·7	83·5	0	54·8	−0·7	69·3	−0·4	28·6	89·6	29th	47·2	25th
43	Chanda . .	*634*	29·439	+·017	30·054	29·643	1st	29·340	11th	·303	60·6	85·1	−0·3	53·7	−0·4	69·4	−0·4	31·4	90·2	22nd & 29th.	43·1	26th
	Seoni . .	2,033	28·606	+·004	30·087	28·223	1st	27·917	11th	·306	57·1	79·1	−0·1	50·2	−1·1	64·7	−0·6	28·9	85·8	29th	38·5	24th
	Jubbulpore . .	1,327	28·712	−·005	30·082	28·924	1st	28·594	11th	·330	53·1	76·4	−1·2	47·6	−0·4	62·0	−0·8	28·8	84·4	29th	37·4	25th
	Saugor . .	1,807	28·231	+·001	30·086	28·438	1st	28·116	11th	·322	55·9	75·4	−1·5	51·0	−0·8	63·2	−1·2	24·4	83·9	28th	35·0	24th
49	Sutna . .	1,040	29·018	+·006	30·093	29·238	1st	28·891	11th	·347	52·3	70·8	−4·3	47·9	+0·3	59·4	−2·0	22·9	79·3	29th	37·6	24th
44	Raipur . .	970	29·084	+·004	30·059	29·301	1st	28·976	23rd	·325	59·7	78·5	−3·1	54·4	−1·0	66·5	−2·1	24·1	85·6	29th	48·4	25th
	Pendra . .	2,123?	27·991?		30·086?	28·191	1st	27·896	11th	·295	54·4	74·4		49·9		62·2		24·5	83·3	29th	39·0	24th
	Sambalpur . .	486	29·595	+·007	30·059	29·823	1st	29·462	30th	·361	60·3	79·1	−3·1	55·3	+0·5	67·2	−1·3	23·8	86·1	30th	49·7	2nd
39	Aurangabad . .	1,905	28·137?		30·044?	28·267	2nd	28·068	21st	·199	64·9	81·8		54·0		67·9		27·8	86·3	28th	48·2	30th
	Indur . . .	1,260	28·726?		29·977?	28·769	31st	28·628	1st	·141	67·2	84·1		54·4		69·3		29·7	88·8	30th	49·1	9th & 10th
	Bidar . . .	*2,165*	27·890		30·045	28·095	1st	27·801	11th	·294	69·0	80·8		61·2		71·0		19·6	85·8	30th	58·0	2nd
53	Gulbarga . .	1,503	28·537	+·007	30·036	28·656	5th	28·450	20th	·206	67·1	86·3	−0·4	59·7	+1·2	73·0	+0·4	26·6	90·5	26th	53·4	9th
	Raichur . .	1,326?	28·720	P	30·029	28·804	1st	28·640	24th	·264	70·6	86·1	−0·6	64·1	+0·7	75·1	+0·1	22·0	90·1	31st	60·2	6th & 9th
	Hyderabad (Dn.) .	1,690	28·355?	+·009?	30·053?	28·543	1st	28·275	31st	·268	64·4	84·3	−0·2	59·4	+1·3	71·8	+0·6	24·9	87·9	28th & 30th.	54·8	2nd, 9th & 10th.
	Hanumkonda .	671	29·183		30·032	29·378	1st	29·099	23rd	·279	67·7	85·2		61·5		73·4		23·7	90·0	30th	56·7	8th
	X.—West Coast . .			+·035								84·2	−1·4	69·2	0	76·8	−0·7	14·9				
37	Bombay . .	37	30·036	+·025	30·014	30·184	1st	29·917	26th	·267	68·8	81·1	−1·5	66·7	−1·3	73·9	−1·4	14·4	87·0	9th	56·0	31st
	Ratnagiri . .	110	29·949	+·040	30·002	30·095	1st	29·850	26th	·245	69·8	82·6	−5·1?	66·5	+0·3	74·6	−2·4	16·1	90·3	1st	61·1	31st
	Mormugao . .	*60*	29·998	+·039	29·994	30·142	1st	29·902	26th	·240	71·1	82·0	−3·8	68·7	−0·2	75·5	−2·0	13·3	88·5	10th	60·3	2nd
	Goa . . .	199	29·853	P	29·994	30·027	1st	29·760	26th	·267	73·6	81·1	−5·8	71·4	+3·6?	76·3	−1·1?	9·7	86·0	10th	68·0	21st & 22nd.
	Karwar . .	44	30·022	+·043	30·001	30·189	1st	29·933	26th	·256	68·8	84·2	−2·7	64·7	−0·8	74·5	−1·8	19·5	89·8	9th & 10th	62·0	4th
33	Cochin . .	10	30·015	+·024	29·954	30·129	1st	29·963	26th	·166	75·5	90·0	+0·9	72·3	+0·8	81·2	+0·9	17·7	93·8	6th	69·7	16th & 18th.
	Calicut . .	27	30·012	+·028	29·969	30·148	1st	29·939	26th	·209	74·4	87·0	−0·6	70·2	+0·6	78·6	0	16·8	88·8	10th	68·2	1st
	Mangalore . .	65	29·984	+·030	29·982	30·133	1st	29·917	26th	·216	75·8	85·5	−3·0	69·8	+0·3	77·7	−1·4	15·7	89·2	7th	66·5	2nd
	Trivandrum . .	198	29·819	+·047	29·950	29·910	1st	29·769	10th	·141	75·7	84·1	+0·7	72·8	+0·4	78·5	+0·6	11·3	86·5	7th	69·0	16th

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any

Note 2.—The data from which divisional means of the figure columns Nos

(*a*) Thermometers were removed to the temporary grass hut after 4 P.M. of 16th October 1904.

ontinued.

ions in India, Burma, etc., in January, 1905—continued.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 31st Jan. 1905.	Normal rainfall for period, 1st Dec. to 31st Jan.	Departure from normal of period, 1st Dec. 1904 to 31st Jan., 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
12	4	2		1		8	N 26° E	2·6			4·3	47	0	·270	0	2·8	+1·1	0	0·10	−0·10	0	0·03	−0·03	0	0·10	−0·10	0	Ahmedabad.
16	6		2		1	2	N 37° E	10·0	8·6	+16		44	− 2	·211	−·016	2·5	+1·2	0	0·36	−0·36	0·02	0·15	−0·13	0·02	0·21	−0·19	0·02	Deesa.
5		5		8		8	W	3·6	3·5	+ 3	4·2	80	+ 8	·302	+·021	3·8	+1·2	3	1·20	+1·80	0·90	0·53	+0·37	2·30	0·82	+1·48	0·35	Agra.
2	2	4		5	1	5	S 52° W	4·0	2·2	+82	4·9	79	+17	·338	+·044	1·7	−0·1	2	1·20	+0·80	0·53	0·62	−0·09	1·55	0·86	+0·69	0·24	Jhansi.
												61	— 1	·336	−·014	2·2	+1·0				0·31	0·24	+0·03					IX.—Deccan.
1	6	2					N 81° E	5·1	10·9	−53		65	+ 5	·315	+·059	3·1	+2·2	0	0·20	−0·20	0	0·04	−0·04	0	0·16	−0·16	0	Belgaum.
2	2	13	1			3	N 88° E	8·4	7·1	+18	10·2	43	— 5	·289	−·036	2·1	+1·1	0	0·20	−0·20	0	0·07	−0·07	0	0·50	−0·50	0	Sholapur.
2	2	2		2	5	12	N 38° W	7·0	5·7	+23		66	+ 9	·310	+·002	2·1	+1·3	0	0·20	−0·20	0	0·04	−0·04	0	0·23	−0·23	0	Poona.
1	6	9	1			7	N 67° E	4·2			4·1	56	−12	·349	−·106?	1·2	0	0	0·20	−0·20	0	0	0	0	0·03	−0·03	0	Bijapur.
1			2	14	9		N 70° W	4·6	3·9	+18	5·3	49	— 9	·249	−·058	0·6	−0·7	0	0·10	−0·10	0	0·11	−0·11	0·01	0·37	−0·36	0	Malegaon.
3		2		2	2	13	N 38° W	5·5			6·7	58	— 3	·332	−·011	1·0	+0·1	0	0·20	−0·20	0	0·01	−0·01	0	0·51	−0·51	0	Ahmednagar.
1	7	2	1	1		9	N 29° E	3·6	3·4	+ 6	3·2	50	— 5	·277	−·021	1·7	+0·5	0	0·70	−0·70	0	0·33	−0·33	0	1·08	−1·08	0	Akola.
11	6	1	1	4	1	1	N 51° E	6·2	3·2	+94	5·6	52	0	·306	−·021	1·1	−0·1	1	0·90	+0·10	0·15	0·35	−0·20	0·15	0·92	−0·77	0·14	Amraoti.
4			1	2	1	3	N 18° W	3·5	2·8	+25	3·3	48	— 8	·227	−·048	2·1	+1·1	0	0·50	−0·50	0	0·26	−0·26	0·05	0·69	−0·64	0	Khandwa.
17	2	2		8		2	N 53° E	2·7	2·5	+ 8	2·8	62	− 5	·300	−·013?	2·6	+1·2	0	0·80	−0·80	0	0·26	−0·26	0·30	0·79	−0·49	0	Hoshangabad.
8		3		1		1	N 31° E	5·2	3·9	+33	4·1	58	− 3	·307	−·041	2·6	+1·3	2	1·00	+1·00	0·22	0·43	−0·21	0·26	0·91	−0·65	0·12	Nagpur.
1	3	1			1	2	N 56° E	1·2	2·1	−43	1·1	70	− 1	·380	−·017	1·8	+0·7	0	0·60	−0·60	0	0·30	−0·30	0	0·64	−0·64	0	Chanda.
8	2	4	3	4	3	2	N 43° E	4·7	2·7	+74	3·9	61	− 6	·291	−·048	2·3	+0·7	1	1·20	−0·20	0·21	0·53	−0·32	0·47	1·05	−0·58	0·16	Seoni.
3	1	9	9	1	1	4	S 23° E	2·0	2·2	− 9	1·8	80	+ 5	·331	+·010	2·5	+0·8	2	1·40	+0·60	0·29	0·72	−0·43	0·83	1·05	−0·22	0·15	Jubbulpore.
6	6	8	3	2	3	1	S 74° E	7·0	2·8	+150	6·2	58	− 1	·264	−·016	3·0	+1·7	0	1·50	−1·50	0·17	0·64	−0·47	0·75	1·34	−0·59	0·09	Saugor.
1	5	4	1	2	4	2	S 29° E	2·1	4·0	−48	1·9	82	+12	·326	+·034	5·4	+4·2	4	1·80	+2·20	1·74	0·92	+0·82	3·20	1·35	+1·85	0·90	Sutna.
1	1	1	2		2		S 22° E	2·1	2·6	−19	2·5	71	+ 9	·367	+·020	4·1	+2·7	3	0·80	+2·20	1·42	0·20	+1·22	1·42	0·45	+0·97	0·86	Raipur.
1	1	2	6	2		3	W	4·5			3·8	73		·317		3·2		4			1·62			1·63			0·98	Pendra.
5	4	9	3	1	2	4	S 85° E	4·3	1·6	+169	4·2	77	+ 4	·407	+·002	2·9	+1·6	4	1·00	+3·00	2·14	0·28	+1·86	2·14	0·52	+1·62	0·79	Sambalpur.
6	2				1		N 45° E	5·8			5·7	40		·262		1·9		1	0·20	+0·80	0·20	0·12	+0·08	0·20	0·73	−0·53	0·20	Aurangabad.
				2		7	N 56° W	4·5			3·8	58		·389		1·2		0	0·20	−0·20	0	0·05	−0·05	0	0·38	−0·38	0	Indur.
2	3	4	8	8	3		S 5° W	5·0			4·2	49		·351		2·5		0	0·10	−0·10	0	0·02	−0·02	0	0·54	−0·54	0	Bidar.
7	8	2	3	3		1	N 89° E	6·7			5·9	56	— 1	·371	−·005	1·1	0	0	0·20	−0·20	0	0·07	−0·07	0	0·07	−0·07	0	Gulbarga.
	3	11	6	5			S 23° E	7·0			6·7	53	−10	·399	−·050	2·0	+0·5	0	0·10	−0·10	0	0	0	0	0	0	0	Raichur.
	3	2			1		S 71° E	2·5			2·4	72	− 3	·442	−·012	1·9	+0·5	0			0	0·06	−0·06	0	0·23	−0·23	0	Hyderabad (Dn.)
	1	15	7				S 35° E	6·2			5·5	70		·480		1·7		0	0·20	−0·20	0			0			0	Hanumkonda.
												76	+ 2	·613	+·020	2·0	+0·9				0·01	0·22	−0·20					X.—West Coast.
13	8	2					N 50° E	9·5	10·1	− 6		74	+ 2	·539	−·010	2·7	+1·8	0	0·10	−0·10	0	0·10	−0·10	0	0·16	−0·16	0	Bombay.
6	12	4	1				N 77° E	10·8	9·8	+10	10·7	71	+11[P]	·514	+·035	1·6	+0·8	0	0·20	−0·20	0	0·15	−0·15	0	0·20	−0·20	0	Ratnagiri.
4	12	9					N 83° E	8·9				85	+ 4[P]	·643	+·010	2·2	+1·3	0			0	0	0	0	0	0	0	Mormugao.
10	17	1	1				N 73° E	7·6				74	+ 7	·611	+·044	1·4	+1·0	0			0	0·19	−0·19	0	0·25	−0·25	0	Goa.
13	13	1					N 61° E	4·5				82	+ 3	·572	+·039	1·2	+0·8	0	0·10	−0·10	0	0·09	−0·09	0	0·16	−0·16	0	Karwar.
13	13	1	1				N 72° E	6·4				72	0	·641	0	2·2	+0·8	0	1·00	−1·00	0	0·54	−0·54	0	2·20	−2·20	0	Cochin.
13	12	1					N 69° E	7·0			6·9	78	+ 1	·664	+·003	2·2	+0·8	0	0·30	−0·30	0·06	0·19	−0·13	0·06	1·16	−1·10	0·06	Calicut.
4	21	1					N 69° E	5·6	3·9	−44		75	+ 4	·670	+·069	3·0	+1·4	0	0·10	−0·10	0	0·05	−0·05	0	0·50	−0·50	0	Mangalore.
12	4	1			1	1	N 45° E	3·7				74	− 3	·665	−·012	1·4	−1·5	0	1·30	−1·30	0·07	0·63	−0·56	0·56	2·87	−2·31	0·07	Trivandrum.

ta for that station are not utilized in calculating the provincial departures from normal.
are derived are incomplete.

Tab

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
	XI.—South India			+·023								85·2	+0·6	64·8	+0·4	75·0	+0·5	20·4					2
57	Pamban	37	30·029	+·042	29·993	30·132	1st	29·961	26th	·171	77·1	82·5	+0·6	73·3	−1·5	77·9	−0·5	9·2	86·8	29th	70·7	25th	1
	Tinnevelly	168	29·906	+·035	30·006	30·022	1st	29·833	31st	·189	76·5	89·0	+1·3	71·1	−0·5	80·1	+0·4	17·9	93·7	25th	66·9	17th	2
	Madura	447	29·622	+·038	30·014	29·741	1st	29·545	31st	·196	75·1	88·1	+0·6	68·4	−0·2	78·3	+0·2	19·7	92·4	25th	63·7	29th	2
	Periyakulam	945	29·113		30·020	29·214	1st	29·044	31st	·170	72·0	88·8		64·8		76·9		24·0	92·8	25th	57·7	30th	3
4	Salem	940	29·139	+·013	30·043	29·275	1st	29·064	31st	·211	72·6	90·0	+1·6	65·2	+1·5	77·5	+1·6	24·8	94·2	26th	57·8	30th	3
	Coimbatore	1,348	28·705	+·022	30·031	28·829	1st	28·617	30th	·212	70·7	87·9	+1·1	65·2	+1·3	76·6	+1·2	22·7	90·9	4 days.	58·8	30th	3
35	Mercara	3,781	26·322	+·029	26·255	26·438	1st	26·267	31st	·171	61·5	77·5	−0·2	56·0	−0·6	66·8	−0·4	21·5	81·0	4th & 19th.	52·1	1st	2
36	Chitaldroog	2,405	27·639	+·020	30·018	27·791	1st	27·564	31st	·227	69·5	84·2	+0·4	61·0	−0·1	72·6	+0·2	23·2	87·1	31st	57·9	1st, 11th & 19th.	2
	Bangalore	3,021	27·049	+·011	30·051	27·171	1st	26·981	31st	·190	63·9	81·8	+1·6	57·7	+0·9	69·7	+1·3	24·1	85·3	31st	53·9	30th	3
	Hassan	3,091	26·984	+·025	30·060	27·113	1st	26·915	31st	·198	63·0	83·0	+1·5	54·0	−0·1	68·5	+0·7	29·0	86·7	21st	50·1	31st	3
	Mysore	2,518	27·540	+·018	30·034	27·675	1st	27·479	26th & 31st.	·196	68·5	85·2	+1·2	60·7	+1·4	73·0	+1·3	24·8	88·4	20th	57·4	2nd & 29th.	3
56	Negapatam	31	30·022	+·020	29·982	30·143	1st	29·946	31st	·197	75·5	83·6	+1·8	71·1	+0·3	77·4	+1·1	12·5	86·9	22nd & 26th.	65·0	29th	2
	Cuddalore	12	30·058	+·026	30·000	30·185	1st	29·970	31st	·215	72·3	83·4	+0·1	66·9	−0·4	75·2	−0·2	16·5	87·6	26th	60·1	29th	2
	Trichinopoly	255	29·817	+·029	30·012	29·946	1st	29·740	31st	·206	73·9	88·1	+0·7	67·4	+0·2	77·8	+0·5	20·7	92·5	25th	61·4	29th	3
	Madras	22	30·058	+·017	30·011	30·206	1st	29·968	31st	·238	72·3	83·2	−1·5	65·2	−2·2	74·2	−1·9	18·0	87·0	25th	57·5	29th	2
	Vellore	707	29·368		30·040	29·511	1st	29·279	31st	·232	69·0	83·1		62·2		72·7		20·9	89·4	24th	56·8	30th	3
55	Nellore	52	30·034	+·029	30·022	30·193	1st	29·935	31st	·258	69·8	85·8	−0·2	64·8	−1·5	75·3	−0·9	21·0	90·3	25th & 31st	60·6	13th	2
	Masulipatam	15	30·069	+·032	30·039	30·267	1st	29·989	30th	·278	71·0	82·6	−0·9	65·4	+0·1	74·0	−0·4	17·2	86·5	30th	60·2	30th	2
54	Cuddapah	433	29·631	+·013	30·013	29·810	1st	29·534	31st	·276	73·7	90·3	+1·9	66·4	+2·0	78·4	+2·0	23·9	96·2	31st	57·8	19th	3
	Kurnool	945	29·127	+·009	30·024	29·322	1st	29·041	24th	·281	69·5	88·7	0	62·1	+3·4	75·4	+1·7	26·6	91·7	30th	56·9	11th	3
	Bellary	1,475	28·560	+·005	30·024	28·745	1st	28·474	31st	·271	67·8	88·4	+0·8	62·3	+1·8	75·4	+1·3	26·1	93·5	31st	57·6	1st	3
52	Cocanada	26	30·082	+·033	30·044	30·257	1st	29·974	30th	·283	70·9	81·7	+0·7	65·2	−0·1	73·5	+0·3	16·5	88·6	30th	62·5	2nd	2
	Waltair (Vizag.)	*226*	29·873	+·022	30·046	30·055	1st	29·755	31st	·300	72·4	80·3	?	67·7	?	74·0	?	12·6	83·8	30th	64·4	3rd	1
	Gopalpur	72	30·027	+·029	30·043	30·245	1st	29·885	30th & 31st.	·360	66·9	78·9	−1·4	62·4	+1·2	70·7	−0·1	16·5	84·2	31st	56·5	2nd & 3rd	2
	XII.—Hill Stations																						
48	Pishin											46·3		27·4		36·9		18·9	62·9	11th	7·1	23rd	5
	Quetta	5,502	24·655	−·033	24·615	24·916	6th	24·388	27th	·528	29·5	45·7	−5·6	26·6	−2·7	36·2	−4·1	19·1	63·2	11th	8·8	23rd	5
	Kalat										33·3	49·0	−3·3	23·3	+3·0	36·2	−0·2	25·7	68·4	17th	0	23rd	6
	Chaman	4,311	25·738	−·033	25·700	26·009	6th	25·487	26th	·522	36·5	50·5	−2·9	32·2	−2·5	41·4	−2·7	18·3	65·8	1st	13·1	23rd	5
30	Leh	11,503	19·548	−·113	19·516	19·877	7th	19·097	22nd	·780	11·2	27·3	−2·5	7·6	−1·3	17·5	−1·9	19·7	39·5	29th	−6·1	31st	4
	Srinagar	5,204	24·921	−·076	24·892	25·205	1st	24·537	22nd	·668	31·1	39·0	0	29·0	+2·6	34·0	+1·3	10·0	46·5	20th	20·6	24th	2
	Sonemarg	*8,764*	21·759		21·727	22·037	7th	21·382	22nd	·654	16·9	31·1		11·6		21·4		19·5	41·7	14th	−10·9	31st	5
	Astor (Kashmir)	*7,955*	22·477		22·447	22·823	7th	22·047	22nd	·776	21·6	35·1		18·2		26·7		16·9	46·5	7th	5·0	31st	4
	Minimarg	*9,359*	21·274		21·242	21·549	7th	20·874	22nd	·675	16·1	29·0		8·9		19·0		20·1	39·8	12th	−12·0	31st	5
	Skardu	*7,505*	22·862		22·832	23·232	1st	22·354	22nd	·878	20·8	30·6		17·0		23·8		13·6	35·9	20th & 30th	5·1	25th	3
	Dras	*10,059*	20·686		20·654	21·061	1st	20·217	22nd	·844	3·8	18·0		−5·0		6·5		23·0	30·8	29th	−27·4	31st	5
	Gilgit	4,890	25·190		25·163	25·570	7th	24·706	22nd	·864	35·0	44·1	−1·1	31·6	0	37·9	−0·6	12·5	50·1	8th	23·1	24th & 31st	2
32	Chitral	*5,486*									31·7	44·8		27·9		36·4		16·9	55·1	9th	9·0	31st	4
	Killa Drosh	4,700?									33·4	45·1		30·3		37·7		14·8	54·3	9th	19·1	23rd, 30th & 31st.	3
	Para Chinar	6,000	24·458		24·425	24·711	6th	24·198	29th	·513	29·0	43·1		23·5		33·1		19·6	57·8	10th	−2·8	23rd	6

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of as

Note 2.—The data from which divisional means of the figure columns Nos. 4

Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the elevatio

ntinued.

ns in India, Burma, etc., in January, 1905—continued.

Number of winds from E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Wind Velocity. Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904, to 31st Jan. 1905.	Normal rainfall for period, 1st Dec. to 31st Jan.	Departure from normal of period, 1st Dec. 1904 to 31st Jan., 1905.	Heaviest rainfall during month.	Station.
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
											77	0	·588	0	2·8	+0·3				0·27	0·37	−0·10					XI.—South India.
1					1	N 35° E	9·6			10·2	89		·823		3·5		4	2·20	+1·80	0·56	1·33	−0·77	10·90	11·64	−0·74	0·14	Pamban.
				3	5	N 4° W	4·6			4·4	72	−6	·647	−·051	3·8	+1·3	1	1·50	−0·50	0·28	1·02	−0·74	3·78	4·77	−1·04	0·17	Tinnevelly.
1					4	N 29° E	6·5	5·4	+20	7·5	78	+4	·683	+·051	1·7	−1·1	0	0·80	−0·80	0	0·24	−0·24	1·16	2·11	−0·95	0	Madura.
1	3	5	1	3	1	S 11° W	2·6			2·9	71		·558		2·5		0	0·90	−0·90	0·05	0·63	−0·58	0·33	2·19	−1·86	0·05	Periyakulam.
17	1			1		N 76° E	5·2	5·0	+4	4·6	72	−3	·585	0	2·8	+0·4	0	0·30	−0·30	0	0·23	−0·23	0·25	1·49	−1·24	0	Salem.
21	1				1	N 73° E	6·0	3·1	+94	5·5	82	−2?	·619	+·001	4·4	+1·9	0	0·50	−0·56	0·04	0·16	−0·12	0·14	1·29	−1·15	0·04	Coimbatore.
1						N 43° E	5·7	4·3	+33	5·3	83	+8	·464	+·046	2·4	−0·7	0	0·20	−0·20	0	0·02	−0·02	0	0·53	−0·53	0	Mercara.
6	6	2	4	5		S 31° E	5·4			4·7	62	+4	·449	+·027?	1·6	+0·1	0	0·30	−0·30	0	0·01	−0·01	0	0·10	−0·10	0	Chitaldroog.
18	7	1	1			S 80° E	7·9	3·8	+108	6·9	74	−4	·441	−·017	2·5	−0·5	0	0·10	−0·10	0·07	0·14	−0·07	0·14	0·62	−0·48	0·07	Bangalore.
7	9	2	3	1		S 56° E	2·1			1·8	79	+7	·458	−·002	4·6	+1·9	0	0·10	−0·10	0	0	0	0	0·18	−0·18	0	Hassan.
7	7	4	4			S 64° E	6·5			7·0	70	−3	·488	+·004	3·2	+0·7	0	0·10	−0·10	0	0	0	0	0·17	−0·17	0	Mysore.
					11	N 7° E	13·8	5·4	+156	12·1	80	−2	·710	−·004	4·6	−0·9	2	1·90	+0·10	0·55	1·37	−0·82	10·24	14·16	−3·92	0·44	Negapatam.
					2	N 10° W	3·3			4·1	87	−1	·697	−·013	2·5	−1·7	1	1·20	−0·20	1·18	0·80	+0·38	6·77	8·99	−2·22	1·06	Cuddalore.
						N 26° E	3·4	4·7	−28		78	+1	·650	+·018	2·7	−0·3	1	0·60	+0·40	0·15	0·27	−0·12	1·64	3·03	−1·39	0·15	Trichinopoly.
10	3	3			1	N 68° E	5·5	6·1	−10		80	−2	·642	−·047	2·1	−1·8	3	2·10	+0·90	1·92	0·52	+1·40	5·26	6·54	−1·28	0·79	Madras.
	1		2	1		S 63° W	3·0			3·0	81		·575		2·4		2	0·70	+1·30	0·50	0·49	+0·01	1·46	3·37	−1·91	0·34	Vellore.
10	11	1			3	S 85° E	2·3				88	+2	·649	−·026	2·1	−1·6	0	0·50	−0·50	0·11	0·55	−0·44	2·95	2·19	+0·76	0·08	Nellore.
	1					N 23° E	5·9	5·2	+13	5·2	88	+2	·667	+·024	2·5	+0·7	0	0·30	−0·30	0	0·07	−0·07	3·12	0·85	+2·27	0	Masulipatam.
10	16			1	1	S 69° E					66	−9	·550	−·031	2·7	+1·2	0	0·20	−0·20	0	0·16	−0·16	0·29	1·30	−1·01	0	Cuddapah.
1	5					S 80° E	4·1				70	?	·508	+·046?	1·6	+0·4	0	0·20	−0·20	0	0·07	−0·07	0	0·19	−0·19	0	Kurnool.
	5	4	3	1	2	S 8° W	2·2	3·3	−33	1·9	65	−1	·443	−·012	2·5	+0·9	0	0·10	−0·10	0	0·09	−0·09	0	0·20	−0·20	0	Bellary.
					2	N 8° E	7·1			6·0	84	+11	·632	+·090	2·8	+1·1	0	0·40	−0·40	0	0·11	−0·11	0·63	0·91	−0·28	0	Cocanada.
1	2	1	10	6		S 78° W	9·4				68	+2	·540	−·012	4·2	+2·8	0	0·60	−0·60	0	0·16	−0·16	1·44	1·96	−0·52	0	Waltair (Vizag.).
			2		16	N 29° W	10·8	6·5	+66	10·6	78	+1	·518	+·019	1·0	−0·4	2	0·40	+1·60	0·78	0·12	+0·66	1·21	0·87	+0·34	0·64	Gopalpur.
																											XII.—Hill Stations.
																	8	4·30	+3·70	4·64	2·16	+2·48	4·66	3·26	+1·30	1·24	Pishin.
	5		1	2	1	S 16° E	2·3	3·8	−39	2·4	91?	+12	·153?	+·005	4·1	+0·4	11	4·80	+6·20	5·04	2·03	+3·01	5·12	2·84	+2·28	1·23	Quetta.
1		24		3		S 5° W					72		·148				7	3·70	+3·30	3·60	0·79	+2·81	3·60	1·44	+2·16	1·62	Kalat.
4	5	4	1			S 64° E.	8·0			8·8	73	+5	·153	−·012	3·6	−0·8	8	3·40	+4·60	3·62	1·30	+2·32	3·64	2·22	+1·42	1·65	Chaman.
4	1	6	9	5		S 16° W	2·0				55	+2	·042	+·006	7·4	+0·7	2	0·80	+1·20	0·60	0·31	+0·29	0·66	0·50	+0·16	0·13	Leh.
	1	4	1			S 15° E	2·6			2·4	92	+1	·164	+·015	8·7	+0·8	9	6·40	+2·60	3·27	3·49	−0·22	7·12	4·40	+2·72	0·93	Srinagar.
2	1	1	1	1		E	2·6			2·4	98		·096		7·8		17			19·78			27·72			5·12	Sonemarg.
		6	3			S 15° W	2·7			2·5	69		·082		7·6		4			2·05			5·74			1·04	Astor (Kashmir.)
8	5	1		3	2	N 86° E	6·6†			7·0†	80		·072		8·5		15			7·66			13·12			2·05	Minimarg.
1	1	3	2	3		S 25° W	2·5			2·5	100		·115		8·3		1	3·00	−2·00	1·13	1·71	−0·58	1·82	2·42	−0·60	0·51	Skardu.
	2	2		2		S 8° E	1·9			1·5	85		·047		8·3		9	8·70	+0·30	2·38	3·98	−1·60	5·61	6·17	−0·56	0·36	Dras.
1	1		2	1		S	2·2			2·0	67	0	·138	−·005	8·8	+1·9	0	0·30	−0·30	0·05	0·21	−0·16	0·19	0·30	−0·11	0·05	Gilgit.
		1				S	2·5			2·2	85		·152		5·5		5			1·09			2·11			0·50	Chitral.
1		2		1		S 79° E					77		·149		5·7		0			0·06			1·16			0·06	Killa Drosh.
1	1					N 45° E	3·5			3·2	80		·129		4·1		9	1·00	+8·00	5·34	0·63	+4·71	6·62	1·42	+ 5·20	2·10	Para Chinar.

data for that station are not utilized in calculating the provincial departures from normal.
re derived are incomplete.
ceed 3,200 feet.

† Mean of 27 days.

Tal

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 A.M., in inches. Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
29	Murree	6,333	23·811	—·053	23·779	24·047	2nd	23·483	21st	·564	32·3	38·6	−8·6	27·5*	−7·7*	33·5*	−8·2*	11·1	52·2	10th	12·0	30th
	Kailang	*10,087*	20·854		20·809	21·056	7th	20·508	22nd	·548	18·3	32·4	−1·9	14·1	−0·4	23·3	−1·2	18·3	40·6	29th	3·5	24th
	Poo											39·2		24·1		31·7		15·1	48·0	26th	14·9	24th
	Simla	7,224	23·071	—·041	23·033	23·278	6th	22·887	31st	·391	34·8	41·5	−3·0	31·4	−3.1	36·5	−3·1	10·1	51·1	9th	18·2	23rd
	Sarain		23·147			23·345	6th	22·970	31st	·375	30·0	41·4		24·6		33·0		16·8	50·2	10th	9·8	23rd
	Chakrata	7,022	23·266	—·033	23·226	23·459	6th	23·102	31st	·357	34·1	44·3	−6·3	31·3	−4·9	37·8	−5·6	13·0	55·5	10th	19·4	23rd
25	Ranikhet	6,069	24·106	—·027	24·065	24·310	6th	23·955	24th	·355	38·4	47·5	−7·0	35·3	−4·7	41·4	−5·9	12·2	55·8	9th	26·5	23rd
	Muktesar	7,600	22·797		22·755	22·981	6th	22·628	31st	·353	35·1	42·5		31·6		37·1		10·9	52·3	10th	21·9	23rd
13	Yatung	10,480										40·1		18·3		29·2		21·8	49·1	6th	14·1	18th
	Darjeeling	7,376	22·990	—·029	22·945	23·212	5th	22·720	24th	·492	36·0	44·0	−2·8	32·6	−2·2	38·3	−2·5	11·4	50·7	6th	27·0	25th &26th
8	Shillong	4,920	25·215		25·167	25·434	1st	24·997	24th	·437	47·7	58·4		38·1		48·3		20·3	64·5	6th	27·0	25th
	Cherra Poonjee	4,309	25·768		25·719	25·972	1st	25·643	26th	·329	49·2	56·9		43·5		50·2		13·4	61·7	6th	34·5	25th
50	Mount Abu	3,945	26·116	—·021	26·066	26·302	1st	25·992	21st	·310	53·6	61·9	−4·7	47·9	−3·3	54·9	−4·0	14·0	70·1	10th, 27th	32·0	30th
42	Pachmarhi	3,528	26·536	—·021	26·483	26·768	1st	26·443	11th	·325	55·7	71·0	−0·3	46·9	−0·6	59·0	−0·5	24·1	75·1	12th	31·3	24th
34	Wellington	6,200	24·315	+·013	24·218	24·408	1st	24·260	30th	·148	52·7	67·9	+0·3	45·0	−0·2	56·5	+0·1	22·9	72·2	31st	37·2	16th
	Ootacamund	*7,322*	23·083		23·019	23·170	1st	23·019	26th	·151	51·0	66·0		42·8		54·4		23·2	70·0	5 days*	34·1	15th
57	Kodaikanal	7,688	22·873		22·808	22·950	1st	22·827	31st	·123	51·2	61·2		44·9		51·7		16·3	67·4	31st	39·8	29th
	XIII.—Extra India.																					
	Trincomalee	12	30·024	+·038	29·962	30·091	2nd	29·957	26th	·134	75·4	83·0	−0·3	73·1	−1·5	78·1	−0·9	9·9	85·0	31st	68·0	14th
	Colombo	40	29·976	+·026	29·942	30·052	1st	29·914	26th	·138	77·5	86·7	−0·8	72·2	+0·1	79·5	−0·4	14·5	91·0	27th	67·0	14th
	Meshed	3,104									33·0†			24·5	+2·3						−1·0	22nd
	Teheran(*b*) †	*4,002*	25·989			26·200	29th	25·820	19th	·380	27·0	43·5	+1·2	24·9	−1·4	34·2	−0·1	18·6	59·5	10th	3·0	28th
	Ispahan(*b*)	*5,817*	24·209			24·470	2nd	23·930	26th	·540	23·3	45·4	−1·1	20·2	−2·9	32·8	−2·0	25·2	60·3	11th	−2·8	29th
	Bushire†	14	30·128	—·006	30·101	30·350	28th	29·898	23rd	·452	52·5	63·3	−0·8	48·9	−2·8	56·1	−1·8	14·4	75·6	2nd & 11th	34·4	28th
	Bahrein	30	30·151			30·362	28th	29·953	23rd	·409	59·2	65·9		54·7		60·4		11·2	77·1	10th	42·4	26th
	Jask	13	30·087	—·040	30·057	30·341	6th	29·852	26th	·489	62·7	71·5	−2·3	59·4	−0·9	65·5	−1·6	12·1	77·3	9th, 10th & 12th.	44·3	29th
	Muscat	20	30·116	−·005	30·084	30·329	6th	29·905	25th	·424	68·6	71·8	−0·4	67·1	−0·1	69·5	−0·3	4·7	78·4	16th	57·1	27th & 28th
	Baghdad	220	30 069	+·043	30·282	30·327	28th	29·701	11th	·626	40·9	56·6	−3·5	34·5	−3·8	45·5	−3·7	22·1	66 2	3rd	20·8	27th
	Busrah		30·300			30·537	28th	30·020	23rd	·517		59·1							68·2	8th		
	Aden†	94	30·006	+·024	30·033	30·127	5th	29·877	26th	·250	75·2	79·4	−1·2	71·3	−1·5	75·4	−1·4	8·1	81·8	22nd	64·5	29th
	Perim	201	29·867	+·037	30·005	30·001	6th	29·799	25th & 26th.	·202	76·3	82·1	−0·6	73·2	−0·3	77·7	−0·5	8·9	83·5	11th & 20th.	69·2	28th
	Kabul		24·323†			24·873	7th	23·869	21st	1·004	23·1	40·5	−4·5	17·5	−0·4	29·0	−2·5	22·0	55·2	11th	−2·6	23rd & 31st.
	Kashgar	4,255	25·571			25·930	5th	25·120	22nd	·810	17·1	34·7	+2·3	14·1	+1·6	24·4	+2·0	20·6	52·2	19th	6·3	26th
	Minicoy	7	30·020		29·953	30·101	1st	29·952	26th	·149	80·9	85·0	−0·7						86·3	1st		
	Zanzibar	73	29·927	+·016	29·925	30·032	2nd	29·852	22nd	·180	82·0	87·3	+1·3	79·8	+0·2	83·6	+0·8	7·5	90·6	18th	76·6	19th
	Do. Dunga	*154*	29·859		29·941	29·959	2nd	29·781	22nd	·178	80·3	89·9		75·2		82·6		14·7	92·3	12th & 13th	71·6	3rd & 21st.
	Penang (*a*)	20	29·947		29·892	29·982	1st	29·915	28th	·067	79·8	89·4		73·2		81·3		16·2	91·0	6 days	70·0	7th
	Singapore (*a*)	10	29·996		29·927	30·068	5th	29·935	26th	·133	82·5	87·9		72·9		80·4		15·0	91·6	29th	71·3	19th

(*a*) 9 hours' observations.
(*b*) Aneroid uncorrected.

* Mean of 29 days.
† Mean of 30 days.

N.B.—Elevations in italics indicate barometrical determinations.
NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of wh

ncluded.

ions in India, Burma, etc., in January, 1905—concluded.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 31st Jan. 1905.	Normal rainfall for period, 1st Dec. to 31st Jan.	Departure from normal of period, 1st Dec. 1904 to 31st Jan. 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
	3	9	5				S 39° E	5·8	8·1	−28	6·3	76	+14	·137	+·001	5·4	+0·1	11	2·80	+8·20	9·90	3·67	+6·23	13·43	4·81	+8·62	2·30	Murree.
2	3	4	5	6	6	5	S 45° W	0·7				74		·080		6·2		5			1·74	2·92	−1·18	2·76	4·00	−1·24	0·60	Kailang.
	1	1		1			S 75° E									6·6		5			1·62	3·20	−1·58	1·94	4·25	−2·31	0·60	Poo.
		2	15	1			S 18° E	5·5	2·0	+175	5·3	64	+11	·127	+·005	5·3	+0·6	11	3·60	+7·40	3·14	2·71	+0·43	3·79	3·94	− 0·15	0·84	Simla.
	1	1	4	1		1	S 14° E	1·5			1·5	90		·150		5·4		13			9·31			13·14			2·17	Sarain.
2							N 5° E	3·8‡	1·8	−21	4·6‡	74	+16	·144	+·013	4·7	+0·6	11	5·00	+6·00	9·85	3·73	+6·12	11·77	4·89	+ 6·88	4·77	Chakrata.
3	1	1		3		2	N 23° E	1·5	1·4	+7	1·7	71	+8	·164	−·012	4·5	+1·0	9	4·30	+4·70	4·94	2·79	+2·15	6·32	3·50	+ 2·82	1·70	Ranikhet.
1	8	6	2	4	9	1	S 3° E	8·9			8·2	73		·143		4·4		9			8·03			9·20			1·80	Muktesar.
																		4	2·50	+1·50	1·30	0·89	+0·41	1·90	1·07	+0·83	0·85	Yatung.
2	5	2		2	3		S 72° E	4·5	2·6	+73	4·1	82	0	·174	−·016	4·1	−0·1	1	1·71	−0·71	0·16	0·71	−0·55	0·16	0·94	−0·78	0·12	Darjeeling.
	1	1		7	1		S 37° W	1·3			1·5	64		·213		1·3		0	1·50	−1·50	0	0·53	−0·53	0·18	0·81	−0·63	0	Shillong.
2	2		1	3	6	1	N 11° E	5·2			4·6	75		·266		3·3		0	1·70	−1·70	0·16	0·83	−0·73	0·31	1·04	−0·73	0·09	Cherra Poonjee.
3		2		4	3	5	N 35° W	7·0	4·8	+46	7·1	50	+6	·203	−·002	3·0	+1·3	0	0·70	−0·70	0	0·33	−0·33	0	0·54	−0·54	0	Mount Abu.
2		1	2	11	7	7	S 80° W	3·0	3·1	−3	3·1	62	+4	·276	−·012	1·5	−0·4	1	1·50	−0·50	0·35	0·65	−0·30	1·41	1·12	+0·29	0·35	Pachmarhi.
3	2					1	N 42° E	1·7	2·4	−29		81	+17	·330	+·055	2·8	+1·0	2	1·70	+0·30	0·59	0·83	−0·24	1·54	4·74	− 3·20	0·30	Wellington.
1	4	5	3	2			S 54° E	4·0			3·8	57		·216		2·5		0	0·60	−0·60	0·06	0·35	−0·29	0·36	2·00	− 1·64	0·03	Ootacamund.
3	6	4	3	2	4	5	N 45° E	11·2				65		·237		2·5		2	1·40	+0·60	0·56	1·17	−0·61	3·46	6·74	− 3·28	0·32	Kodaikanal.
																												XIII.—Extra India.
9				2	1		N 39° E	1·2				89	+10	·790	+·013	4·3	+0·3	4			2·25	5·38	−3·13	22·09	21·28	+ 0·81	1·29	Trincomalee.
3	4	3					N 47° E	7·7	8·4	−8		82	+8	·789	+·020	3·4	−0·2	5			3·85	3·20	+0·65	5·97	9·99	− 4·02	1·42	Colombo.
												76†		·146†		3·5	−1·8	3			1·11	0·41	+0·70	1·90	1·11	+0·79	0·51	Meshed.
0			1	2			N 41° E	1·7			2·2	87	?	·140	?	3·7	−0·1	6			1·75	1·29	+0·46	4·40	2·66	+1·74	0·49	Teheran.
	1			2	2		S 79° W	1·8			2·4	61‖	−21	·093‖	−·046	3·7	+0·2	3			0·93	0·26	+0·67	1·97	0·80	+1·17	0·40	Ispahan.
7	3	8				4	N 59° E	9·4			10·3	80		·334	−·015	2·5	−0·8	2			0·32	3·12	−2·80	5·98	6·36	−0 38	0·13	Bushire.
1		2	6	1	1	11	N 49° W	9·8**			8·4**	74		·386		1·8		1			0·10			0·10			0·10	Bahrein.
1	9					8	N 38° E	12·5			10·4	83	+10	·490	+·044	5·2	+3·3	1			0·39	0·87	−0·48	0·39	1·65	− 1·26	0·28	Jask.
	1		1		4	7	N 58° W	4·7			4·9	62	−6	·446	−·040	4·2	+1·7	1			1·24	1·28	−0·04	1·27	1·54	− 0·27	1·24	Muscat.
1			2		1	4	N 31° W	1·3	2·7	−5·2	1·7	74	−6	·201	−·043	2·9	+0 3	1			0·48	1·38	−0·90	1·65	3·02	−1·37	0·23	Baghdad.
			10		2	19	N 79° W											1			0·10			0·62			0·10	Busrah.
1	4	2					N 54° E	12·8	12·0	+7	10·4	82	+7	·685	+·033	3·0	−3·4	1			1·77	0·32	+1·45	1·77	0·69	+1·08	1·77	Aden.
	25	3			2		S 88° E	20 9			21·1	76	0	·690	+·006	2·7	−2·5	1			0·39	0·34	+0·05	1·01	0·42	+0·59	0·29	Perim.
9	16	2	2			1	N 78° E					81		·112		3·5	?	0			0	1·24	−1·24	0·32	1·53	−1·21	0	Kabul.
1	2	1	1	2	2	2	S 67° W	1·0			0·9					4·8	−1·1	2			0·42	0·27	+0·15	0·50	0·46	+0·04	0·15	Kashgar.
1	3			1			N 29° E	3·9			4·2	73	−6	·775	−·018	3·6	+0·4	4			2·45	2·09	+0·36	5·16	6·75	−1·59	1·02	Minicoy.
4	1	1				1	N 25° E	8·1			7·6	81	+1	·883	+·016	7·0	+0·8	8			2·36	3·37	−1·01	6·75	6·14	+0·61	0·61	Zanzibar.
3				1		1	N 28° E	3·8			3·7	85		·877		5·5		4			1·64			5·24			0·61	Do. Dunga.
3	2	1	1				N 33° E	9·5								0·6		5			1·66			5·65			0·85	Penang.
1	6	1				2	N 52° E	6·6								3·7		8			4·93			13·12			1·40	Singapore.

‡ Mean of 19 days.

‖ Mean of 23 days.

** Mean of 25 days

,200 feet.

TABLE II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Stations in India, Burma, etc., in January, 1905.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at

Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of air.									Temperature, Wet-bulb.			
		Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Port Blair	61	30·006	29·892 ††	·114	29·950	+·052	29·942 ††	84·9 ‡‡	74·2 ‡‡	10·7	88·0	68·5	19·5	80·9	83·3 ††	78·8 ‡‡	−1·4	70·8 ††	74·8 ††	75·5 ††	73·7
Rangoon	57	·009¶	·898	·111	·953	+·026	·948	87·3	64·4	22·9	89·0	58·5	30·5	80·3¶	84·3	73·9	−0·8	61·7	69·7	71·6	67·7
Diamond Island	41	·033	·918	·115	·977	+·023	·953	80·6	71·9	8·7	83·9	70·4	13·5	77·5	78·7	75·4	−1·2	66·3	70·8	70·4	69·2
Cocoa Island	119	29·948	·838	·110	·894		·947	80·7	73·0	7·7	82·2	70·8	11·4	78·4	78·0	76·1		68·0	71·2	71·1	70·1
Akyab	20	30·079	·954	·125	30·010	+·017	·973	78·5	59·3	19·6	83·9	51·1	32·8	70·3	76·0	68·2	−1·3		65·1	67·0	
Chittagong	87	·029	·908	·121	29·964	+·024	30·002	76·9	54·8	22·1	80·0	46·4	33·6	68·7	73·8	65·7	−0·9	53·8	62·9	64·3	60·3
Calcutta (Alipore)	21	·114	·977	·137	30·036	+·018	·003	75·8	55·4	20·4	83·7	47·8	35·9	67·8	74·5	64·6	−0·6	54·0	61·1	62·9	59·4
Saugor Island	25	·091	·961	·130	·015	+·009	29·985	76·3	59·1	17·2	84·0	51·9	32·1	69·7	73·5	66·5	−0·2	56·9	63·7	65·0	61·9
False Point	21	·099	·980	·119	·029	+·012	·992	77·7	59·0	18·7	85·4	50·2	35·2	73·9	75·0	67·2	−0·3	58·3	66·8	67·0	64·0
Hazaribagh	2,007	28·039	27·933	·106	27·977	+·003	·997	70·6	49·2	21·4	79·7	39·3	40·4	61·4	67·6	59·0	−1·9	46·3	52·6	55·0	51·3
Allahabad	309	29·816	29·697	·119	29·743	+·017	30·022	69·9	48·0	21·9	79·9	39·1	40·8	60·9	68·5	57·3	−2·2	47·3	56·1	58·6	54·0
Dehra Dun	2,233	27·810	27·720	·090	27·754	+·014	·060	61·7	43·0	18·7	69·2	31·9	37·3	52·5	57·4	51·5	−3·1	41·3	48·3	50·8	46·8
Roorkee	899	29·185	29·091	·094	29·127	+·024	·049	62·8	44·2	18·6	74·2	30·7	43·5	54·2	60·2	51·8	−3·5	43·4	50·3	52·8	48·8
Meerut	738	·355	·265	·090	·299	+·019	·048	64·9	44·9	20·0	73·4	31·1	42·3	54·5	62·0	53·2	−2·8	43·7	50·2	53·5	49·1
Lahore	702	·391	·309	·082	·341	+·015	·061	60·4	43·3	17·1	68·6	31·1	37·5	52·1	58·2	50·0	−3·0	41·2	49·0	52·0	47·4
Ludhiana	812	·261	·197	·064	·220	+·014	·056	60·5	44·2	16·3	66·6	32·0	34·6	52·7	58·6	50·6	−3·4	43·2	49·9	51·5	48·2
Peshawar	1,110	28·991	28·906	·085	28·940	−·009	·105	57·9	39·7	18·2	68·2	28·1	40·1	51·1	55·9	46·9	−2·8	37·1	45·0	47·7	43·3
Jacobabad	186	29·980	29·873	·107	29·919	+·041	·079	66·2	43·4	22·8	77·4	25·0	52·4	58·1	62·6	53·6	−3·7	40·4	50·8	53·3	48·2
Kurrachee	30	30·144	30·024	·120	30·076	+·044	·057	72·5	53·0	19·5	80·7	40·4	40·3	64·7	70·6	62·3	−3·0	48·3	54·6	58·2	53·7
Jaipur	1,431	28·653	28·548	·105	28·591	+·007	·044	68·7	47·7	21·0	78·7	28·0	50·7	59·5	66·8	56·8	−3·1	43·8	50·6	53·8	49·
Udaipur	1,925	·137	·022	·115	·071		·003	73·7	47·1	26·6	82·9	31·4	51·5	63·1	71·8	60·2		44·2	53·8	57·9	52·0
Deesa	466	29·635	29·516	·119	29·566	+·022	·000	79·7	50·7	29·0	89·9	35·1	54·8	69·4	77·5	64·8	−2·3	43·4	54·2	57·2	51·6
Jamnagar	61	30·071	·949	·122	30·002		·008	76·1	53·0	23·1	82·8	36·4	46·4	68·4	74·1	63·7		47·0	56·6	57·7	53·8
Belgaum	2,539	27·502	27·375	·127	27·435	+·014	29·900	82·2	56·5	25·7	87·5	52·9	34·6	74·1	80·7	69·6	−1·2	54·2	60·9	61·7	58·9
Sholapur	1,590	28·462	28·319	·143	28·387	0	·932	86·4	59·5	26·9	89·6	54·8	34·8	75·9	84·9	72·6	−0·1	50·5	60·2	63·4	58·0
Akola	930	29·149	29·001	·148	29·067	+·013	·959	84·8	52·9	31·9	90·2	45·1	45·1	73·4	84·0	68·1	−0·4	46·8	59·0	63·4	56·4
Buldana	2,132	27·917	27·793	·124	27·847	−·033	·943	79·6	57·0	22·6	85·0	46·4	38·6	71·1	77·9	67·7	−1·6	48·3‡	54·9	57·1	53·4
Khandwa	1,044	29·027	28·882	·145	28·947	+·011	·966	83·4	51·2	32·2	90·2	40·0	50·2	70·2	82·3	66·8	−0·6	44·9	54·7	59·2	52·9
Nagpur	1,025	·054	·914	·140	·976	+·017	·978	83·4	55·0	28·4	89·4	46·9	42·5	69·4	81·3	68·4	−0·4	49·7	57·7	61·7	56·4
Do. (Sanitary Commr.'s Office)	1,013	·062	·907	·155	·977		·967	84·1	54·3	29·8	89·8	46·1	43·7	71·2	81·7	68·4		49·9	58·7	62·8	57·1
Hyderabad (Deccan)	1,690	28·374	·241	·133	·302	+·011	·949	84·6	59·3	25·3	88·5	54·6	33·9	75·6	82·1	71·1	+0·7	56·2	64·1	65·5	62·0
Bombay	37	30·053	29·934	·119	29·987	+·032	·964	80·9	66·7	14·2	86·9	56·1	30·8	72·6	77·1	73·0	−1·5		65·4	68·1	
Karwar	44	·029	·910	·119	·967	+·045	·945	84·1	64·8	19·3	90·0	62·2	27·8	78·1	82·0	73·6	−1·8	62·9	70·1	71·5	68·2
Periyakulam	945	29·117	28·966	·151	·050		·924	89·1	64·9	24·2	92·9	57·7	35·2	79·8	86·8	77·0		51·6	69·2	70·6	67·1
Salem	940	·144	·980	·164	·065	+·015	·945	90·2	65·3	24·9	95·2	57·6	37·6	79·4	88·2	76·8	+1·8	62·0	69·3	72·2	67·8
Chitaldroog	2,405	27·648	27·519	·129	27·581	+·016	·911	84·6	61·0	23·5	89·8	57·8	32·0	75·6	82·3	71·8	+0·3	55·1	63·3	63·7	60·7
Bangalore	3,021	·063	26·929	·134	26·994	+·008	·918	82·1	57·8	24·3	85·4	53·9	31·5	72·6	79·4	69·0	+1·5	55·0	61·6	62·2	59·6
Hassan	3,091	26·998	·868	·130	·931	+·023	·915	83·2	54·0	29·2	86·7	50·1	36·6	73·6	80·6	67·6	+0·8	52·6	62·3	62·6	59·2
Mysore	2,518	27·549	27·408	·141	27·477	+·006	·912	85·4	60·7	24·7	88·3	57·4	30·9	75·3	83·0	72·1	+1·4	58·8	63·9	64·7	62·5
Madras	22	30·076	29·961	·119	30·015	+·019	·968	83·2	65·0	18·2	87·2	57·4	29·8	79·9	79·6	73·5	−1·8		70·7	70·4	69·3
Bellary	1,475	28·581	28·428	·153	28·502	−·001	·927	88·7	62·2	26·5	93·8	57·5	36·3	77·4	85·4	74·6	+1·4	55·8	65·5	68·0	63·1
Waltair	226	29·894	29·765	·129	29·820	+·024	·911	80·4	67·7	12·7	83·8	64·2	19·6	77·7	77·6	73·3	−0·2	63·5	67·0	67·7	66·1

¶ Mean of 27 days. † Mean of 16 days. †† Mean of 26 days. ‡‡ Mean of 28 days.

'ations in India, Burma, etc., for January, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.
	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
1	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
																								%	%					
79	·783	·776	−·031	84	74	68	78	−1	4·0	3·7	3·9	+0·3		4	53	2	1				2	N 42° E	N 39° E	92	76	157*	156	0·05	0·05	Port Blair.
39	·609	·589	+·021	85	57	52	72	+2	3·0	3·5	3·3	+1·3	6	17	7					6	17	N 21° W	N 27° E	69	36	34*	91	0	0	Rangoon.
38	·634	·638	−·017	73	70	64	72	−1	1·7	2·0	1·9	−0·5	1	9	15	2					35	N 15° W	N 1° W	74	69	281*	190	0	0	Diamond Island.
70	·671	·673	−·020	77	69	70	76	+2	1·8	1·9	1·9	−0·3		43	8						4	N 3° E	N 15° E	93	83	324§		0	0	Cocos Island
55	·547				74	60			0·1	0·1	0·1	−1·3			17	13	1			9	22	N 3° E	N 18° W	43	44	55*	67	0	0	Akyab.
92	·481	·473	−·006	94	71	57	75	+1	3·4	2·3	2·9	+1·4		2	21	1	3	2	7	3	20	N 5° W	N 24° W	39	48	65*	74	0·11	0·10	Chittagong.
94	·425	·445	+·014	91	67	50	71	+1	3·6	2·7	3·2	+1·7	11	12	4	4	2	1	8	6	14	N 39° W	N 30° W	34	44	50*	62	0·94	0·80	Calcutta (Alipore).
18	·508	·500	−·015	87	71	61	74	−2	3·0	2·0	2·5	+0·5		23	10	4	1	9	6	3	6	N 1° E	N 6° W	34	22	189	173	1·19	0·77	Saugor Island.
36	·560	·550	−·003	96	67	64	75	−4	3·3	3·1	3·2	+1·0		9	13	9	9	9	7	4	2	S 87° E	N 57° E	23	22	132*	142	0·92	0·79	False Point.
86	·281	·298	+·016	80	54	42	63	+8	4·4	3·9	4·2	+1·8		9	7	3	2	11	3	5	22	N 41° W	N 51° W	32	49	155*	139	1·40	0·55	Hazaribagh.
73	·398	·379	+·045	94	73	57	80	+12	3·7	3·2	3·5	+1·1	3	1	11	10	2	2	2	21	10	N 43° W	N 42° W	24	26	78*	91	0·67	0·47	Allahabad.
93	·293	·281	+·011	86	73	62	76	+9	5·5	6·3	5·9	+1·6	23			6	6	5	7	11	4	S 37° W	S 66° W	23	20	16	38	3·37	1·03	Dehra Dun.
18	·309	·305	+·017	94	75	58	78	+9	3·7	4·0	3·9	+0·4	13	2		2	7	5		3	30	N 52° W	N 72° W	35	21	52	50	2·80	1·17	Roorkee.
14	·304	·303	+·017	91	71	54	74	+8	2·8	3·4	3·1	0	27	9	2	7		1	6	7	3	N 33° W	N 60° W	14	42	23*	48	2·07	1·07	Meerut.
14	·315	·293	+·024	84	79	64	78	+8	4·1	6·0	5·1	+1·4	18	11	5	2	4	4	1	11	6	N 34° W	N 30° W	21	21	40	41	1·86	0·56	Lahore.
30	·297	·304	+·018	92	81	59	80	+10	2·9	3·6	3·3	−1·0	11			13			18	20		N 78° W	N 54° W	37	29	26*	41	2·19	1·58	Ludhiana.
33	·233	·224	0	78	60	50	66	+2	5·6	5·8	5·7	+1·0	26	2	9	8	1	1	1	11	3	N 7° E	S 7° W	13	4	25*	60	1·60	0·95	Peshawar.
85	·295	·271	+·014	75	58	52	65	+14	3·7	3·1	3·4	+0·4	14	14	4	7	2	2	2	3	14	N 8° W	N	35	23	86*	53	0·85	0·36	Jacobabad.
07	·336	·329	−·035	68	48	43	57	−2	3·7	4·5	4·1	+1·7		6	22	9	5	6	6	4	7	N 49° E	N 24° E	32	20	160*	221	1·50	0·86	Kurrachee.
70	·264	·269	+·001	74	50	39	58	+2	3·7	4·0	3·9	+0·6	5	4	15	10	5	3	4	10	6	N 37° E	N	19	18	102	79	0·17	0·09	Jaipur.
05	·314	·288		79	52	40	57		3·4	3·6	3·5		36	5	2	4	1	1	3	5	5	N 37° W		13		39*		0·01	0·01	Udaipur.
32	·210	·206	−·028	50	31	21	34	−2	2·0	2·7	2·4	+0·3		13	14	7	1	2	7	10	8	N 9° W	N 24° E	34	37	241	204	0·02	0·02	Deesa.
19	·270	·301		59	43	31	48		2·0	2·0	2·0			16	21	8			4	5	5	N 20° E		5½		355*		0	0	Jamnagar.‖
71	·316	·363	+·018	86	44	30	55	+6	3·0	3·1	3·1	+1·6	14	3	2	2	1	1	2	5	5	N 50° W	S 75° E	21	42	114†	240	0	0	Belgaum.
32	·317	·300	−·034	51	37	27	38	−4	2·2	2·4	2·3	+0·5	2	5	7	2	28	2	6	5	5	S 49° E	S 60° E	30	56	237*	187	0	0	Sholapur.
19	·317	·298	−·030	60	38	27	44	−5	1·4	2·5	2·0	+0·5	11	1	7	7	8	3	2	4	19	N 7° W	N 48° E	14	26	77*	89	0	0	Akola.
10	·216	·238	−·062	50‡	31	22	42	−7	2·3	2·8	2·6	+0·6		7	1	7	8	7	5	12	15	N 81° W	N 68° E	21	12	156*	137	0·04	0·04	Buldana.
45	·219	·236	−·084	59	32	19	39	−11	1·8	2·2	2·0	+0·5	6	10	3	1	2	3	11	5	21	N 58° W	N 24° E	45	23	83*	79	0	0	Khandwa.
37	·313	·320	−·043	67	46	29	49	−5	2·0	3·4	2·7	+0·7	7		42		2		5		6	N 39° E	N 72° E	60	30	96*	84	0·22	0·12	Nagpur.
48	·346	·340		72	45	32	52		2·1	2·5	2·3		3		35		14	2	5		3	N 69° E		50		43*		0·13	0·12	Do. (Sanitary Commr.'s Office).
55	·427	·431	+·008	83	52	39	59	+2	1·3	3·1	2·2	+0·6	33	1		7	17	1		3		S 53° E	S 54° E	32	55	54*	86	0	0	Hyderabad (Deccan).
42	·577				66	61			2·3	2·0	2·2	+1·1		5	15	9	1			11	21	N 10° W	N 6° E	48	58	232	238	0	0	Bombay.
31	·631	·622	+·013	90	66	58	75	+2	0·9	1·2	1·1	+0·4		4	7	5				25	21	N 53° W	N 20° W	62	52	106	84	0	0	Karwar.
72	·534	·539		83	56	42	60		2·3	4·8	3·6		2	3	4	11	20	10	3	5	4	S 46° E		40		66*		0·05	0·05	Periyakulam.
87	·584	·579	−·005	82	58	44	65	−4	2·8	3·5	3·2	+0·1	5		4	41	3		1	8		E	N 81° E	60	65	110*	115	0	0	Salem.
32	·362	·391	+·015	68	49	33	52	+4	1·4	2·2	1·8	−0·1	4	3	7	22	15		3	3	5	S 87° E	S 88° E	47	72	107*	161	0	0	Chitaldroog.
27	·362	·402	−·006	84	53	37	60	−2	2·2	1·8	2·0		4		14	28	8	4	3	1		S 88° E	N 88° E	64	78	159*	127	0·07	0·07	Bangalore.
29	·362	·395	+·018	91	52	35	61	+3	3·4	3·8	3·6	+0·6			14	14	18	4	8	4		S 65° E	N 87° E	48	77	43*	70	0	0	Hassan.
58	·386	·445	+·022	89	52	34	61	+3	2·9	3·1	3·0	0		3	9	19	15	6	2	3	5	S 79° E	N 83° E	45	81	166*	211	0	0	Mysore.
32	·621	·651	−·034		62	62	80	+1	3·2	2·5	2·9	−1·2		4	17	27	12	1	1			N 83° E	N 51° E	76	76	126	137	1·92	0·79	Madras.
86	·475	·436	+·030	66	51	39	51	+1	2·2	2·9	2·6	+0·2	3	1	3	11	18	11	4	5	6	S 36° E	S 69° E	39	61	48*	86	0	0	Bellary.
22	·547	·553	−·024	78	55	57	66	−2	4·3	3·6	4·0	+2·2		1	14	7	7	18	13	2		S 30° E	S 80° E	34	30	110		0	0	Waltair

† Corrected. ‡ Mean of 30 days. § Mean of 27½ days. ‖ Wind variable 3. ‡† Mean of 22½ days.

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Abstract of Observations recorded at 10 A.M. and 4 P.M.

Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of air.										Temperature, Wet-bulb.		
		Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Quetta	5,502	24·681	24·604	·077	24·633	−·030	24·592	45·1	27·4	17·7	63·4	8·6	54·8	38·1	40·6	35·5	−4·1	26·7	33·9	35·9
Leh	11,503	19·568§	19·489	·079	19·523	−·098	19·489§	27·1	8·3	18·8	39·5	−6·1	45·6	18·5§	24·1	15·7	−1·6	5·5	11·6§	16·4§
Srinagar	5,204	24·954	24·879	·075	24·908	−·083	24·879	38·8	29·0	9·8	46·5	20·6	25·9	33·1	37·0	31·9	+1·2	27·6	31·7	34·9
Sarain		23·156	23·103	·053	23·129			40·9	25·0	15·9	50·2	9·8	40·4	37·2	32·7	33·0			32·7	31·4
Simla (Ridge)	7,224	·100	·047	·053	·064	−·041	23·026	41·0	31·6	9·4	51·1	18·2	32·9	37·7	37·2	35·6	−3·2	28·5	32·1	33·8
Chakrata	7,022	·292	·241	·051	·280	−·009	·240	43·9	31·3	12·6	55·5	19·4	36·1	37·3	39·0	36·9	−5·8	29·4	33·5	35·6
Ranikhet	6,069	24·143	24·068	·075	24·096	−·019	24·056	47·2	35·1	12·1	55·9	26·3	29·6	42·2	43·0	40·5	−6·1	33·5	38·0	38·8
Muktesar	7,600	22·835	22·770	·065	22·793		22·751	42·2	31·3	10·9	52·5	21·9	30·6	37·6	38·9	36·1		28·8	33·1	35·3
Katmandu	4,388	25·755	25·631	·124	25·687	0**	25·641	59·6	37·1	22·5	65·8	30·8	35·0	45·2	57·2	47·6	−2·0**	35·6	42·6	48·6
Darjeeling	7,376	22·991	22·957	·034	22·968	−·013	22·926	44·0	32·7	11·3	50·6	27·0	23·6	39·2	41·0	37·7	−2·4	31·2	36·7§	3·83
Mount Abu	3,945	26·140	26·068	·072	26·096	−·019	26·046	61·4	48·0	13·4	70·1	32·0	38·1	57·8	58·0	53·9	−4·3	41·5	46·3	46·6
Pachmarhi	3,528	·549	·465	·084	·499	−·028	·446	70·8	46·9	23·9	75·1	31·3	43·8	59·7	68·1	58·2	−0·5	43·2	50·8	54·5
Chikalda	3,642	·455	·355	·100	·397	−·040	·341	72·0	53·2	18·8	76·8	42·4	34·4	64·6	69·9	61·9	−2·1	46·5	51·5	54·5
Kodaikanal	7,688	22·891	22·820	·071	22·852		22·791	61·3	44·9	16·4	67·4	39·8	27·6	57·1	56·2	51·8		40·7	49·7	52·4
Ootacamund	7,322	23·107	23·038	·069	23·067		23·003	65·9	42·5	23·4	70·1	34·1	36·0	61·7	61·0	53·6		37·9	48·9	51·0
Dodabetta	8,539?	22·096	22·038	·058	22·061		21·998	57·8	42·3	15·5	66·2	38·8	27·4	53·4	53·0	49·4			44·5	46·7
Aden	94	30·015	29·899	·116	29·951	+·017	29·979	79·3	71·3	8·0	81·7	64·5	17·2	77·0	78·4	74·3	−1·4	69·4	72·3	71·0
Perim	201	29·875	·758	·117	·811	+·028	·919	82·1	73·2	8·9	83·5	69·2	14·3	78·9	80·0	76·7	−0·4	63·5	72·0	72·7
Minicoy	7	30·029	·950	·079	·993		·925	85·0			85·7			82·8	82·0				74·9	74·7
Zanzibar	73	29·938	·805	·133	·875	+·022	·873	87·3	79·8	7·5	90·6	76·6	14·0	83·3	86·8	82·6	+0·7	74·6	77·8	78·5
Port Victoria (Seychelles)	15	·982	·894	·088	·949	+·024**	·888	83·5	77·4	6·1	85·8	74·3	11·5	81·3	82·3	79·3	+0·8**	73·7	76·9	77·2
Mauritius (Pamplemouses)	181				·725	−·036	·851				88·5	71·0	17·5			78·7¶	−0·2			

N.B.—Elevations in italics indicate barometric determinations. § Mean of 30 days. ¶ Mean of 27½ days.

Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

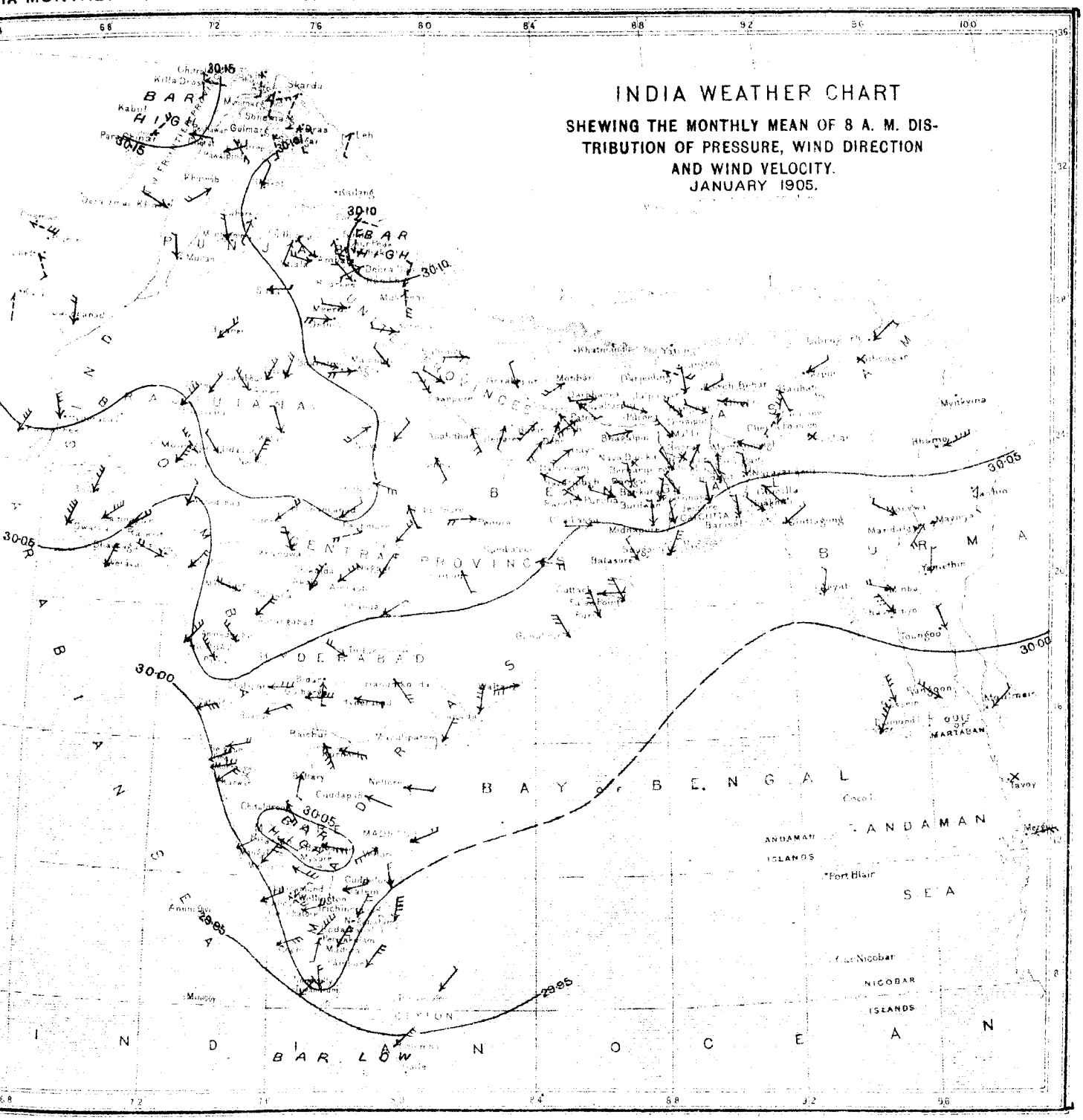
concluded.

tations in India, Burma, etc., for January, 1905—concluded.

Vapour Tension.				Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.
													Total number of 10 hours and 16 hours winds from																
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean direction of month	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
																								%	%					
·161	·171	·167	+·003	93	71	70	81	+11	4·0	5·0	4·5	+0·4	21	3	1	1	12	4	1	12	8	S 61° W	N 84° W	16	24	56*	70	5·04	1·23	Quetta.
·030§	·043§	·036	−·028	55	30§	34§	41	−21	6·2§	7·1	6·7	−0·1			4	4	1	16	25	11		S 34° W	S 13° W	62	32	49	24	0·60	0·13	Leh.
·166	·184	·163	+·005	86	87	82	85	+1	8·6	8·5	8·6	+1·4	16	8	2	1	10	5	3	3	14	N 49° W	S 21° E	13	4	57*	74	3·27	0·93	Srinagar.
·141	·164				66	88			5·5	6·3	5·9		34	7	6	3		4	7	1		N 26° E		5		36*		9·31†	2·17†	Sarain.
·126	·160	·147	−·004	75	59	74	73	+12	6·2	7·5	6·9	+1·3	5	13	1		2	37				S 5° E	S 18° E	40	20	133	120	3·14	0·84	Simla (Ridge).
·155	·177	·167	+·005	83	70	74	80	+14	5·1	6·2	5·7	+1·1	17	27	1	1	2	13			1	N 10° E	S 51° W	23	6	103	137	9·85	4·77	Chakrata.
·189	·197	·196	−·005	87	71	72	81	+14	4·2	6·0	5·1	+1·0	40	1	5	2			4	5	5	N 48° W	S 60° W	13	17	40*	50	4·94	1·70	Ranikhet.
·144	·172	·159		79	66	75	77		5·3	6·8	6·1		7		2	9	7	5	13	18		S 34° W		34		198*		8·03	1·80	Muktesar.
·247	·249	·238	−·015	86	81	54	78	+ 1	1·6	4·7	3·2	−0·2	18		2	12	2		3	18	7	N 74° W	N 78° W	18	46	12	21	0·64	0·24	Katmandu.
·192§	·203	·193	−·017	86	79§	78	85	0	5·5	6·9	6·2	+0·5	10	2	8	1	8		9	9	15	N 66° W	N 81° W	24	20	116*	89	0·16	0·12	Darjeeling.
·190	·194	·200	−·007	57	39	39	53	+ 4	3·5	4·0	3·8	+1·4	1	9	9		5	3	22	3	10	N 88° W	N 61° W	25	12	170*	125	0	0	Mount Abu.
·276	·275	·272	−·021	74	54	40	64	+ 1	1·6	2·0	1·8	−0·6		8	6	1	1		23	11	12	N 83° W	N 75° W	48	10	73*	84	0·35	0·35	Pachmarhi.
·235	·256	·253	−·061	59	39	34	52	− 6	2·5	2·6	2·6	+0·6	14	11	3		2	7	17		8	S 83° W	S 44° W	23	21	188*	132	0	0	Chikalda.
·287	·356	·287		72	63	79	75		3·1	6·0	4·6			10	5	10	12	11		3	10	N 85° E		19		267		0·56	0·32	Kodaikanal. ‡
·216	·275	·235		67	40	52	54		2·1	4·3	3·2		1	9	7	11	10	12	4	4	4	S 69° E		23		85*		0·06	0·03	Ootacamund.
·205	·256				51	64			2·6	4·0	3·3		1	10	13	8	9	8	3	6	4	N 57° E		18		288		0·15	0·08	Dodabetta.
·730	·660	·705	+·063	90	79	68	80	+ 8	2·8	1·3	2·1	−1·9 **		1	22	11	26	2				S 85° E	S 89° E	72	70	254*	324	1·77	1·77	Aden.
·701	·710	·634	−·059	56	71	69	66	− 7	1·6	0·5	1·1	−1·3			1	4	35	18			4	S 34° E	N 86° E	76	80	493*	475	0·39	0·29	Perim.
·762	·765				68	70			3·7	4·7	4·2			22	34	4	1		1			N 32° E		85		101*		2·45	1·02	Minicoy.
·883	·865	·855	−·007	77	77	68	75	− 2	6·5	4·8	5·7	+1·0 **		19	22	10	1	3			5	N 33° E	N 33° E	68	70	183*	187	2·36	0·61	Zanzibar.
·875	·873	·865	+·032	83	81	79	84	0	5·8	6·8	6·3	−0·7	9	18	9				1	5	20	N 20° W	N 42° W	64	65	147	144	15·08	4·10	Port Victoria (Seychelles).
		·833	+·096				85	+10			8·4	+1·9										N 34° E	S 86° E			192	266	21·16	4·78	Mauritius (Pamplemouses)

* Corrected.
** Departure from old normal.
† Snow water.
†† Mean of 19½ days.
‡ Wind variable 1.
‡‡ Mean of three previous columns.

C. P. O.—No. 880 Meteor.—3·8-1905—385.

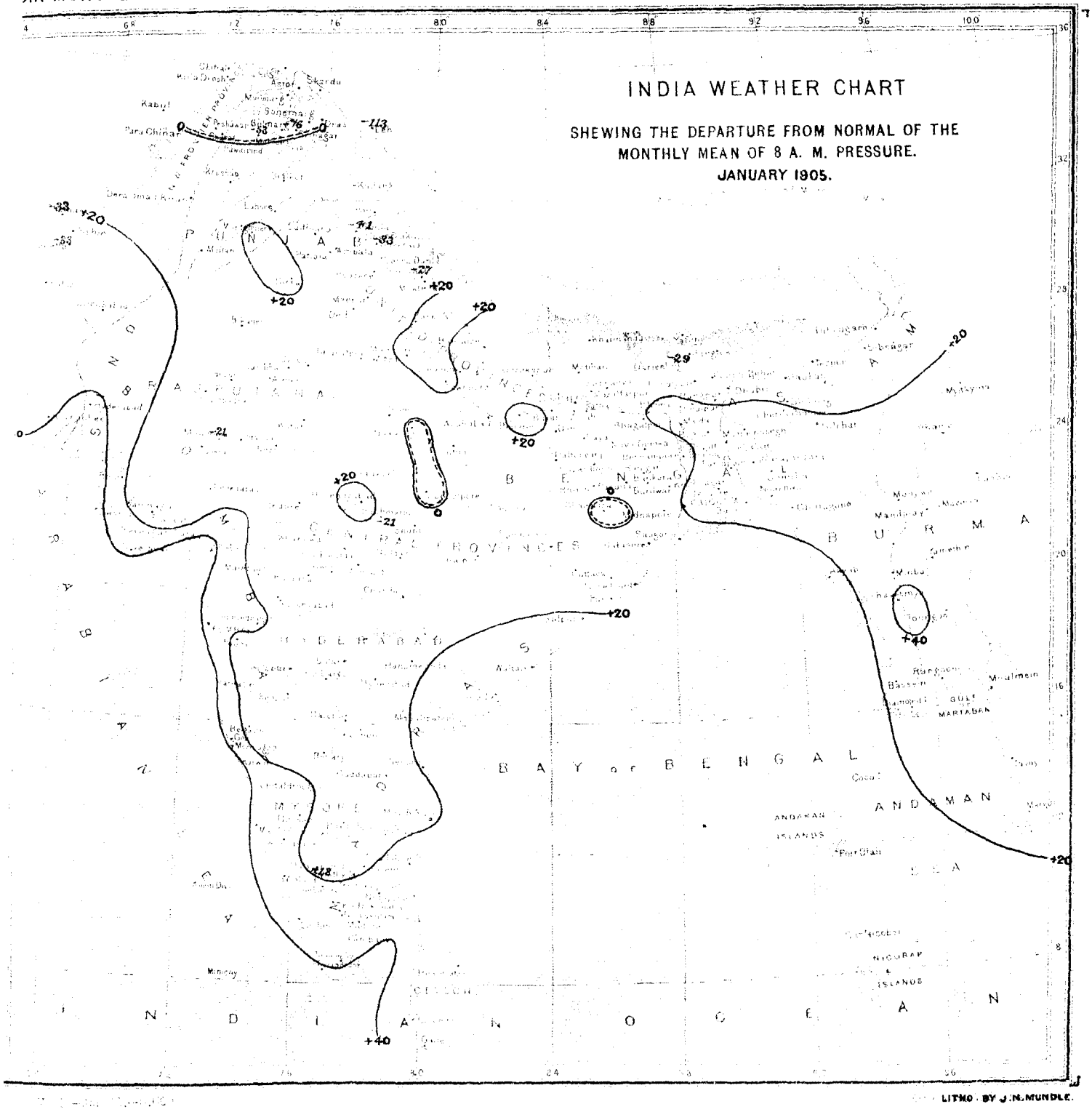


Lith. at I.T.R.O. BY S. B. MUNDLE.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric essure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the ore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of ambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are dicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the onth is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added to the wind arrow.					
,, ,,	2 to 5	,,	,,	,,	...	two	feathers	,,	,,	,,	,,
,, ,,	5 to 10	,,	,,	,,	...	three	,,	,,	,,	,,	,,
,, ,,	10 to 20	,,	,,	,,	...	four	,,	,,	,,	,,	,,
	over 20	,,	,,	,,	...	five	,,	,,	,,	,,	,,



LITHO. BY J.N. MUNDLE.

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal amounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020 or two hundredths of an inch, &c. Continuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted lines that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuous and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative departures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF DAILY
MAXIMUM TEMPERATURE.

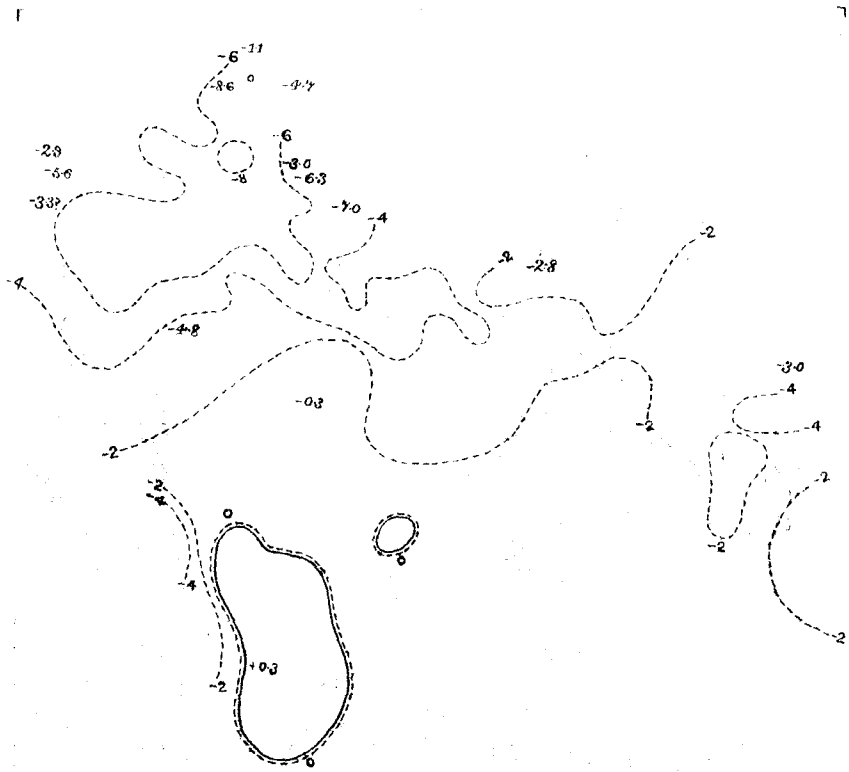


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF DAILY
MINIMUM TEMPERATURE.

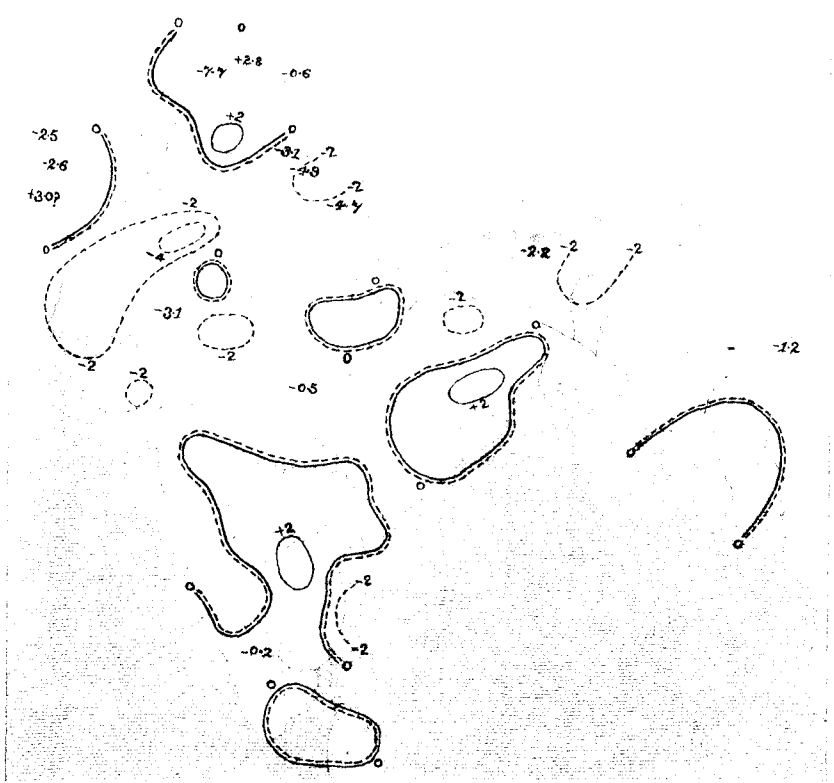


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

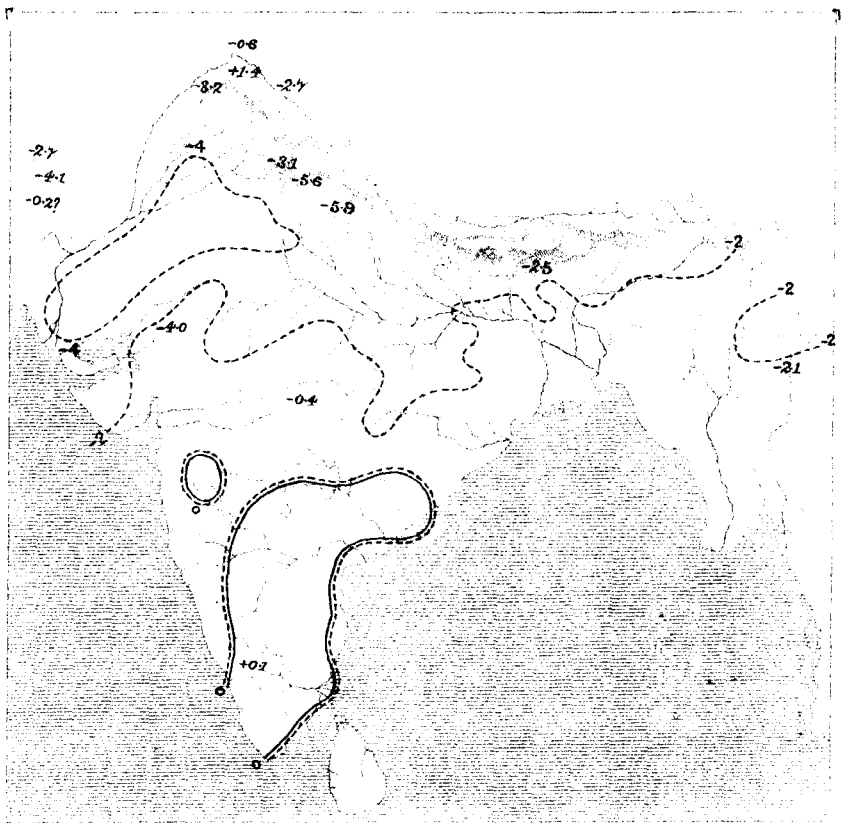


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

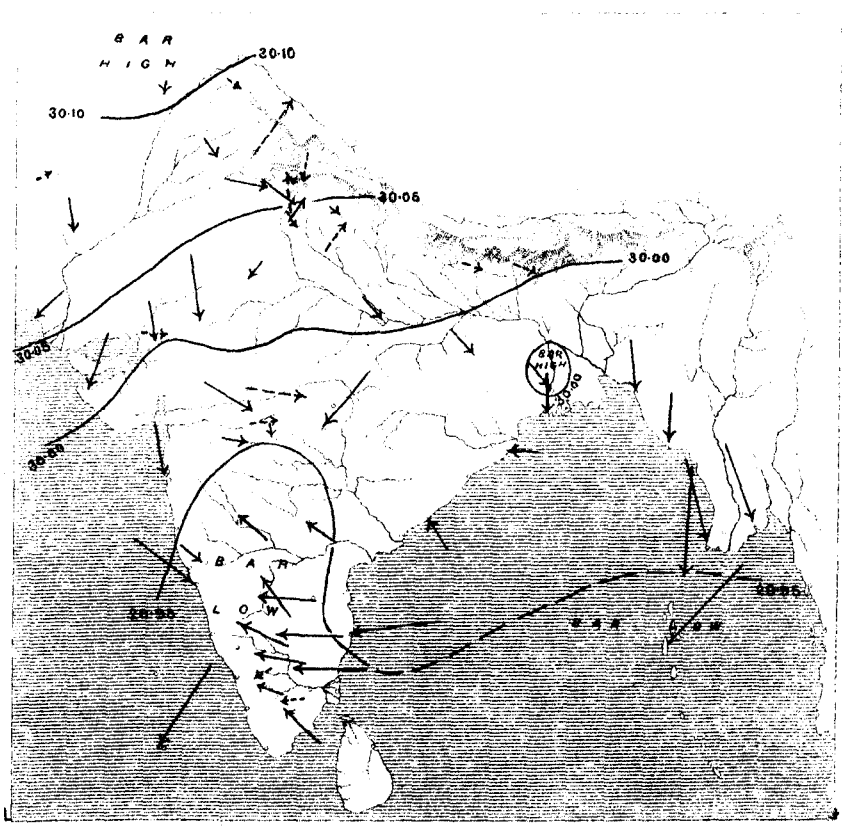


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF ABSOLUTE
HUMIDITY AT 8 A. M.

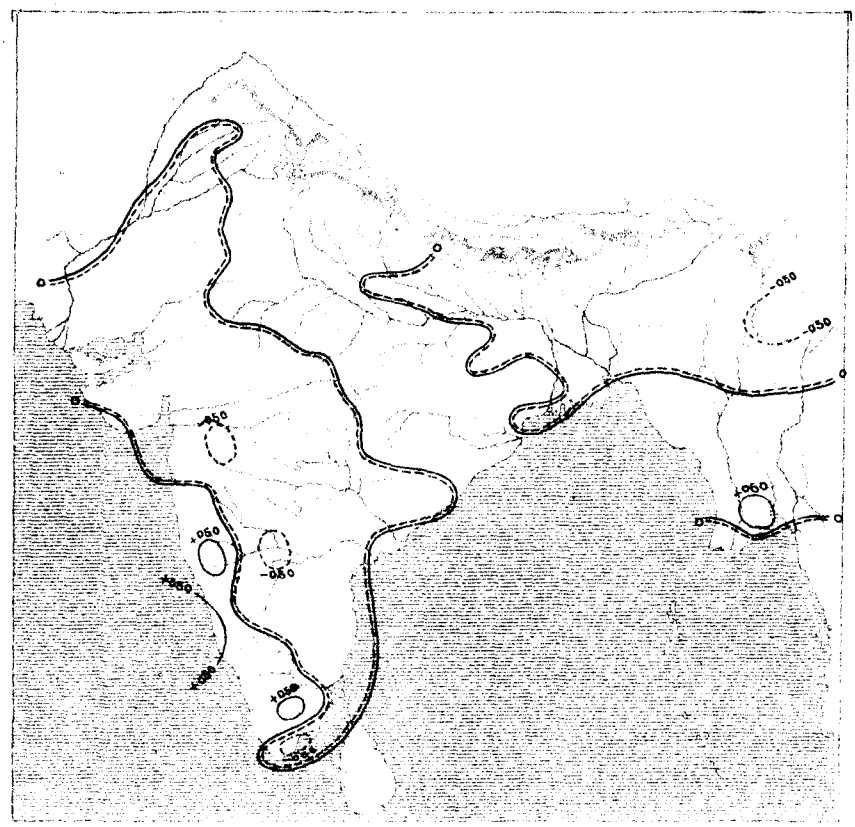
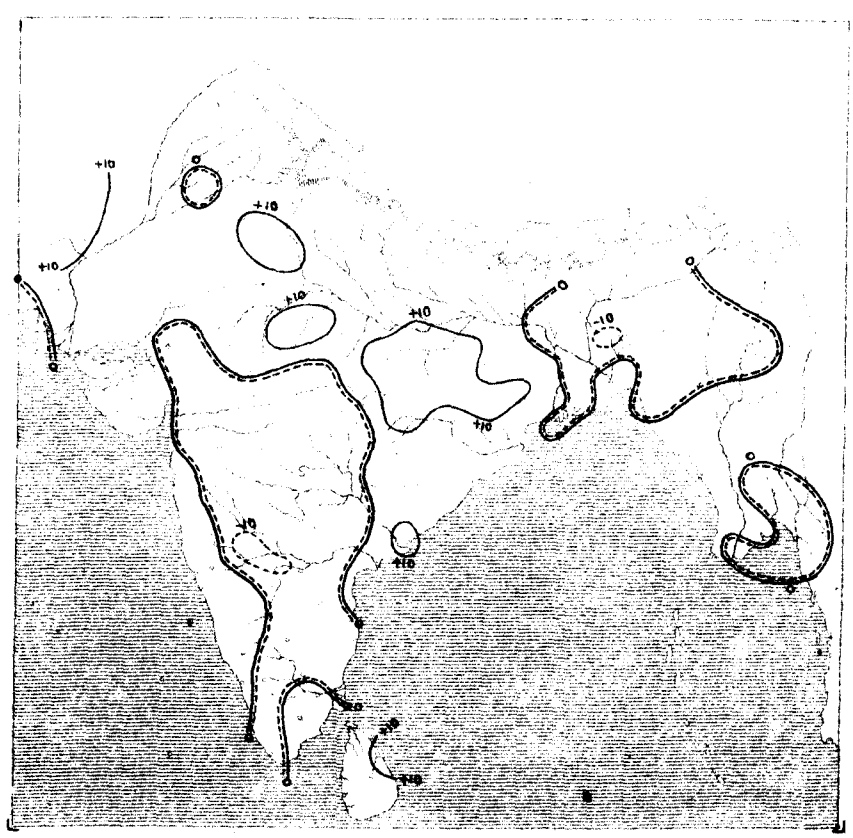


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF RELATIVE
HUMIDITY AT 8 A. M.



LITHO. BY S. S. MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 A. M.

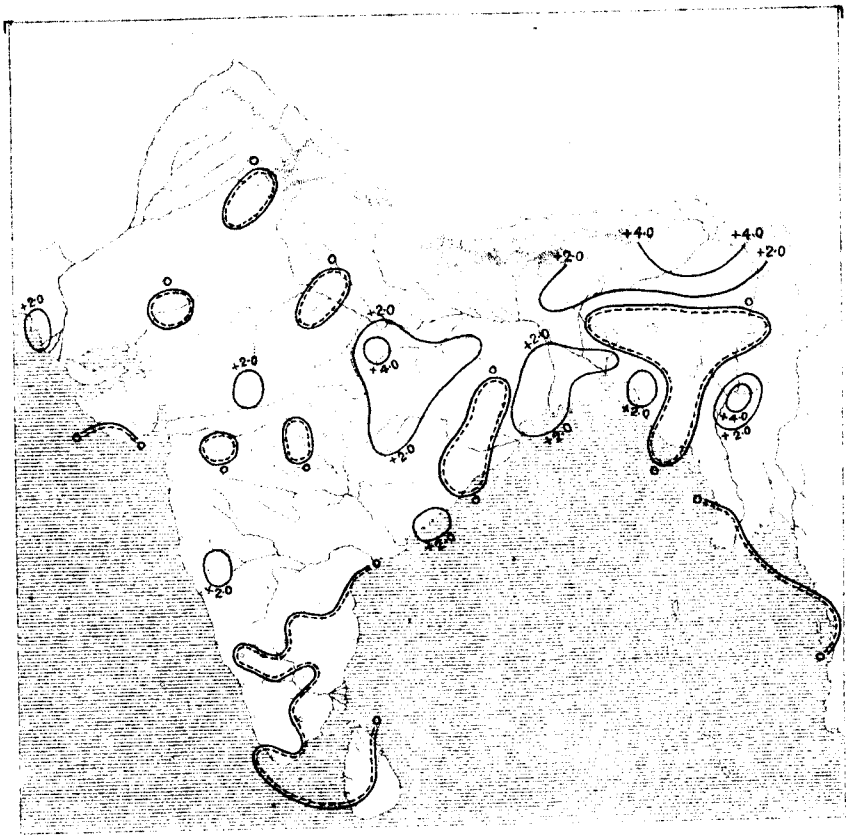
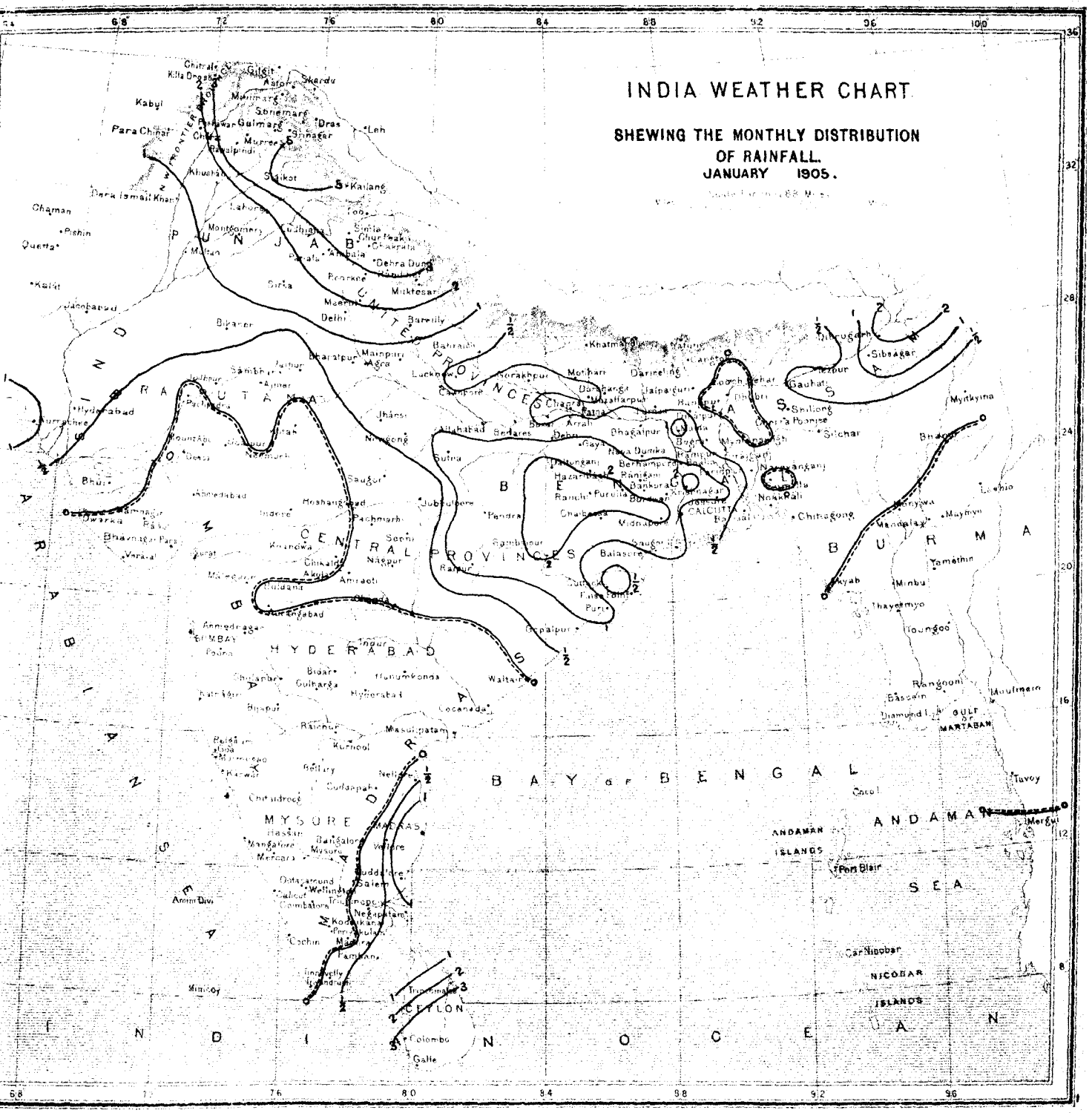


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

LITHO. BY S.B. MUNDLE



The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.

LITHO. BY S. S. MUNDLE

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above these give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained by referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South do.
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, FEBRUARY, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of February 1905, is based on observations taken daily at 8 A.M. at 231 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 64 stations. In the rainfall summary the rainfall data of the meteorological observatories, and the rainfall statements of the month, published by the Provincial Governments, that had been received up to the date of the preparation of the review are utilized and brief notes on Solar and Magnetic disturbances are supplied by the observatories.

Summary of the chief features of the weather in India during the month of February, 1905.

Cloudy and cold weather prevailed over the greater part of the Indian land area during the month under review. The severe cold, which commenced during the last ten days of January, continued practically throughout the month over northern India, though over the Peninsula and more particularly the south of the Peninsula, the mean temperature was higher than usual. A series of cold waves traversed northern India from west to east and the temperatures at some stations were lower than had hitherto been recorded in the month of February.

The first three days were fairly fine except for some showers in upper Assam and Upper Burma, but between the 4th and the 8th conditions became unsettled, and snow fell on the hills and rain on the plains of north-west and of north-east India. The mean temperature was largely below the normal over the whole of northern India during the first three days and with the occurrence of snow on the mountains around the north-west frontier, a fresh cold wave appeared over the Indus Valley on the 4th. This cold wave extended extremely slowly across northern India. The largest departures of mean temperature from the normal were recorded over Rajputana (−18°) on the 5th and 6th; over the Central Provinces (−16° to −12°) from the 7th to the 10th; over the east Gangetic Plain (−14°) on the 11th and 12th and over Orissa (−12°) on the 13th and 14th. The greatest depression of temperature during the passage of this cold wave occurred in the day or maximum temperature. The following gives data for the station exhibiting the largest departure of the day temperature from normal for each day from the 4th to the 14th:—

Date.	Station.	Departure from normal of maximum temperature of date.
		°
4th February 1905	Hyderabad (Sind)	−22·2
5th „	Lahore	−21·3
6th „	Bikaner	−17·0
7th „	Neemuch	−14·0
8th „	Seoni	−15·4
9th „	Sambalpur	−13·4
10th „	Neemuch	−12·6
11th „	Sutna	−16·5
12th „	Sambalpur	−14·1
13th „	Cuttack	−10·9
14th „	Cuttack	− 8·6

Though the largest departures from normal were generally exhibited by the day temperatures the cold at night was very intense and the following notable minimum temperatures were recorded during the period under review :—

Date.	Station.	Minimum temperature of date.	Departure from normal of minimum temperature of date.
		°	°
4th FEBRUARY 1905	Peshawar	29·9	—10·6
5th „	Bikaner	34·1	—16·6
6th „	Bikaner	35·1	—15·8
7th „	Khandwa	38·2	—15·6
8th „	Khandwa	36·7	—17·3
9th „	Akola	38·9	—16·7
10th „	Chanda	42·6	—15·4
11th „	Raipur	44·8	—14·5
12th „	Chanda	43·1	—15·4
13th „	False Point	48·0	—16·3
14th „	False Point	50·0	—14·5

As the cold wave slowly progressed eastward the temperature rose in its rear, and on the 13th and 14th the mean temperature exceeded the normal over a considerable part of north-west India. This is shown below :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of	
	13th February.	14th February.
	°	°
Sind	+2·0	+2·8
Rajputana	—2·5	+0·3
Gujarat	—1·5	+1·5

On the 14th the weather again became unsettled over northern India. Showers commenced in Rajputana on that day and thence extended to north-west India on the 15th, and to northern India on the 16th, 17th and 18th, the rainfall having been especially heavy in the north-east on the last day. The mean temperature fell 10° over north-west India on the 15th and a fall subsequently took place over the greater part of the country. The mean temperature was below the normal in all places except small portions of Burma and of Madras from the 16th to the 21st. The following gives mean temperature data for all divisions for these six days :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					
	16th February.	17th February.	18th February.	19th February.	20th February.	21st February.
	°	°	°	°	°	°
Burma	—1·9	— 0·5	+ 1·6	— 0·1	— 0·2	— 1·1
Assam	—4·2	— 5·4	— 6·6	— 4·5	— 0·6	— 6·5
Bengal	—3·6	— 3·0	— 6·6	— 7·7	— 6·2	— 6·3
Orissa	—1·0	— 1·1	— 1·6	— 7·6	— 8·3	— 6·4
Bihar	—5·7	— 7·2	—10·5	— 7·7	— 6·6	— 9·1
Chota Nagpur	—3·3	— 4·3	— 9·9	— 9·2	— 8·0	—11·6
United Provinces of Agra and Oudh.	—4·1	— 8·5	— 9·3	— 8·6	—11·2	—10·6
Punjab	—4·9	— 9·2	— 8·7	— 8·1	— 9·3	— 7·0
North-west Frontier Province.	—3·0	— 8·0	— 6·8	— 8·6	— 9·0	— 4·4
Sind	—3·0	— 5·3	— 3·4	— 4·9	— 5·7	— 2·0
Rajputana	—5·1	—10·1	+ 8·5	—10·7	—11·5	—10·7
Gujarat	—1·5	— 7·0	— 7·1	— 6·7	— 5·5	— 6·1
Central India	—0·6	— 5·5	— 9·1	— 9·9	—11·1	—12·6
Central Provinces	—0·8	— 3·3	— 7·7	— 9·9	—10·2	—11·7
Berar	—2·0	— 7·4	—11·2	—11·0	—10·5	—10·3
West Coast	—1·8	— 2·7	— 4·5	— 3·7	— 2·2	— 0·6
Bombay Deccan	—2·7	— 7·6	— 8·8	— 9·1	— 6·6	— 5·9
Mysore	+1·1	— 0·2	— 0·2	+ 1·0	+ 2·0	+ 3·7
Madras Coast	—1·1	+ 0·6	+ 0·9	+ 1·3	+ 1·3	+ 1·8
Madras Deccan	+0·2	— 1·6	— 3·4	— 1·9	— 0·1	— 0·4
South India	+0·4	— 0·5	+ 1·8	+ 3·0	+ 4·2	+ 5·0

On the 21st the weather again became disturbed. Showers commenced in Baluchistan on this day and extended to north-west India on the 22nd, 23rd and 24th. A fresh cold wave appeared over the Indus Valley on the 24th and the following low day temperatures were recorded on that and the following day :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
24th February	Hyderabad	56·5	83·9	—27·4
	Jacobabad	62·9	81·8	—18·9
	Peshawar	49·7	68·6	—18·9
	Rawalpindi	49·4	67·3	—17·9
	Jaipur	64·2	82·1	—17·9
	Sirsa	62·2	78·8	—16·6
	Kurrachee	65·9	82·0	—16·1

Date.	Station.	Maximum temperature. Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
25th February	Hyderabad	61·0	84·6	−23·6
	Kurrachee	64·9	82·2	−17·3
	Agra	70·0	83·0	−13·0
	Ajmer	68·4	81·4	−13·0
	Jaipur	70·2	82·6	−12·4
	Sirsa	67·2	79·5	−12·3
	Jacobabad	70·4	82·5	−12·1
	Bikaner	68·0	80·1	−12·1

This cold wave did not, however, extend, and over the Peninsula the mean temperature was generally excessive between the 23rd and the 26th. The following gives data for the Peninsular divisions for these four days :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of 23rd February.	24th February.	25th February.	26th February.
	°	°	°	°
Central Provinces	−1·3	+1·1	+1·5	+1·8
Berar	+0·6	+2·6	+2·3	+5·0
West Coast	−0·9	−0·5	−0·6	+0·9
Bombay Deccan	+0·3	+1·9	+3·8	+2·5
Mysore	+1·8	+1·0	+1·9	+1·3
Madras Coast	+2·2	+1·6	+1·1	+0·5
Madras Deccan	−0·3	+1·5	+1·2	+0·9
South India	+3·7	+1·5	+1·3	+0·7

On the two last days of the month the weather was again unsettled. A fairly well-marked depression crossed the Indus and entered the West Punjab on the morning of the 27th. The depression nearly filled up during the next 24 hours, but at the same time drifted slowly eastward. Rain and snow fell over the north-west Himalayas and showers of rain at several places on the plains of northern India. In consequence a fresh and severe cold wave appeared in the north-west, the mean temperature of the Indus Valley stations falling to between 14° and 18° below the normal. The following gives comparative data for the different divisions of northern India for the two last days of the month :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of 27th February.	28th February.
	°	°
Bengal	− 3·2	− 2·5
Orissa	− 0·3	− 0·3
Bihar	− 3·0	− 2·5
Chota Nagpur	+ 1·1	− 1·1
United Provinces of Agra and Oudh	− 5·9	− 7·1
Punjab	− 6·6	−11·9
North-west Frontier Province	− 8·7	−17·8
Sind	−14·3	−18·0
Rajputana	− 6·9	−11·4
Gujarat	+ 0·9	− 9·9
Central India	− 2·5	− 2·7

Solar and Magnetic Disturbances.

SOLAR PHYSICS OBSERVATORY, KODAIKANAL,—SOLAR OBSERVATIONS,—FEBRUARY 1905.

Observations were possible on every day of the month. On the 16th, 17th, and 23rd prominences could not be observed but otherwise the observations were complete.

Twentysix new* groups of spots appeared during the month, of which 11 were in the northern and 15 in the southern hemispheres and the mean daily number of groups visible was 6·1 for the whole month. If we take the mean daily number weekly it shows how unequally the spots were distributed in longitude:—1st week 5·3 ; 2nd week 10·4 ; 3rd week 6·0 ; 4th week 4·3. This corresponds closely with the distribution during the previous rotation.

* For statistical purposes the return of an old group is treated as a new group.

By far the most important spot of the month was 464, referred to in last month's notes as having appeared on January 29th. It is the largest spot that has been seen for many years, probably since 1872, but fell far below the size of the great spot of 1858. As shown on the photograph taken on February 4th, it covered an irregularly elliptical area of which the greatest length was about 110,000 miles and the greatest breadth 59,000 miles. The umbra of the chief spot measured about 21,000 by 13,000 miles. As shown in the spectroheliograms on the same date the disturbed area covered some 16,000 million square miles. The umbra was exceptionally dark and the spectroscopic observations showed the whole spot to be greatly disturbed. The hydrogen and calcium lines were contantly found bright, not only in the regions surrounding the spot, as is

usual, but even over the darkest part of the umbra. D_3 appeared bright inside part of the umbra and very dark outside it; C. was once observed doubly reversed in the umbra; D_1, D_2, and many other lines, chiefly those of iron and nickel, were also seen reversed in the umbra. Displacements of both the bright and dark hydrogen lines were common. The Sun's rotation carried the spot round the west limb on the 11th and it reappeared on the 25th, somewhat reduced in size and less disturbed, but still a large spot easily seen without a telescope. Its reappearance was preceded by a fine display of bright metallic prominences showing displacements in the helium and hydrogen lines.

The other large spots of the month were 465 (2nd to 14th), 466 (3rd to 16th), 473 (8th to 20th) and 487. The first three of these were regular groups showing no great changes or disturbances as they crossed the disc. The last appeared as a small dot near the eastern limb on the 21st and by the 23rd had developed into an active group with C. brilliantly reversed in the centre.

Prominences were hardly so numerous as in January, but there were a number of large ones seen. The tallest prominence that has been observed here was photographed on the 20th in the calcium line H. at position angle 45°. When the first photograph was taken at 8 h. 36 m. it had a height of 95,000 miles, another photograph at 9 h. 18 m. showed that it had risen to 108,000 miles, while in a photograph taken at 10 h.14 m. its height exceeded 162,000 miles and it had got beyond the limits covered by the spectroheliogram. On the 25th, 26th and 27th nearly 28° of the eastern limb were covered with bright prominences. During the month 5 metallic prominences showing displacements of the hydrogen line, were observed.

There was a great magnetic disturbance on the 3rd (7 hrs. to 24 hrs.) and moderate disturbances on the 4th (all day) and 5th (11 hrs. to 24 hrs.) These were connected with the passage of the great spot the large umbra of which crossed the central meridian on the forenoon of the 4th.

C. MICHIE SMITH,

Director,

Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay:—Note on the Magnetic Record.

During the month the traces showed 10 calm days, 15 days of small, 2 days of moderate and 1 day of great disturbance.

The great disturbance was recorded on the 3rd February. It commenced with an abrupt movement, showing an increase of force of about ·00137 C. G. S. unit at about 7h. 30 m. It then fell gradually reaching its lowest point at about 18 hours, showing a fall of about ·00086 C. G. S. unit. Thus the whole range of disturbance was ·00223 C. G. S.

Movements suspected to be due to seismic causes occurred on the 11th, 12th and 23rd; commencing at about 2h, 22h and 1h respectively on those days, the strain lasting for about 3 hours in the former two cases and 5 hours in the last case.

The selected quiet days of the month were the 8th, 9th, 13th, 19th and 22nd.

The mean observed absolute values of the several elements as also the ranges and summed ranges of the Horizontal Force and Declination for the month were as follows:—

Horizontal Force	·37402 C. G. S. Unit
Declination	15′17″ East.
Dip	21°55′3
Horizontal Force range	·00045 C. G. S. Unit.
„ „ Summed range	·00282 Do.
Declination range	2′42.
„ Summed range	10′05.

NOTE.—Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.

Six seismic disturbances were recorded, viz., on 3rd, 4th, 14th, 17th, 19th, and 27th, the amplitudes of the disturbances recorded on the 14th and 17th being 8·6 m.m. and 3·4 m.m., corresponding to an apparent tilt of 3″·78 and 1″·50 respectively.

MAGNETIC DISTURBANCES.

February 1905.		February 1905.		February 1905.	
1	S.	10	C.	19	C.
2	S.	11	S.	20	C.
3	G.	12	S.	21	S.
4	M.	13	C.	22	C.
5	M.	14	S.	23	S.
6	S.	15	S.	24	S.
7	C.	16	S.	25	S.
8	C.	17	S.	26	S.
9	C.	18	S.	27	C.
				28	C.

The magnitudes of the disturbances are determined from Horizontal Force traces. C=Calm; S=Small; M=Moderate; G=Great; V. G.=Very great. Days are reckoned from midnight to midnight.

N. A. F. MOOS,

Director,

Government Observatory, Bombay.

Royal Alfred Observatory:—Mauritius. Solar observations:—No observations were made on the 7th, 8th, 15th or 27th. On all other days groups of sunspots were observed, the number of groups ranging from two on the 2nd, 20th, 21st, and 26th to nine on the 10th. The mean daily number of groups for the days on which observations were possible was 4·4. Single spots were also recorded on the 5th, 6th, 9th, 10th to 14th and 26th while faculæ were recorded on all the observing days.

The largest spot observed since February 1892 appeared on the sun's limb on January 29th and reappeared on February 25th.

MAGNETIC RECORD

Day.	Hours.	Magnetic Disturbances.
2	1–6	Small fluctuations in Horizontal force.
„	5½–6	Wave in Declination (1″·1E.)
„	6½–7	Wave in Declination (1″·4E.)
„	7–8	Decrease of westerly declination (5″·0).
„	13½–14	Wave in declination (1″·2E.) steep at commencement.
3–6		Large disturbance.
11	0¾	Sudden increase of Horizontal Force (·00029.)
14	—	Accentuated diurnal variation in Horizontal Force.
„	19–20½	Wave in declination (2″·2 W.).
15	1½–3	Wave in Horizontal Force (+·00026); in Declination (2″·1E.).
23	3¼	Sudden increase in Horizontal Force (·00017) followed by a general decrease of force (·00065) till 21 h. with waves, 3½h–8h (—·00022); 10 h.–16½ h. (—·00026.). In Declination 4½h to 5½h wave (2″·2E); 6h–9h fluctuations (±0″·5); 10h–14h easterly movement (:0″·0); 14½h–18h westerly movement (6″·0) somewhat steep at commencement.
26	18½–23½	Wave in horizontal Force (—·00030).

T. F. CLAXTON,
Director.

The following gives the list of displacements recorded by the Seismograph at the Alipore Observatory (Calcutta) during February 1905:—

List of displacements recorded by tne Seismograph at the Alipore Observatory during February 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement.	Maxima G. M. T.	End.	Amplitude in m. m.	Duration.	REMARKS.
	H. M.	H. M.	H. M.			H. M.	
2-2-05	21-12·1	21-17·2	21-19·3	21-38·6	2·75	0-26·5	
4-2-05	6-34·2	6-39·2	6-41·3	6-53·5	2·00 (a)	0-19·3	
14-2-05	8-58·6	9-7·7	9-34·2	11-32·1	15·00 (a)	2-33·5	
17-2-05	11-43·5	11-45·6	11-48·6	12-50·6	17·00	1-7·1	
„	13-42·5		13-43·0	14-33·3	0·50	0-50·8	Doubtful.
18-2-05	15-25·5			15-34·7		0-9·2	Thickening of line.
27-2-05	17-49·1	18-21·4	18-35·6	18-55·0	0·75	1-5·9	

(*a*) Measured from the base line.
Sensibility 1 mm=0″·38 of tilt.

The local times of the commencement:—

Date 1905.	H. M.
February 3	3-5·4
„ 4	12-27·5
„ 14	14-51·9
„ 17	17-36·8
„ „	19-35·8
„ 18	21-18·8
„ 27	23-42·4

G. W. KÜCHLER,
Asstt. Meteo. Reporter to the Govt. of India.

Weather in Indian Monsoon region.

Pressure was higher than usual over practically the whole of the trades-monsoon area. The weather was generally quiet over the Equatorial Belt and the Indian Seas. In the former area, however, the departures from the normal conditions were considerable. This is shown below:—

Departure from normal of	Mauritius.	Zanzibar.	Seychelles.
Mean pressure . .	+·032″	+·026″	+·021″
Normal mean wind direction.	S 81° E	N33°E	N21°W
Actual mean wind direction.	S 81° E	N38°E	N23°W
Normal mean wind velocity.	264	161	145
Actual mean wind velocity.	190	176	160
Rainfall. . . .	—4·35″	—1·30″	—4·03″

The above shows that pressure exceeded the normal everywhere. The wind blew from the normal directions but the velocity was greater than usual in the area of northerly winds though it was less than the average in that of the south-east Trades. Both the north-west wind at the Seychelles and the north-east wind at Zanzibar were steadier than usual. The rainfall was lighter than the average everywhere.

For the Indian Seas there are no comparative data for wind direction, but the daily charts appear to show that the mean direction was somewhat more northerly than usual. Over the Arabian Sea at the beginning of the month, the wind was northerly along the Indian coast and was north-easterly to easterly in the centre and west of the sea. On the 3rd the direction drew more to the northward all over the surface of the sea and this continued till the 8th. On the 9th, ordinary north-east winds of the winter monsoon were re-established and blew steadily till the 20th when the directions became more variable and unsteady winds were reported till the 26th when the

direction again became generally northerly. In the Persian Gulf the winds were as usual unsteady. Variable winds were reported on the 4th, 5th, 13th, 18th, 20th, 24th, and 25th and north-westerly and northerly winds at other times. In the Gulf of Aden the wind was easterly throughout.

In the Bay of Bengal ordinary north-east winds prevailed during the first four days after which the directions became variable or southerly for three days. On the 8th northerly winds set in and continued till the 14th when variable breezes again set in and lasted till the 18th. On the following day, the 19th, the winds again blew from the usual north-east direction but the direction gradually "backed" and during the 26th, 27th and 28th north-north-west winds were blowing over a large part of the Bay.

The mean force for the month for the two seas was as follows:—

February 1905.	Arabian Sea.	Bay of Bengal.
Mean Force	3·3	2·9
Normal Force	3·0	2·5

The force of the wind, on the mean of the month, was thus above the normal over both areas.

Over the north of the monsoon area the weather was unsettled, and within a wide band which extended from Asiatic Turkey through Persia and Baluchistan to northern India, the weather was wetter and colder than usual. No severe storms affected the Indian area, and though the weather was unsettled throughout the band mentioned above, the observations do not indicate the passage of storms from the Mediterranean or Asia Min or eastward into the Indian monsoon region. In Egypt pressure was almost everywhere above the normal for the month. Several depressions passed eastward chiefly during the first-half of the month. The following table shows the dates of the occurrence of minima of pressure and of temperature and of the fall of rain at certain stations along a line extending from the east of the Mediterranean to north-west India: —

Alexandria.			Beirut.			Baghdad.			Ispahan.			Chaman.			Lahore.		
P.	T.	R.	P.	T.	R	P.	T.	R	P.	T.	R	P.	T.	R	P.	T.	R.
5	9	1	5	2	5	6	3	9	5	6		3	4	11	7	5	5
8	19	4	9	5	to	9	7	12	10	14		7	9	12	16	9	19
18	28	5	14	9	12	12	11		13	17		11	18	14	19	15	27
28		7	18	11	14	18	14		21	19		15	22	16	24	20	28
		9	28	18	16	23	20		24	26		22	24	21	27	25	
		11		21	to	28	23		28			28	27	22		28	
		12		24	20		28							23			
		19			22									26			
		20												27			
		22															

The dates of the occurrence of the barometric minima apparently indicate that these minima were translated eastward along portions of the band, for which data are given, thus for example the pressure minimum of the 5th at Alexandria and Beirut apparently reached Baghdad on the 6th then disappearing, and that of the 8th at Alexandria apparently reached Beirut and Baghdad on the 9th, Ispahan on the 10th and Chaman on the 11th. At other times the minimum occurred simultaneously throughout the whole band, that of the 28th affording a good example of a case of this character. The temperature minima occurred at very irregular dates throughout the band. Rain fell on 15 days at Beirut, while, on the contrary, none was received during the month at Ispahan. The rainfall periods were different in the west from those in the east of the band. In the west the principal rain fell between the 5th and the 12th and the 16th and the 20th, after which rain practically ceased, while in the east of the band most of the rain occurred after the 20th. Pressure gave way rapidly in western Siberia on the 2nd and 3rd, the 5th and 6th, the 10th and 11th, the 14th, the 19th and 20th and the 24th and 25th, but apparently the barometric changes were unconnected with the weather changes in progress over north-west India and the north-west frontier.

Depressions and cyclonic storms.

On the 2nd pressure was giving way briskly in Persia, where a disturbance of a diffused character was affecting the weather of the southern districts occasioning cloudy skies and very light rain. The reports of the 3rd apparently showed that this depression had advanced eastward across Mekran and was entering southern Baluchistan and north Bombay. Showers had occurred in Mekran and lower Sind. On this day pressure was high and considerably above the normal over north-western and central India while it was giving way and was about normal over north Bombay. The observations of the 4th showed that the depression which was entering Sind on the previous day had apparently travelled east-south-eastward through Sind and Gujarat to the neighbourhood of Surat. The barometer was falling briskly to rapidly over the central districts of India and pressure was slightly to considerably below the normal in the depression area. The winds were irregularly cyclonic and conditions, favourable to the development of barometric minima, apparently existed over an extensive region extending from southern Baluchistan over north-western and central India. Light rain had occurred at some stations in the depression area.

The depression apparently moved eastward during the day, and, at 8 A.M. on the 5th, lay over the north of the Central Provinces and the east of Central India. Pressure was consequently giving way in north-east while it was recovering in north-west India. The winds were very irregular. Light rain had occurred in front of the depression—over north-east India—the largest amount reported having been 0·55″ at Gaya. After this day, the

5th, the depression became very ill-defined but, apparently, it continued to drift eastward and light showers of rain extended through north-east India into Upper Burma.

While this slight depression was passing along a curved course through the central parts of the country, conditions became feebly unsettled over the north-west Himalayas. On the 5th pressure fell briskly over Kashmir and the north-west Himalayas and simultaneously showers occurred over the hill and submontane districts of north-west India. These unsettled conditions continued on the 6th, but were passing away on the 7th, when strongly marked anticyclonic conditions prevailed over the Indian land area.

On the 8th the barometer was falling over the western desert and a shallow depression had appeared with its centre near Bikaner. This depression subsequently moved eastward and broke up among the United Provinces Himalayas during the 9th. Its effect on the weather was slight and unimportant. Anticyclonic conditions were re-established on the 10th and held steadily with fine weather till the 12th.

On the 13th the barometer was falling everywhere and again a large area of uniform and relatively low pressure appeared extending from Gujarat through Sind to the Persian Gulf region. Rain had fallen both at Jask and Muscat. The reports of the 14th showed that the low pressure area was advancing eastward, the eastern extremity of the area extending into Central India. The barometer continued to fall all over northern India, shallow barometric minima were shown over Rajputana and Central India and light showers of rain were reported from the neighbourhoods of these minima. On the 15th the barometer was falling generally and a shallow trough of low pressure stretched across the head of the Peninsula, scattered showers of rain on the plains and of snow on the hills falling to the north of this trough. The reports of the 16th showed that pressure had increased over north-east and north-west India leaving pressure low over the central districts where a shallow but fairly well-marked depression was developing. Snow continued to fall on the hills and rain on the plains of northern India. This depression subsequently passed eastward out into the Bay giving extensive rain to north-east India.

On the morning of the 17th the barometer was falling over the Indus Valley and the north-west Himalayas and a shallow depression was shown in the neighbourhood of Dera Ismail Khan. This depression advanced eastward and probably broke up among the hills during the 18th or 19th It was never of any consequence.

From the 21st to the 26th anticyclonic conditions of pressure prevailed over the Indian land area, though occasionally very slight shallow depressions appear to have crossed the Indus from the westward.

On the 26th disturbed conditions appeared over Baluchistan and the barometer was falling over north-west India with south-easterly winds. On the following morning, the 27th, a well-marked depression was shown over the West Punjab where pressure was in considerable defect. Snow had fallen over Baluchistan and the west Himalayas and light rain on the plains of north-west India. The storm subsequently filled up without moving much, but after giving a considerable amount of rain and snow in the north-west.

Pressure.

The mean pressure of the whole Indian area was in excess of the normal by amounts which averaged 0·043″. The mean pressure of the month of February has thus been in excess of the normal during the past five years. The following gives data:—

	February 1901.	February 1902.	February 1903.	February 1904.	February 1905.
	″	″	″	″	″
Mean pressure departure of Indian Area.	+·020	+·088	+·063	+·008	+·043

The actual distribution of barometric pressure for February 1905 at 8 A.M. on the mean of the month, is shown in Plate I. Pressure was highest in the north of the North-west Frontier Province, relatively high over Rajputana, the Upper Assam Valley and part of North Bengal, and lowest within a large area covering Malabar, Ceylon, the south of the Bay and Tenasserim. The barometric gradient was generally steeper than usual, the mean pressure, though in excess at all stations, having been in greater excess in the north, where pressure was highest, than in the south where it was lowest.

The excess of pressure which was general over India, extended westward over Persia and Arabia and southward over Ceylon and the Indian seas as far as the south-east Trades region.

The increased pressure over the plains of India accompanied decreased temperature over the greater part of the country. The following gives average departure data of pressure and temperature for the larger provinces:—

Meteorological Province.	Departure from normal of	
	Mean 8 A.M. pressure of February 1905.	Mean temperature, February, 1905.
	″	°
Burma Coast and Bay Islands	+·019	−0·3
Burma Inland	+·044	−3·2
Assam	+·053	−6·3
Bengal and Orissa	+·063	−6·4
Gangetic Plain and Chota Nagpur	+·063	−7·8
Upper Sub-Himalayas	+·063	−8·8
Indus Valley and North-West Rajputana	+·066	−7·6
East Rajputana, Central India and Gujarat	+·053	−6·9
Deccan	+·035	−5·2
West Coast	+·023	−1·7
South India	+·017	+1·1

Relatively to the geographical mean pressure was in excess over northern and north-eastern India and northern Burma and was more than 0·020″ in excess at the stations for which comparative data are given below:—

Area.	Station.	Departure from normal of mean 8 A.M. pressure, February 1905.	Pressure anomaly, February, 1905.
		″	″
Northern India	Ambala	+·086	+·043
	Khushab	+·082	+·039
	Montgomery	+·082	+·039
	Cawnpore	+·082	+·039
	Mainpuri	+·081	+·038
	Sialkot	+·079	+·035
	Hyderabad (Sind)	+·075	+·032
	Kurrachee	+·071	+·028
	Jacobabad	+·070	+·027
	Pachpadra	+·069	+·026
	Bahraich	+·069	+·026
	Benares	+·069	+·026
	Bareilly	+·068	+·025
	Ludhiana	+·068	+·025
	Sirsa	+·067	+·024
	Ahmedabad	+·067	+·024
	Roorkee	+·066	+·023
	Lucknow	+·066	+·023
	Allahabad	+·066	+·023
	Bhuj	+·066	+·023
	Veraval	+·065	+·022
	D. I. Khan	+·065	+·022
North-east India	Purnea	+·075	+·032
	Bogra	+·074	+·031
	Narayanganj	+·072	+·029
	Patna	+·072	+·029
	Dinajpur	+·070	+·027
	Mymensingh	+·070	+·027
	Berhampore	+·070	+·027
	Dhubri	+·066	+·023
	Jalpaiguri	+·065	+·022
	Gay	+·065	+·022
	Jessore	+·065	+·022
	Barisal	+·065	+·022
	Calcutta	+·064	+·021
	Darbhanga	+·064	+·021

Arakan, Lower Burma and Tenasserim pressure was, on the contrary, locally in defect and at the following stations the departures from normal exceeded—·020″.

Area.	Station.	Departure from normal of mean 8 A.M. pressure of February, 1905.	Pressure anomaly, February, 1905.
		″	″
Peninsula	Salem	+·001	—·042
	Bangalore	+·003	—·040
	Bellary	+·005	—·038
	Goa	+·006	—·037
	Coimbatore	+·007	—·036
	Trichinopoly	+·009	—·034
	Belgaum	+·010	—·033
	Negapatam	+·011	—·032
	Madras	+·012	—·031
	Kurnool	+·012	—·031
	Waltair	+·014	—·029
	Cuddapah	+·014	—·029
	Chitaldroog	+·014	—·029
	Cochin	+·015	—·028
	Hassan	+·016	—·027
	Masulipatam	+·016	—·027
	Gulbarga	+·017	—·026
	Mangalore	+·018	—·025
	Mysore	+·018	—·025
	Sholapur	+·019	—·024
	Calicut	+·019	—·024
	Madura	+·019	—·024
	Cuddalore	+·020	—·023
Ceylon	Colombo	+·006	—·037
	Trincomalee	+·013	—·030
Arakan	Akyab	+·015	—·028
Lower Burma	Rangoon	+·006	—·037
	Diamond Island	+·010	—·033
Tenasserim	Moulmein	+·013	—·030
	Tavoy	+·014	—·029
	Mergui	+·016	—·027

Over the central districts of India, the Peninsula, Ceylon, Pressure conditions on the hills—and more particularly on the north-west hills—departed largely from the normal. As was the case in January 1905, pressure was in considerable defect in the middle and perhaps in the higher atmosphere as the amount of the deficiency appeared to increase with elevation. As both the excess on the plains and the deficiency at the level of the hills—at least in some districts—were greater than in the preceding month of January the vertical pressure gradient had increased and in some areas

was very large. The following gives data for ten pairs of stations:—

HILL STATION.	Departure from normal pressure, February, 1905.	PLAIN STATION.	Departure from normal pressure, February, 1905.	Departure of pressure difference.
	"		"	"
Quetta	—·026	Jacobabad	+·070	+·096
Leh	—·134	Lahore	+·061	+·195
Murree	—·043	Peshawar	+·031	+·074
Simla	—·065	Ludhiana	+·068	+·133
Chakrata	—·058	Roorkee	+·066	+·124
Ranikhet	—·042	Bareilly	+·068	+·110
Darjeeling	—·035	Dhubri	+·066	+·101
Mount Abu	—·009	Deesa	+·057	+·066
Pachmarhi	—·010	Seoni	+·030	+·040
Wellington	+·008	Coimbatore	+·007	—·001

A very remarkable change has been carried out in the vertical pressure conditions during the past six months as is shown by the following data:—

AREA.	DEPARTURE OF PRESSURE DIFFERENCE OF					
	September, 1904.	October, 1904.	November, 1904.	December, 1904.	January, 1905.	February, 1905.
	"	"	"	"	"	"
Quetta-Jacobabad	+·043	+·015	—·030	+·012	+·072	+·056
Leh-Lahore	—·011	+·004	—·011	—·001	+·120	+·195
Murree-Peshawar	+·003	—·004	+·001	—·007	+·035	+·074
Simla-Ludhiana	+·013	—·022	+·013	+·008	+·057	+·133
Chakrata-Roorkee	—·006	—·002	+·013	+·011	+·051	+·124
Ranikhet-Bareilly	—·011	—·004	+·018	+·014	+·047	+·110
Darjeeling-Dhubri	—·004	+·014	+·023	+·028	+·042	+·101
Mount Abu-Deesa	—·012	+·001	+·010	+·006	+·034	+·066
Pachmarhi-Seoni	—·026	...	+·011	+·017	+·025	+·040
Wellington-Coimbatore	—·014	+·001	+·024	+·023	+·009	—·001

The following summarises the chief abnormal features of the pressure distribution of the month in the Indian area:—

(1) A general excess over the whole plains districts of India and neighbouring seas.

(2) A slight to moderate excess, relatively to the general condition, over northern and north-eastern India.

(3) A relative deficiency over the central parts of the country, the Peninsula, Lower Burma and Tenasserim.

(4) A general deficiency at the level of the hill stations, the amount of the deficiency apparently increasing with elevation.

The following gives the mean pressure departures and anomalies of the month for the eleven meteorological provinces:—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of February, 1905.	Pressure anomaly, February, 1905.
	"	"
Burma Coast and Bay Islands	+·019	—·024
Burma Inland	+·044	+·001
Assam	+·053	+·010
Bengal and Orissa	+·063	+·020
Gangetic Plain and Chota Nagpur	+·063	+·020
Upper Sub-Himalayas	+·063	+·020
Indus Valley and North-West Rajputana	+·066	+·023
East Rajputana, Central India, and Gujarat	+·053	+·010
Deccan	+·035	—·008
West Coast	+·023	—·020
South India	+·017	—·026

Temperature.

The low temperature conditions which appeared over the greater part of the Indian land area during the last ten days of January 1905, continued during the whole of February, resulting in a large deficiency of temperature in all parts of the country except the south of the Peninsula.

The mean maximum or day temperature of the month was about normal on the Tenasserim and south Burma coast and was in slight excess of the normal over southern Madras and Mysore. At the stations for which comparative data are given below the departures from normal amounted to +2°·0 or more:—

STATION.	MEAN MAXIMUM TEMPERATURE.		
	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°	°
Negapatam	87·7	84·4	+3·3
Cuddalore	88·0	85·4	+2·6
Hassan	88·4	86·3	+2·1
Salem	95·6	93·6	+2·0

In all other parts of the Indian region the mean maximum temperature was lower than usual, the amount of the deficiency increasing northward and having been greatest over the South-East Punjab and the neighbouring parts of Rajputana and of the United Provinces. At the following stations the departures from the normal were—10° or more:—

Station.	Mean maximum temperature. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°	°
Sirsa	61·8	75·2	—13·4
Delhi	61·8	74·8	—13·0
Agra	65·6	78·6	—13·0
Ludhiana	59·0	71·2	—12·2
Bareilly	62·9	75·0	—12·1
Lahore	60·7	72·7	—12·0
Meerut	63·0	74·5	—11·5
Bikaner	64·4	75·9	—11·5
Jaipur	67·2	78·6	—11·4
Roorkee	62·0	73·1	—11·1
Dehra Dun	58·1	69·2	—11·1
Ajmer	66·8	77·8	—11·0
Pachpadra	72·2	83·1	—10·9
Sambhar	66·7	77·4	—10·7
Mainpuri	66·1	76·8	—10·7
Montgomery	62·1	72·8	—10·7
Lucknow	68·5	78·8	—10·3
Cawnpore	68·8	78·8	—10·0
Gaya	71·3	81·3	—10·0

At Mount Abu, in Baluchistan and at the hill stations on the outer ranges of the north-west Himalayas the deficiency of the day temperature was as large as on the neighbouring plains and at the following places was more than 10° in amount:—

Hill station.	Mean maximum temperature. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°		
Kalat	43·8	56·0	—12·2
Chaman	45·4	57·0	—11·6
Quetta	41·9	53·1	—11·2
Ranikhet	42·4	55·6	—13·2
Murree	35·1	48·0	—12·9
Chakrata	39·7	51·2	—11·5
Simla	35·7	45·9	—10·2

The departures of the mean minimum or night temperature from the normal exhibited the same general distribution as those of the mean maximum temperature. The mean night temperature was normal or in excess over Tenasserim, Lower Burma, Madras and Mysore and at the following places the departures from the normal exceeded +2°:—

Province or division.	Station.	Mean minimum temperature. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
		°	°	°
Tenasserim	Mergui	71·7	69·1	+2·6
Madras	Salem	70·2	65·5	+4·7
	Coimbatore	68·6	65·5	+3·1
	Masulipatam	71·2	68·3	+2·9
	Cuddapah	71·9	69·1	+2·8
	Bellary	67·5	65·4	+2·1
	Trichinopoly	70·5	68·4	+2·1
Mysore	Mysore	65·6	62·9	+2·7
	Bangalore	62·1	59·6	+2·5

In all other parts of the Indian region the mean night temperature was more or less in defect of the normal. The departures from the normal were smaller than in the case of the mean day temperature, but were more than —7° at the following large number of stations:—

Station.	Mean minimum temperature. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°	°
Bikaner	44·7	53·5	—8·8
Dhubri	47·3	56·0	—8·7
Darbhanga	45·7	54·4	—8·7
Saugor Island	57·6	65·5	—7·9
Jaipur	44·0	51·9	—7·9
Roorkee	39·9	47·7	—7·8
Hoshangabad	48·2	56·0	—7·8
Saugor	47·7	55·4	—7·7
Dehra Dun	39·4	47·0	—7·6
Dinajpur	45·5	53·1	—7·6
Seoni	48·0	55·4	—7·4
Jalpaiguri	45·4	52·8	—7·4
Peshawar	35·3	42·6	—7·3
Delhi	44·5	51·8	—7·3
Akola	50·1	57·5	—7·4
Sambhar	42·5	49·7	—7·2
Montgomery	39·2	46·4	—7·2
Khandwa	48·8	55·9	—7·1

At all the hill stations, except Wellington, the mean night temperature was lower than usual—more particularly on the outer ranges of the Himalayas—and at the following places the deficiency exceeded 7° :—

Hill station.	Mean minimum temperature.		
	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°	°
Murree	21·9	34·5	−12·6
Ranikhet	30·4	40·8	−10·4
Simla	25·5	35·6	−10·1
Chakrata	26·4	36·1	−9·7
Mount Abu	46·1	53·6	−7·5
Chaman	29·5	36·7	−7·2
Leh	2·6	9·8	−7·2

The cold period, which commenced in the last ten days of January and lasted throughout February 1905, was unexampled in recent years both as regards duration and intensity, and the following low temperatures were registered, in all cases lower than any previously recorded :—

Province or division.	Station.	Lowest minimum temperature recorded in February, 1905.	Date on which recorded.	Lowest minimum temperature recorded in February previous to 1905.	Year in which recorded.
		°		°	
Hill stations	Murree	13·0	1st Feb.	16·7	1886
	Gilgit	21·6	4th	22·1	1893
	Simla	18·5	1st	19·7	1883
	Chakrata	19·4	8th	20·2	1876
	Ranikhet	22·5	18th	26·0	1877
	Pachmarhi	33·3	8th	34·0	1875
N-W. F Province.	Peshawar	28·4	3rd	29·2	1883
	Dera Ismail Khan.	26·8	2nd	28·0	1883
Punjab	Khushab	28·4	2nd	31·4	1902
	Lahore	30·1	2nd	30·5	1887
	Montgomery	28·5	6th	32·3	1893
	Ludhiana	30·0	1st	32·0	1876
	Ambala	30·7	1st	34·0	1902
	Delhi	33·5	2nd	39·2	1886
Rajputana	Bikaner	31·1	1st	38·1	1903
	Ajmer	30·0	1st	32·0	1887
	Jaipur	28·0	1st	34·8	1884
	Sambhar	26·0	1st & 2nd	33·0	1891
United Provinces.	Dehra Dun	30·0	1st Feb.	33·9	1876
	Roorkee	28·2	2nd	33·8	1891
	Meerut	31·6	2nd	33·7	1883
	Bareilly	32·1	2nd	36·7	1893
	Mainpuri	31·3	2nd	38·5	1893&1903
	Agra	33·9	2nd	36·5	1887
	Bahraich	32·6	2nd	38·1	1893
	Lucknow	34·6	1st & 2nd	35·0	1875
	Cawnpore	33·1	2nd	37·7	1891
	Jhansi	38·1	2nd	41·4	1883
	Allahabad	34·1	2nd	37·5	1891
	Benares	34·5	2nd	38·0	1867&1903
	Gorakhpur	37·0	1st & 2nd	41·0	1870&1886
Central Provinces.	Hoshangabad	36·1	2nd	40·9	1886
	Saugor	36·0	1st	39·1	1893
	Jubbulpore	31·9	2nd	34·0	1875
	Seoni	38·5	2nd	39·1	1893
Central India	Indore	33·6	1st	36·2	1886
	Nowgong	31·5	2nd	36·4	1887
	Sutna	34·0	2nd	36·6	1886
Bengal	Darbhanga	34·2	2nd	41·2	1876
	Dinajpur	34·0	3rd	38·9	1886&1887
	Patna	36·3	2nd	40·7	1893
	Gaya	42·0	1st, 2nd & 3rd.	43·3	1883
	Hazaribagh	37·8	2nd	39·9	1891
	Ranchi	38·5	3rd	40·9	1891
	Chaibassa	43·5	3rd	44·4	1904
	Burdwan	40·2	3rd	43·2	1889
	Berhampore	42·1	3rd	43·1	1886&1893
	Bogra	38·7	3rd	41·2	1893
	Mymensingh	39·7	3rd	40·2	1887
	Narayanganj	43·7	3rd	44·8	1883
	Calcutta	45·9	10th	46·2	1883
	Barisal	42·4	4th	46·1	1893
	Saugor Island	45·9	3rd	48·6	1886
	Balasore	44·4	3rd	48·3	1887
	False Point	48·0	13th	49·5	1904

Province or Division.	Station.	Lowest minimum temperature recorded in February, 1905.	Date on which recorded.	Lowest minimum temperature recorded in February previous to 1905.	Year in which recorded.
		°		°	
Assam	Silchar	41·5	10th Feb	43·4	1893
	Dhubri	37·3	9th	43·9	1887
	Sibsagar	37·5	13th	40·2	1886
	Gauhati	37·5	3rd	42·1	1904
	Dibrugarh	39·9	13th	43·9	1904

The most intense cold was thus experienced about the 1st, 2nd or 3rd February though at some of the hill stations and in parts of north-east India the lowest temperatures were recorded some days later.

As the departures from normal of the mean maximum and mean minimum temperatures were generally similar in character, the distribution of the departures from normal of the mean temperature exhibited the same general characteristics. Normal or slightly excessive mean temperatures were reported from Lower Burma, Tenasserim, and a considerable part of Madras and Mysore. The excess was 2° or more at the following places :—

Station.	Mean temperature. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°	°
Salem	82·9	79·5	+3·4
Negapatam	80·9	78·3	+2·6
Coimbatore	80·9	78·7	+2·2
Bangalore	74·7	72·6	+2·1
Mysore	77·9	75·9	+2·0
Cuddalore	79·1	77·1	+2·0

In all other parts of the country the mean temperature was in defect of the normal by amounts which ranged from 0°·1 at Calicut, 0°·2 at Tavoy and 0°·5 at Colombo to 10°·2 at Delhi and Bikaner. At all the hill stations except Wellington, the mean temperature of the month was lower than usual, the amount of the deficiency ranging from 3°·9 at Srinagar to 12°·8 at Murree.

The following table gives mean temperature data for the month for the 57 meteorological divisions of the empire :—

Province.	Division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Departure from normal of month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	89·8	70·4	80·1	19·4	26·5	−0·3	−0·7	+0·4
	Lower Burma (Deltaic)	87·2	68·8	78·0	18·4	27·4	−1·8	+1·1	−2·9
	Central do.	90·0	57·2	73·7	32·8	42·8	−0·8	−1·7	+0·9
	Upper do.	82·2	55·5	68·9	26·8	43·0	−5·2	−1·9	−3·3
	Arakan	81·2	60·5	70·9	20·7	34·8	−3·6	−1·0	−2·6
Bengal and Assam	Eastern Bengal	74·7	51·7	63·2	23·0	41·3	−6·0	−5·8	−0·2
	Assam (Surma)	74·3	50·5	62·4	23·8	40·4	−6·4	−5·1	−1·3
	Do. (Hills)	58·0	39·6	48·8	18·4	36·7	...	...	...
	Do. (Brahmaputra)	69·8	48·2	59·0	21·7	37·7	−6·3	−6·8	+0·5
	Deltaic Bengal	75·1	54·3	64·7	20·9	41·6	−7·2	−6·4	−0·8
	Central do.	73·1	51·3	62·2	21·8	42·7	−8·1	−4·9	−3·2
	North do.	70·4	45·8	58·1	24·7	41·4	−7·3	−7·5	+0·2
	Bengal Hills	39·8	21·8	30·8	18·0	37·1	−4·8	−6·3	+1·5
	Orissa	78·7	61·0	69·9	17·7	41·4	−7·4	−4·1	−3·3
	Chota Nagpur	71·9	49·9	60·9	22·0	46·2	−9·6	−5·5	−4·1
	South Bihar	71·1	49·6	60·4	21·4	44·2	−9·0	−5·8	−3·2
	North do.	70·2	46·4	58·3	23·8	44·1	−7·4	−7·1	−0·3
United Provinces of Agra and Oudh.	United Provinces (East)	70·8	46·2	58·5	24·6	46·3	−9·6	−5·8	−3·8
	Oudh (South)	68·5	45·2	56·9	23·3	42·6	−10·3	−5·7	−4·6
	Do. (North)	67·4	44·5	56·0	22·9	42·0	−9·3	−6·2	−3·1
	United Provinces (Central)	68·8	46·2	57·5	22·7	42·9	−10·1	−6·3	−3·8
	Do. (West)	64·3	44·9	54·7	19·4	39·5	−12·3	−5·5	−6·8
	Do. (Submontane, East)	68·1	46·2	57·2	21·9	40·1	−9·9	−6·4	−3·5
	Do. (Submontane, West)	61·0	41·1	51·0	19·9	39·8	−11·4	−9·1	−2·3
	Do. (Hills)	39·7	27·6	33·7	12·1	31·5	−12·4	−10·1	−2·3

Province.	Division.	Actual Temperature.					Departure from normal of month of		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and maximum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
UNJAB	Punjab (South-East)	61·8	44·5	53·2	17·3	36·7	−13·0	−7·3	−5·7
	Do. (South)	60·7	41·8	51·3	18·9	39·0	−13·4	−5·2	−8·2
	Do. (Central)	60·7	39·5	50·1	21·2	39·7	−12·0	−4·6	−7·4
	Do. (Submontane)	59·0	39·9	49·4	19·1	37·1	−10·3	−5·9	−4·4
	Do. (Hills)	35·7	18·0	26·9	17·7	38·0	−8·6	−7·8	−0·8
	Do. (West)	63·0	40·4	51·7	22·5	41·8	−8·8	−6·2	−2·6
.-W. F. Province	N.-W. F. Province	60·2	36·6	48·4	23·6	41·7	−8·8	−7·2	−1·6
OMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Malabar	87·0	73·6	80·3	13·5	20·2	−0·9	+0·7	−1·6
	Madras (South Central)	94·4	69·4	81·9	25·0	34·9	+1·6	+3·9	−2·3
	Coorg	81·8	50·9	70·9	21·9	31·9	+0·6	+1·1	−0·5
	Mysore	88·9	63·0	76·0	25·9	34·3	+1·3	+1·5	−0·2
	Konkan	82·7	64·5	73·6	18·1	27·4	−2·4	−4·1	+1·7
	Bombay Deccan	88·5	56·7	72·8	31·8	49·0	−2·5	−4·1	+1·6
	Hyderabad (North)	84·6	56.2	70·4	28·4	44·5	...	...	...
	Khandesh	84·5	50·2	67·4	34·4	55·5	−4·5	−5·1	+0·6
ENTRAL PROVINCES AND BERAR.	Berar	84·5	53·1	68·8	31·5	55·1	−5·9	−6·6	+0·7
	Central Provinces (West)	81·3	50·4	65·9	30·8	54·4	−6·6	−6·9	+0·3
	Do. (Central)	77·9	48·5	63·3	29·4	54·1	−6·9	−7·1	+0·2
	Do. (East)	77·4	53·2	65·3	24·3	46·2	−8·3	−6·5	−1·8
OMBAY (NORTH)	Gujarat East	82·5	53·5	68·0	29·0	50·7	−5·4	−4·7	−0·7
	Kathiawar and Cutch	78·2	53·9	66·1	24·3	42·6	−6·1	−4·0	−2·1
	Sind	71·1	49·2	60·2	21·9	41·9	−8·4	−4·4	−4·0
	Baluchistan Hills	43·1	26·1	34·7	17·0	38·0	−11·7	−5·1	−6·6
AJPUTANA AND CENTRAL INDIA.	Central India (East)	72·4	45·5	59·0	27·0	49·8	−8·7	−6·5	−2·2
	Rajputana (East), Central India (West)	68·6	44·9	56·8	23·7	45·8	−11·0	−6·6	−4·4
	Do. (West)	68·9	45·3	57·1	23·6	49·9	−11·2	−7·1	−4·1
ADRAS	East Coast (North)	81·6	69·4	75·5	12·2	27·8	−3·0	−0·3	−2·7
	Hyderabad (South)	89·2	63·6	76·4	25·6	43·0	−2·4	−1·7	−0·7
	Madras (Central)	94·3	68·7	81·5	25·6	38·8	−0·3	+2·3	−2·6
	East Coast (Central)	87·8	70·7	79·3	17·2	29·6	−1·0	+2·0	−3·0
	Do. (South)	88·9	70·5	79·7	18·4	29·0	+1·8	+1·8	0
	Madras (South)	91·7	71·6	81·6	20·1	29·1	+1·3	+0·5	+0·8

The mean maximum temperature of the month exceeded 0° in the following divisions, *viz.*, Madras South-Central, ladras Central, and Madras South while the mean inimum temperature of the month was below 40° (on the ains) in the Central Punjab (39°·5), the submontane unjab (39°·9) and the North-west Frontier Province 36°·6). The mean daily range was almost everywhere naller than usual.

The following gives temperature departure data for ie eleven meteorological provinces:—

Meteorological province.	Departure of actual from normal of		
	Mean maximum temperature, February, 1905.	Mean minimum temperature, February, 1905.	Mean temperature, February, 1905.
	°	°	°
rma Coast and Bay Islands	−1·3	+0·7	−0·3
rma Inland	−4·6	−1·7	−3·2
sam	−6·3	−6·2	−6·3

Meteorological province	Departure of actual from normal of		
	Mean maximum temperature, February, 1905.	Mean minimum temperature, February, 1905.	Mean temperature, February, 1905.
	°	°	°
Bengal and Orissa	−7·1	−5·6	−6·4
Gangetic Plain and Chota Nagpur	−9·5	−6·1	−7·8
Upper Sub-Himalayas	−11·4	−6·1	−8·8
Indus Valley and North-West Rajputana.	−9·1	−6·0	−7·6
East Rajputana, Central India, and Gujarat.	−8·3	−5·5	−6·9
Deccan	−5·1	−5·3	−5·2
West Coast	−1·7	−1·6	−1·7
South India	+0·6	+1·6	+1·1

At the extra-Indian stations the departure data were as follows:—

STATION.	MEAN TEMPERATURE. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°	°
Trincomalee	79·7	80·1	— 0·4
Colombo	80·2	80·7	— 0·5
Kabul	20·7	35·7	—15·0
Kashgar	20·3	33·6	—13·3
Teheran	35·6	42·4	— 6·8
Ispahan	35·4	41·7	— 6·3
Bushire	56·3	59·3	— 3·0
Jask	65·6	68·4	— 2·8
Muscat	68·9	70·3	— 1·4
Baghdad	50·9	53·2	— 2·3
Perim	78·8	78·8	0
Zanzibar	84·4	83·7	+ 0·7
Seychelles	80·0	79·1	+ 0·9
Mauritius	78·9	78·5	+ 0·4

The following sums up the chief abnormal features of the mean temperature conditions of the month:—

(1) Lower temperatures than usual, both by day and night, prevailed over the greater part of the country.

(2) Normal or higher temperatures than usual were reported from Tenasserim, Lower Burma, Mysore and a large part of Madras.

(3) Larger deficiency in the day than in the night temperatures.

(4) Considerable to large deficiency, both by day and night, at all the hill stations except Wellington.

(5) Deficiency of temperature over Afghanistan, Persia and Asiatic Turkey but, except in Afghanistan and Kashgar, of less amount than over the Indian region.

The following is a brief statement of the more important daily changes of temperature during the month over the Indian land area.

During the first three days of the month the weather was generally fine over India and the mean temperature above the normal over Burma and part of South Madras and very low elsewhere. A rise of temperature took place during these three days in the north-west and the area of greatest defect of temperature gradually moved eastward across northern India. The following gives data for the stations at which the greatest defect of temperature was registered on these three days:—

Date.	STATION.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
1st FEBRUARY 1905	Sambhar	—19·9
	Bikaner	—19·3
	Jaipur	—18·9
2nd Do.	Sambhar	—17·5?
	Jaipur	—17·1
	Jubbulpore	—16·9
	Nowgong	—16·5
	Mainpuri	—16·3
	Agra	—16·2
3rd Do.	Benares	—14·7
	Jubbulpore	—14·6
	Ranchi	—14·6
	Hazaribagh	—14·0

Between the 4th and the 8th the weather was feebly unsettled over northern India, showers occurring over Sind Gujarat, and north-east India and snowstorms on the north west Himalayas. A fresh cold wave appeared over Sind on the 4th while the wave which was traversing northern India during the previous three days advanced eastward into Bengal and subsequently into Upper Burma. Throughout these five days (4th to 8th) the mean temperature exceeded the normal only in parts of South Madras and of Lower Burma while it was lower than usual in all other parts of the country, the deficiency amounting to between 12° and 18° over a large part of northern India. On the 9th the weather cleared and remained fine till the 13th and during these ten days, from the 4th to the 13th, the cold wave which, as mentioned above, entered Sind on the 4th, passed slowly across northern India. The following shows for each day the station on the plains recording the largest negative departure of mean temperature from normal, and illustrates the passage of the cold wave eastward:—

DATE.	STATION.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date
		°
4th February 1905	Hyderabad (Sind)	— 13·6
5th " "	Bikaner	—18·2
6th " "	Bikaner	—16·4
7th " "	Khandwa	—14·5
8th " "	Khandwa	—16·2

DATE.	STATION.	Departure from normal of mean temperature of 24 hours preceeding 8 A.M. of date.
		°
9th February 1905.	Hoshangabad	−14·1
	Akola	−14·1
10th " "	Neemuch	−13·9
11th " "	Sutna	−15·4
12th " "	Jubbulpore	−13·4
	Chanda	−13·4
	Sambalpur	−13·4
13th " "	False Point	−11·4

As the cold wave progressed eastward the temperature rose in the north-west and by the 14th exceeded the normal over a considerable part of that region. The following gives comparative data for north-west India for the 13th and 14th:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF	
	13th February.	14th February.
	°	°
Baluchistan	−2·0	−1·6
North-west Frontier Province	−2·3	−1·5
Punjab	−4·0	−0·8
Sind	+2·0	+2·8
Rajputana	−2·5	+0·3
Gujarat	−1·5	+1·5

On the 14th another unsettled period commenced, showers falling first in Rajputana and thence extending over the greater part of northern India. These showers continued till the 19th when the weather cleared somewhat. On the 15th a large fall of temperature occurred in the north-west and from the 16th to the 22nd the mean temperature was below the normal in all divisions except parts of Burma and of Madras. No distinctly marked cold wave traversed the country during this period, but the mean temperature was fairly steadily low over the whole area, with the exceptions given above, but especially over the east Punjab and the central districts of India. The following gives comparative data for all divisions for each alternate day from the 15th to the 21st:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	15th February.	17th February.	19th February.	21st February.
	°	°	°	°
Burma	−2·8	−0·5	−0·1	−1·1
Assam	−4·2	−5·4	−4·5	−6·5
Bengal	−4·2	−3·0	−7·7	−6·3
Orissa	−4·8	−1·1	−7·6	−6·4
Bihar	−1·9	−7·2	−7·7	−9·1
Chota Nagpur	−2·1	−4·3	−9·2	−11·6
United Provinces of Agra and Oudh	−4·5	−8·5	−8·6	−10·6
Punjab	−5·0	−9·2	−8·1	−7·0
North-west Frontier Province	−1·7	−8·0	−8·6	−6·5
Sind	−0·9	−5·3	−4·9	−2·0
Rajputana	−6·5	−10·1	−10·7	−10·7
Gujarat	+1·5	−7·0	−6·3	−6·1
Central India	+0·8	−5·5	−9·9	−12·6
Central Provinces	−0·4	−3·3	−9·9	−11·7
Berar	+1·4	−7·4	−11·0	−10·3
West Coast	−0·3	−2·7	−3·7	−0·6
Bombay Deccan	+0·1	−7·6	−9·1	−5·9
Mysore	+0·4	−0·2	+1·0	+3·7
Madras Coast	−1·9	+0·6	+1·3	+1·8
Madras Deccan	+0·6	−1·6	−1·9	−0·4
South India	+0·2	−0·5	+3·0	+5·0

Between the 21st and the 24th snow and rain shower occurred in Baluchistan and thence extended into north-west India and on the 23rd a fresh cold wave appeared over the Indus Valley. The mean temperature had fallen between 5° and 10° at the Indus Valley stations between the 22nd and 23rd and on the latter day was 15°·5 below the normal at Jacobabad, 15°·4 at Dera Ismail Khan and 13°·8 at Hyderabad (Sind). This cold wave did not advance much but it kept temperature very low in the extreme north-west. The following gives departure data for the different divisions of north-west India for each day from the 23rd to the 26th:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	23rd February.	24th February.	25th February.	26th February.
	°	°	°	°
Baluchistan	−9·2	−14·1	−12·9	−12·3
North-west Frontier Province.	−13·9	−10·3	−6·3	−5·3
Punjab	−8·1	−7·4	−7·2	−5·2
Sind	−13·0	−13·6	−11·2	−9·6
Rajputana	−6·3	−7·6	−6·8	−6·5

The central and Peninsular divisions of India were unaffected by this cold wave, and the mean temperature over those divisions rose and exceeded the normal during this interval. The following gives departure data for each day :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	23rd February.	24th February.	25th February.	26th February.
	°	°	°	°
Central Provinces	—1·3	+1·1	+1·5	+1·8
Berar	+0·6	+2·6	+2·3	+5·0
West Coast	—0·9	—0·5	—0·6	+0·9
Bombay Deccan	+0·3	+1·9	+3·8	+2·5
Mysore	+1·8	+1·0	+1·9	+1·3
Madras Coast	+2·2	+1·6	+1·1	+0·5
Madras Deccan	—0·3	+1·5	+1·2	+0·9
South India	+3·7	+1·5	+1·3	+0·7

On the 27th a depression occassioned showers of snow on the hills and of rain on the plains of the north-west, a rapid fall of temperature followed over Baluchistan and north-west India, and another cold wave passed through Baluchistan and entered north-west India. On the 27th the mean temperature at Chaman was 25°·5 below the normal and at Quetta 19°·6 below; while on the 28th the deficiency amounted to 24°·4 at Quetta, to 19°·2 at Peshawar and to 19°·1 at Hyderabad (Sind). Temperature, though falling over the Peninsula, remained above the normal in that area. The following gives departure data for all divisions for the 27th and 28th :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF	
	27th February.	28th February.
	°	°
Burma	—1·0	+0·2
Assam	—4·7	—2·9
Bengal	—3·2	—2·5
Orissa	+0·3	—0·3
Bihar	—3·0	—2·5
Chota Nagpur	+1·1	—1·1
United Provinces of Agra and Oudh	—5·9	—7·1
Punjab	—6·6	—11·9
North-west Frontier Province	—8·7	—17·8
Sind	—14·3	—1·0
Rajputana	—6·9	—11·4
Gujarat	+0·9	—9·9
Central India	—2·5	—2·7
Central Provinces	+0·5	—0·7
Berar	+0·8	—2·5
West Coast	+1·3	—0·3
Bombay Deccan	+3·3	—0·9
Mysore	+2·2	+1·6
Madras Coast	+1·0	+1·8
Madras Deccan	+1·6	+2·6
South India	+1·3	+1·0

Winds.

The winds at the Bay Islands and on the Lower Burma coasts were approximately normal in direction and somewhat, higher than usual in velocity, but at Akyab the direction was more northerly than the average and the wind lighter and less steady than usual. The following gives data :—

STATION.	MEAN STEADINESS.			MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, February, 1905.	Normal percentage, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
				°	°			
Port Blair	91	71	+20	N 43 E	N 42 E	164	120	+ 44
Cocos Island	91	86	+ 5	N 4 E	N 6 E	325	...	...
Rangoon	55	16	+39	N 4 W	S 42 W	34	91	— 57
Diamond Island	68	85	—17	N 25 W	N 33 W	315	211	+104
Akyab	23	43	—20	N 1 E	N 21 W	64	84	— 20

Around the head of the Bay the wind was unusually northerly and very steady. This is shown below :—

STATION.	MEAN STEADINESS.			MEAN WIND DIRECTION.	
	Actual, percentage, February, 1905.	Normal, percentage, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.
				°	°
Chittagong	55	27	+28	N 1 E	N 42 W
Calcutta	42	25	+17	N 3 W	N 73 W
Saugor Island	50	19	+31	N 13 E	S 54 W
False Point	46	17	+29	N 76 E	S 11 E

This increased northing was also observable in the inds over the Gangetic Plain. The following gives data r Allahabad :—

Station.	Mean wind direction.		
	Actual, February, 1905.	Normal, February.	Northerly deflection.
	°	°	
lahabad	N 27 W	N 63 W	+36

In the upper Sub-Himalayas the winds varied irregularly from the normal. At Dehra Dun and Ludhiana the ean wind direction was more southerly, at Roorkee and eerut more northerly and at Lahore more westerly than ne average. In the upper Indus Valley the winds were lso more westerly than usual while at Kurrachee the ean direction was N. 2° E., the normal direction being . 80° W. Stronger and more westerly winds than usual lso prevailed in eastern Rajputana and Gujarat. The ollowing gives data :—

Station.	Mean wind direction.			Mean wind velocity in miles per diem.		
	Actual, February, 1905.	Normal, February.	Westerly deflection.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°				
aipur . . .	N 40 W	N 20 W	+ 20	105	91	+14
eesa . . .	N 6 W	N 2 W	+ 4	246	206	+40

The following gives data of mean steadiness and velocity or the different divisions of northern India and for Burma nd the Bay Islands :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, February, 1905.	Normal percentage, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
Bay Islands . .	91	79	+12	143	120	+23
Burma . . .	49	48	+ 1	138	129	+ 9
Bengal . . .	49	24	+25	128	127	+ 1
Chota Nagpur .	37	54	—17	169	173	— 4
Orissa . . .	46	17	+29	184	187	— 3
United Provinces of Agra and Oudh.	31	33	— 2	52	70	—18
Punjab . .	30	34	— 4	35	50	—15
North-west Frontier Province.	20	9	+11	23	77	—54
Rajputana . .	23	32	— 9	176	149	+27
Sind . . .	24	23	+ 1	124	154	—30

The above shows that the mean velocity more or less exceeded the normal over Rajputana, Bengal, Burma and the Bay Islands, but was lower than usual elsewhere, while the steadiness was, on the whole, greater than the average.

The air movement was somewhat irregular over the Deccan. There was an increased amount of westing in the wind's direction over the Bombay Deccan and in part of Berar, while, on the contrary, the wind was south-south-westerly at Akola and east-south-easterly at Hyderabad. The velocity was approximately normal while the steadiness, in some cases, exceeded the average.

At Karwar the wind was stronger and slightly more northerly than usual while at Bombay the mean direction was somewhat more westerly than the average. The following gives data of the West Coast stations :—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual, February, 1905.	Normal, February.	Actual, February, 1905.	Normal February.	Departure from normal, February, 1905.
	°	°			
Bombay . . .	N 18 W	N 1 W	258	250	+ 8
Karwar . . .	N 40 W	N 53 W	139	98	+41

The winds were in many cases more southerly than usual over southern India. The following gives instances :—

Station.	Mean wind direction.		
	Actual, February, 1905.	Normal, February.	Southerly deflection.
	°	°	
Bangalore.	S 59 E	S 69 E	+10
Hassan	S 34 E	S 84 E	+50
Mysore	S 80 E	N 87 E	...
Madras	S 54 E	S 84 E	+30

The velocity varied irregularly from the normal but was, on the whole, above the average.

The following gives data of mean steadiness and velocity for the Peninsular divisions :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, February, 1905.	Normal percentage, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
Central Provinces .	41	25	+16	113	102	+11
Berar . . .	37	27	+10	128	129	— 1
Bombay Deccan .	18	17	+ 1	215	207	+ 8
Madras Deccan .	11	43	—32	99	96	+ 3
West Coast . .	68	65	+ 3	199	174	+25
Mysore . . .	29	52	—23	111	132	—21
Madras Coast .	55	53	— 3	142	120	+22
South India . .	64	51	+13	158	127	+31

The above shows that the mean velocity generally exceeded the normal.

At Quetta the wind was feeble but was steadier and more southerly than the average. This is shown below:—

Hill station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, February, 1905.	Normal percentage, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
				°	°			
Quetta . .	37	30	+ 7	S 88 W	N 84 W	42	84	—42

In Kashmir the wind's direction was unusually westerly and at Leh the wind was both stronger and steadier than usual. In the central and eastern Himalayas the mean winds varied irregularly from the average, one of the principal features being the increased southing, steadiness and velocity at Simla. The following gives data for this station :—

Hill station.	Mean steadiness.			Mean wind direction.			Mean wind velocity in miles per diem.		
	Actual percentage, February, 1905.	Normal percentage, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Southerly deflection.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
				°	°				
Simla . .	75	25	+50	S 1 E	S 11 E	+10	132	120	+12

At the central hill stations the wind was unusually northerly, steady and strong. This is shown below :—

Hill station.	Mean steadiness.			Mean wind direction.			Mean wind velocity in miles per diem.		
	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Northerly deflection	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
				°	°				
Mount Abu .	47	28	+19	N51W	N66W	+15	189	146	+43
Pachmarhi .	28	25	+ 3	N22W	N69W	+47	123	106	+17
Chikalda . .	41	24	+17	N29W	N81W	+52	189	156	+33

At the southern India hill stations the wind's direction varied between east-south-east and east-north-east.

At both Aden and Perim the wind was more southerly than the average and the velocity, especially at Aden, was below the average. The following gives data for these two stations :—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual, February, 1905.	Normal, February.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	°	°			
Aden	S 81 E	N 89 E	210	367	—157
Perim	S 2 W	N 89 E	432	461	— 29

In the south-east Trades region the winds were stronger and steadier than usual except at Mauritius, but while at Zanzibar the mean direction was more easterly and at the Seychelles it was more westerly than the average, it was exactly normal at Mauritius. This is shown below :—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, February, 1905.	Normal percentage, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
				°	°			
Zanzibar . .	73	55	+18	N 38 E	N 33 E	176	161	+15
Seychelles . .	64	53	+11	N 23 W	N 21 W	160	145	+15
Mauritius . .	...	...	...	S 81 E	S 81 E	190	264	—74

The following gives a brief summary of the chief abnormal features of the air movement of the month :—

(1) The mean wind was more westerly than usual over upper India from Bombay as far north as Peshawar and as far east as Ludhiana and Jaipur.

(2) Further to the eastward the winds were more northerly than the average and this feature was particularly noticeable at the head of the Bay.

(3) Over the Peninsula the winds were variable but over the Bay the north-east monsoon was stronger and steadier than usual.

(4) In the south-east Trades region the winds blew from about the normal directions but were, except at Mauritius, stronger and steadier than the average.

Humidity and Cloud.

The distribution of the departures of the mean absolute midity at 8 A.M. from the normal in February 1905 ffered largely from that in January. The air was drier an usual in all parts of the country except parts of ower Burma and over the southern half of the Peninsula. he areas of increased humidity agreed closely with the eas of increased temperature and those of decreased midity with those of decreased temperature. The dry- ss of the air was most marked over Bombay, the Central rovinces, and the delta of Bengal and the mean absolute midity was more than ·100″ below the normal at the llowing stations:—

Province or division.	Station.	Absolute humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
		″	″	″
Bombay	Malegaon	·179	·353	—·174
	Bombay	·428	·579	—·151
	Rajkot	·219	·368	—·149
	Veraval	·259	·401	—·142
	Surat	·297	·437	—·140
	Ahmednagar	·249	·382	—·133
	Ratnagiri	·423	·539	—·116
	Bhuj	·272	·384	—·112
	Poona	·213	·317	—·104
Central Provinces	Nagpur	·230	·360	—·130
	Amraoti	·230	·349	—·119
	Hoshangabad	·210	·323	—·113
	Chanda	·311	·419	—·108
Delta of Bengal	Saugor Island	·459	·642	—·183
	Calcutta	·377	·517	—·140
	Narayanganj	·374	·511	—·137
	Balasore	·399	·526	—·127
	Jessore	·383	·502	—·119
	Pogra	·307	·421	—·114
	Cuttack	·458	·562	—·104
	False Point	·554	·667	—·113
	Mymensingh	·344	·457	—·113
	Chittagong	·419	·523	—·104

The excess in the mean absolute humidity was most marked at the stations for which departure data are given below:—

Province or division.	Station.	Absolute humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
		″	″	″
Lower Burma	Rangoon	·685	·633	+·052
Tenasserim	Tavoy	·755	·694	+·061
Peninsula	Cocanada	·729	·638	+·091
	Madura	·761	·687	+·074
	Mysore	·564	·508	+·056
	Cuddapah	·668	·614	+·054
	Chitaldroog	·475	·424	+·051
	Kurnool	·528	·478	+·050

At all the hill stations, except Wellington, the air was drier than usual, but the departures from the normal were generally smaller than at the stations on the neighbouring plains. This is shown below:—

Hill station.	Absolute humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	″	″	″
Chaman	·159	·182	—·023
Quetta	·156	·166	—·010
Gilgit	·104	·136	—·032
Ranikhet	·165	·195	—·030
Srinagar	·139	·158	—·019
Simla	·121	·131	—·010
Chakrata	·139	·149	—·010
Murree	·137	·144	—·007
Leh	·030	·036	—·006
Darjeeling	·177	·211	—·034
Pachmarhi	·196	·295	—·099
Mount Abu	·139	·206	—·067
Wellington	·361	·314	+·047

The distribution of the mean relative humidity from the normal differed considerably from that of the mean absolute humidity. The mean relative humidity was in defect in three areas, *viz.*, (1) the North-west Frontier Province, (2) Bombay, Central India, the west and centre of the Central Provinces and Hyderabad, and (3) the delta

of Bengal and the coasts of the Bay. The principal departures from normal in these areas were as follows:—

Area.	Station.	Relative humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
		%	%	
First area	Peshawar	68	76	— 8
Second area	Malegaon	33	57	—24
	Rajkot	42	59	—17
	Seoni	45	62	—17
	Veraval	43	59	—16
	Ahmednagar	43	59	—16
	Surat	50	65	—15
	Hoshangabad	43	58	—15
	Nagpur	38	52	—14
	Bijapur	43	56	—13
Third area	Calcutta	71	81	—10
	Cuttack	69	78	— 9
	Mymensingh	76	85	— 9
	Dinajpur	71	80	— 9
	Bogra	71	79	— 8
	Balasore	70	78	— 8

Over the greater part of northern India, owing to the low temperatures prevailing and notwithstanding the low absolute humidities, the mean relative humidity was in excess, the departures from normal having been considerable to large over upper Sind, the east and south of the Punjab, the central districts of the United Provinces and the south-west of Bengal. The principal departures in these areas were as follows:—

Province or division.	Station.	Absolute humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.	Relative humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
		"	"	"	%	%	
Upper Sind	Jacobabad	·246	·249	—·003	67	57	+10
East and south of the Punjab.	Delhi	·257	·282	—·025	75	65	+10
	Sirsa	·251	·286	—·037	80	73	+ 7
United Provinces.	Jhansi	·293	?	?	69	53	+16
	Bareilly	·302	·324	—·022	88	76	+12
Bengal	Chaibassa	·414	?	?	87	69	+18

Over a considerable part of Madras and over Mysore the mean absolute humidity was in excess, and notwithstanding the prevailing high temperatures the mean relative humidity was also in excess. The following shows the principal departures:—

Station.	Absolute humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.	Relative humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	"	"	"	%	%	
Cocanada	·729	·638	+·091	83	74	+9
Chitaldroog	·475	·424	+·051	57	51	+6
Mysore	·564	·508	+·056	73	68	+5
Hassan	·510	·479	+·031	72	67	+5

The relative humidities, partly owing to the temperature conditions, were in excess over parts of Burma. The following gives the principal departures from normal:—

Station.	Relative humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	%	%	
Mandalay	74	69	+ 5
Minbu	69	64	+ 5
Mergui	88	83	+ 5
Tavoy	91	88	+ 3
Rangoon	88	85	+ 3

At the hill stations, with the exceptions of Leh, Gilgit and Mount Abu, the mean relative humidity, owing to the prevailing low temperature, was in excess of the average. The departures were +15 or more at the following places:—

Hill station.	Relative humidity. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	%	%	
Murree	89	64	+25
Ranikhet	87	66	+21
Simla	73	56	+17
Chakrata	81	64	+17
Quetta	93	74	+19
Chaman	80	65	+15

At Aden the absolute humidity was in excess of the mal, the mean temperature lower than usual and the an relative humidity in excess; while at Perim both absolute and relative humidities were in defect of the rage. The following gives data:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	"	"	"	%	%	
en . . .	·695	·654	+·031	75	73	+2
im . . .	·643	·721	—·078	66	76	—10

In the south-east Trades region the mean absolute humidity was approximately normal and the mean relative midity, except at Mauritius, in slight defect. This is own below:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.	Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
	"	"	"	%	%	
anzibar . .	·863	·870	—·007	75	77	—2
eychelles . .	·850	·842	+·008	81	83	—2
auritius . .	·788	·757	+·031	80	78	+2

The chief features of the hygrometric conditions of the nonth were thus:—

(1) The mean absolute humidity was in slight to large efect of the normal except over the south of the Peninsula nd parts of Burma.

(2) The mean relative humidity was below the normal in hree areas, *viz.*, the North-west Frontier Province; ombay, the central districts of India and Hyderabad; nd the delta of Bengal and the coasts of the Bay.

The following gives mean comparative data of the nine eteorological provinces:—

Meteorological Province.	Mean absolute humidity.		Mean relative humidity.	
	Average actual, February, 1905.	Departure from normal, February, 1905.	Average actual, February, 1905.	Departure from normal, February, 1905.
	"	"	%	
Burma Coast and Bay Islands.	·740	—·032	74	—3
Bengal and Orissa . .	·444	—·127	67	—7
Gangetic Plain and Chota Nagpur.	·291	—·009	59	+8
Upper Sub-Himalayas .	·253	—·042	70	+8
Indus Valley and North-West Rajputana.	·263	—·047	59	+3
East Rajputana, Central India, and Gujarat.	·189	—·054	39	0
Deccan	·261	—·069	36	—5
West Coast . . .	·488	—·156	64	—9
South India . . .	·545	+·045	60	+3

The departures of the mean cloud amount of the month, at 8 A.M., from the normal agreed, to a certain extent, with the departures of the mean relative humidity. The sky was clearer than usual over the Upper Indus Valley and the North-west Frontier Province, part of Bombay and of the Central Provinces and parts of Bengal, Cachar, and of the coasts of the Bay. The departures from the normal were generally small but amounted to —0·5 or more at the following places:—

Province or Division.	Station.	Mean cloud amount.		
		Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
Bombay and Central Provinces.	Malegaon . . .	0·3	1·3	—1·0
	Jubbulpore . . .	1·1	2·1	—1·0
	Seoni	1·2	2·2	—1·0
	Gulbarga . . .	0·1	0·9	—0·8
	Nagpur . . .	1·2	1·8	—0·6
	Surat	0·6	1·1	—0·5
Burma . .	Bassein . . .	0·6	2·0	—1·4
	Mergui . . .	2·3	3·6	—1·3
	Diamond Island . .	1·5	2·3	—0·8
Cachar [illegible] .	Silchar . . .	2·4	3·7	—1·3
Bengal . .	Narayanganj . .	3·5	4·2	—0·7
	Barisal . . .	3·3	3·9	—0·6

In all other parts of the country the sky was more cloudy than usual. The excess was greatest and more than 2·0 at the following stations:—

Province or division.	Station.	Mean cloud amount. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
Peninsula	Waltair	6·1	2·0	+4·1
	Tinnevelly	4·6	2·3	+2·3
	Hassan	4·6	2·4	+2·2
Ceylon	Colombo	4·5	2·4	+2·1
Bengal	Dinajpur	4·0	1·5	+2·5
	False Point	5·5	3·1	+2·4
	Cuttack	4·7	2·4	+2·3
Assam	Sibsagar	8·9	5·9	+3·0
Central India	Sutna	3·8	1·7	+2·1
United Provinces	Dehra Dun	6·0	3·8	+2·2
Punjab	Ambala	6·4	3·4	+3·0
Sind	Kurrachee	4·6	2·1	+2·5

At most of the hill stations the mean cloud amount exceeded the normal, but at Murree it was normal and at Darjeeling and Lashio less than the normal. The following shows the departures exceeding 1·0:—

Hill station.	Mean cloud amount. Actual, February, 1905.	Normal, February.	Departure from normal, February, 1905.
Ranikhet	6·1	3·9	+2·2
Srinagar	9·7	7·6	+2·1
Chakrata	5·2	3·6	+1·6
Quetta	5·3	3·8	+1·5
Wellington	3·3	1·9	+1·4
Lashio	2·5	4·4	−1·9
Pachmarhi	0·9	2·2	−1·3
Darjeeling	3·7	4·8	−1·1

The following gives the stations at which the mean cloud amount of the month exceeded 5·0 and was less than 1·0, and thus outlines the areas of greatest cloudiness and of greatest serenity:—

Station.	Mean cloud amount over 5·0.	Station.	Mean cloud amount less than 1·0.
Mandalay	9·2	Veraval	0·9
Mymensingh	9·0	Poona	0·9
Sibsagar	8·9	Karwar	0·8
Ambala	6·4	Bijapur	0·7
Dibrugarh	6·3	Bassein	0·6
Patiala	6·2	Surat	0·6
Waltair	6·1	Ahmednagar	0·6
Dehra Dun	6·0	Aurangabad	0·6
False Point	5·5	Ratnagiri	0·4
Delhi	5·5	Goa	0·4
Puri	5·3	Malegaon	0·3
		Gulbarga	0·1

In the Persian Gulf area as well as in the south-east Trades region the sky was more cloudy than usual, while in southern Arabia the sky was clearer than the average.

The chief abnormal features of the cloud distribution of the month were as follows:—

(1) Slight deficiency in the North-west Frontier Province region, over parts of Bombay and of the Central Provinces and over parts of East Bengal, Cachar and the Burma coast, most marked at Malegaon (−1·0); Darjeeling (−1·1); Silchar (−1·3); Bassein (−1·4); and Mergui (−1·3).

(2) Excess over the remainder of the country, most marked over the submontane Punjab (Ambala +3·0); lower Sind (Kurrachee +2·5); upper Assam (Sibsagar +3·0) and the Circars (Waltair +4·1).

(3) The sky was practically clear of cloud over the Bombay Deccan and part of the Bombay coast.

(4) Considerable excess over the Persian Gulf region and slight excess over Ceylon and the south-east Trades region.

The following gives comparative data of the mean cloud amount for the nine meteorological provinces:—

Meteorological Province.	Mean cloud amount. Average actual, February, 1905.	Departure, from normal, February, 1905.
Burma Coast and Bay Islands	2·2	0
Bengal and Orissa	3·5	+0·9
Gangetic Plain and Chota Nagpur	3·4	+1·0
Upper Sub-Himalayas	4·9	+1·1
Indus Valley and North-West Rajputana	3·6	+0·2
East Rajputana, Central India, and Gujarat	3·1	+0·4
Deccan	1·5	−0·2
West Coast	0·7	−0·3
South India	3·6	+0·9

Rainfall.

The rainfall of February in northern India ordinarily irs during the passage of storms of the cold weather e and is generally heaviest in the Punjab and along foot of the hills. In most years the central districts ndia, west Bengal, Lower Burma and Malabar receive during thunderstorms but during the month under iew, most of the rainfall over central and north-eastern ia, though in some cases accompanied with thunder, eared generally to be connected with the passage east- rd of cold weather disturbances. The weather during ruary 1905 was more showery and unsettled than al, and over a large part of the country the rainfall s heavier than the average.

The principal periods of rainfall were—

(1) The 3rd to the 8th, when showers fell over the ins of north-west and of north-east India and snow on e hills;

(2) The 14th to the 19th, when showers occurred over the greater part of northern India and were heavy in parts of north-west and north-east India,

(3) The 22nd to the 24th, when rain and snow fell over Baluchistan and north-west India; and

(4) The 27th and 28th, when snow fell on the hills and rain on the plains of the north-west.

The actual distribution of rain, as determined from the records of the meteorological observatories, is shown in Plate VII. This chart shows that little or no rain fell over large portions of Bombay, of Madras and of Burma and that from these dry areas the rainfall increased and amounted to 2·74″ at Colombo, 3·57″ at Ambala, 3·82″ at Dehra Dun and 3·30″ at Chaibassa. On the hills the snowfall was irregularly distributed. It measured (as rain) 13·09″ at Chur Peak, 9·49″ at Chakrata, 10·03″ at Sonemarg and 7·78″ at Murree, while there was none at Gilgit and Killa Drosh and less than one quarter of an inch at Astor, Skardu and Leh.

The following table gives the mean actual, mean normal and departure data for the 57 meteorological divisions:—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, February, 1905.	Average normal, February.	Average actual, February, 1905.	Average normal, February.	Departure from normal, February, 1905.
				Inches.	Inches.	Inches.
RMA	Tenasserim	1·0	0·8	0·43	0·49	−0·06
	Lower Burma (Deltaic)	0	0·2	0	0·17	−0·17
	Central do.	0·1	0·1	0·03	0·05	−0·02
	Upper do.	0·8	0·4	0·21	0·19	+0·02
	Arakan	0·5	0·2	0·40	0·16	+0·24
NGAL AND ASSAM	Eastern Bengal	2·0	1·6	0·86	0·99	−0·13
	Assam (Surma)	2·1	3·1	0·71	1·83	−1·12
	Do. (Hills)	2·8	2·9	1·19	1·35	−0·16
	Do. (Brahmaputra)	2·3	3·4	0·57	1·35	−0·78
	Deltaic Bengal	2·9	1·6	1·73	1·07	+0·66
	Central do.	3·4	1·4	1·52	0·73	+0·79
	North do.	2·5	1·2	1·11	0·54	+0·57
	Bengal Hills	4·0	2·1	1·54	0·87	+0·67
	Orissa	1·4	1·3	0·61	0·75	−0·14
	Chota Nagpur	3·9	1·6	2·17	0·80	+1·37
	Bihar (South)	2·6	1·5	1·16	0·66	+0·50
	Do. (North)	2·5	1·1	1·07	0·45	+0·62
NITED PROVINCES OF AGRA AND OUDH.	United Provinces (East)	1·5	1·1	0·42	0·48	−0·06
	Oudh (South)	2·4	0·9	1·02	0·39	+0·63
	Do. (North)	2·9	1·2	1·26	0·51	+0·75
	United Provinces (Central)	1·3	0·8	0·67	0·37	+0·30
	Do. do. (West)	2·6	1·0	0·94	0·50	+0·44
	Do. do. (East Submontane)	2·8	1·2	0·89	0·51	+0·38
	Do. do. (West do.)	4·5	2·2	2·32	1·26	+1·06
	Do. do. (Hills)	6·8	4·1	2·80	2·51	+0·29

Province.	Division.	Number of rainy days. Average actual, February, 1905.	Number of rainy days. Average normal, February.	Rainfall. Average actual, February, 1905.	Rainfall. Average normal, February.	Rainfall. Departure from normal, February, 1905.
				Inches.	Inches.	Inches.
Punjab	Punjab (South-East)	1·8	1·3	0·55	0·55	0
	Do. (South)	2·9	1·5	1·10	0·60	+0·50
	Do. (Central)	2·8	2·2	0·99	1·07	−0·08
	Do. (Submontane)	4·8	2·8	2·30	1·62	+0·68
	Do. (Hills)	9·2	4·9	4·48	3·44	+1·04
	Do. (West)	2·4	1·3	0·97	0·55	+0·42
N.-W. F. Province	North-West Frontier Province	3·9	3·0	1·97	1·47	+0·50
Bombay and Malabar Coast Districts (Madras).	Malabar	0·6	0·3	0·27	0·21	+0·06
	Travancore	1·8	..	1·16	..	...
	Madras (South, Central)	0·2	0·6	0·08	0·33	−0·25
	Coorg	1·4	...	0·52	...	...
	Mysore	0·5	0·1	0·30	0·04	+0·26
	Konkan	0	0·1	0·01	0·05	−0·04
	Bombay Deccan	0·1	0·2	0·07	0·09	−0·02
	Hyderabad (North)	0·8	0·3	0·28	0·16	+0·12
	Khandesh	0·2	0·2	0·05	0·11	−0·06
Central Provinces and Berar.	Berar	0·9	0·6	0·32	0·23	+0·09
	Central Provinces (West)	1·0	0·0	0·31	0·28	+0·03
	Do. (Central)	1·0	0·8	0·43	0·47	−0·04
	Do. (East)	2·7	0·9	1·07	0·48	+0·59
Bombay (North)	Gujarat East	0·1	0·2	0·04	0·11	−0·07
	Kathiawar and Cutch	0·1	0·2	0·02	0·11	−0·09
	Sind	2·9	0·7	0·71	0·25	+0·46
	Baluchistan Hills	5·3	3·7	1·91	1·57	+0·34
Rajputana and Central India.	Central India (East)	0·4	0·7	0·15	0·35	−0·20
	Rajputana (East), Central India (West)	1·5	0·6	0·45	0·26	+0·19
	Do. (West)	0·8	0·3	0·20	0·13	+0·07
Madras	East Coast (North)	1·4	0·5	0·62	0·33	+0·29
	Hyderabad (South)	0·8	0·4	0·24	0·18	+0·06
	Madras (Central)	0	0	0·19	0·05	+0·14
	East Coast (Central)	0·6	0·1	0·38	0·21	+0·17
	Do. (South)	0·4	0·5	0·21	0·45	−0·24
	Madras (South)	0·9	1·2	0·48	0·84	−0·36

The preceding data show that actually or practically no rain fell during the month in eight divisions, *viz.*, Deltaic and Central Burma, South-central Madras, the Konkan, the Bombay Deccan, Khandesh, Gujarat (east) and Kathiawar and Cutch, but that elsewhere more or less rain was received. The month's rainfall was short of the average over the above divisions and in addition over Tenasserim, East Bengal, Assam, Orissa, the east division of the United Provinces, the Central Punjab, the central division of the Central Provinces, Central India (east), the East Coast (south) and Madras (south); was exactly normal in the south-east Punjab and was more or less excessive elsewhere. The excess was actually greatest in Chota Nagpur (+1·37″), the west submontane division of the United Provinces (+1·06″) and the hills division of the Punjab (+1·04″) but the rainfall was more than 100% in excess of the average in the following considerable number of divisions:—

Division.	Rainfall. Average actual, February, 1905.	Rainfall. Average normal, February.	Rainfall. Departure from normal, February, 1905.	Rainfall. Percentage departure from normal.
	Inches.	Inches.	Inches.	
Arakan	0·40	0·16	+0·24	+150
Central Bengal	1·52	0·73	+0·79	+108
North Bengal	1·11	0·54	+0·57	+106
Chota Nagpur	2·17	0·80	+1·37	+171
North Bihar	1·07	0·45	+0·62	+138
South Oudh	1·02	0·39	+0·63	+162
North Oudh	1·26	0·51	+0·75	+147
Mysore	0·30	0·04	+0·26	+650
Central Provinces, East	1·07	0·48	+0·59	+123
Sind	0·71	0·25	+0·46	+184
Madras Central	0·19	0·05	+0·14	+280

The following gives rainfall data of the extra-Indian stations:—

Station.	Rainfall. Average actual, February, 1905.	Average normal, February.	Departure from normal, February, 1905.	Percentage departure from normal, February, 1905.
	Inches.	Inches.	Inches.	
Trincomalee	0·93	1·98	—1·05	— 53
Colombo	2·74	2·29	+0·45	+ 20
Minicoy	0	0·35	—0·35	—100
Kashgar	0·07	0·12	—0·05	— 42
Kabul	0	0·98	—0·98	—100
Meshed	0·09	1·03	—0·94	— 91
Teheran	0·60	0·82	—0·22	— 27
Ispahan	0	0·17	—0·17	—100
Bushire	1·09	2·35	—1·26	— 54
Jask	1·29	0·97	+0·32	+ 33
Muscat	1·83	0·78	+1·05	+135
Baghdad	0·26	2·17	—1·91	— 88
Aden	0	0·29	—0·29	—100
Perim	0·06	0·26	—0·20	— 77
Zanzibar	0·08	1·38	—1·30	— 94
Seychelles	8·08	12·11	—4·03	— 33
Mauritius	3·33	7·68	—4·35	— 57

Summarising the rainfall conditions of the month the data show :—

(1) Over India the rainfall was in excess on the Arakan Coast, over the greater part of Bengal, of the United Provinces, and of the Punjab, as well as over the North-west Frontier Province, Sind, Rajputana, the Central Provinces and the north-east of the Peninsula.

(2) The excess was actually greatest in Chota Nagpur, the west submontane division of the United Provinces, and the hill division of the Punjab.

(3) There was no rain in Central and Deltaic Burma, South-Central Madras, the Konkan, the Bombay Deccan, Khandesh, Gujarat (east) and Kathiawar and Cutch.

(4) The month's rainfall was deficient over Tenasserim, East Bengal, Assam, Orissa, the east division of the United Provinces, the Central Punjab, Central India (east), the central division of the Central Provinces, the East Coast (south) and Madras (south).

(5) The rainfall was in excess at Jask, Muscat and Colombo, but was short of the average at the other extra-Indian Stations.

The following gives comparative rainfall data of the seven meteorological divisions :—

Meteorological Province.	Rainfall. Mean actual, February, 1905.	Mean normal, February.	Departure from normal, February, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inch.	
Burma Coast and Bay Islands	0·24	0·44	—0·23*	— 52
Burma Inland	0·33	0·15	+0·15*	+100
Assam	0·66	1·49	—0·83	— 56
Bengal and Orissa	1·38	0·90	+0·48	+ 53
Gangetic Plain and Chota Nagpur	1·23	0·67	+0·56	+ 84
Upper Sub-Himalayas	1·91	1·37	+0·56*	+ 41
Indus Valley and North-West Rajputana.	0·89	0·46	+0·43	+ 93
East Rajputana, Central India and Gujarat.	0·23	0·18	+0·02*	+ 11
Deccan	0·30	0·28	+0·02	+ 7
West Coast	0·13	0·21	—0·08	— 38
South India	0·38	0·38	—0·01	— 3

* A reference to table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

Showers occurred in different parts of Burma on the 2nd and 3rd, between the 9th and 11th, on the 11th and 12th and between the 17th and the 24th, but the total monthly fall was small and in Deltaic and Central Burma practically *nil*. There were only three falls exceeding 1·00″ in 24 hours, *viz.*, 1·04″ on the 12th at Victoria Pt. (Mergui); 1·25″ on the 4th at Rathedaung (Akyab); and 1·50″ on the 7th at Maungdaw (Akyab).

In Assam the only general rainfall occurred between the 16th and 18th but local rain fell on the 1st to 3rd, the 5th to 7th, and the 23rd to the 28th. The month's rainfall was about normal on the hills but, except in Goalpara, very short of the average on the plains. The following gives data for the eight plains districts :—

District.	Rainfall. Average actual, February, 1905.	Average normal, February.	Departure from normal, February, 1905.	Percentage departure from normal.
	Inch.	Inches.	Inches.	
Cachar	0·78	2·01	—1·23	— 61
Sylhet	0·64	1·68	—1·04	— 62
Goalpara	0·68	0·59	+0·09	+ 15
Kamrup	0·39	0·75	—0·36	— 48
Darrang	0·38	0·93	—0·55	— 59
Nowgong	0·41	0·86	—0·45	— 52
Sibsagar	0·65	1·79	—1·14	— 64
Lakhimpur	0·94	2·62	—1·68	— 64

Falls exceeding 1·00″ in 24 hours were registered at some of the hill stations during the showery period in the middle of the month but elsewhere and at other times the rainfall was very light.

In Bengal there were two periods of general showers, *viz.*, between the 5th and the 7th and between the 15th and the 18th. The second was the more important fall and extended to all divisions of the province. The month's rainfall was normal in East Bengal and in Orissa but was more or less excessive elsewhere and falls of 2·00″ or more in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inch.
Gaya	Pakri Barawan	16th February	2·00
Sonthal Parganas	Barkope	17th "	2·68
Bankura	Raipur	" "	2·53
Monghyr	Gidhaur	" "	2·20
Sonthal Parganas	Deoghur	" "	2·10
Monghyr	Kharagpur	" "	2·07
Burdwan	Raniganj	" "	2·04
Bhagalpur	Supaul	" "	2·00
Darbhanga	Ladania	18th "	3·50
Balasore	Jellasore	" "	2·38
Jessore	Magura	" "	2·35
Nadia	Ranaghat	" "	2·18

In the United Provinces there was one general fall of rain, *viz.*, between the 15th and the 18th, but general showers were also received in the west and submontane divisions on the 5th and 6th, the 7th to 11th, the 23rd and 24th and the 27th and 28th. The month's rainfall was about normal in the east and hills divisions and was more or less excessive elsewhere. As was the case in Bengal the principal rainfall period was that of the middle of the month and during that period the following falls exceeding 2·00″ in 24 hours were recorded :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Dehra Dun	Dehra (Asylum)	15th February	3·09
	Mussooree	" "	2·40
	"	16th "	2·40
	Chakrata (Observatory)	17th "	4·16
	" Tahsil	" "	2·60
Saharanpur	Kalsia	" "	2·17

The Punjab had five rainfall periods, *viz.*, the 5th and 6th, the 9th to the 11th, the 15th to the 20th, the 22nd to the 24th and the 27th to the 28th. The rainfall of the month was normal over the South-east and Central Punjab, but was heavier than usual in the remaining divisions. In both the third and fifth periods the rainfall was heavy and general and the following falls exceeding 1·50″ in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kangra	Palampur	15th February	1·65
Gurdaspur	Dalhousie	" "	1·61
Shahpur	Naushahra	18th "	1·65
	Sakesar	27th "	2·40
Kangra	Kangra	" "	1·80
Gurdaspur	Dalhousie	28th "	3·50
Kangra	Palampur	" "	2·35
	Dharmsala	" "	2·20
Rawalpindi	Murree	" "	2·10
	Rawalpindi	" "	1·73
	Kahuta	" "	1·5
Attock	Talagang	" "	1·53

In the North-west Frontier Province five showery periods were also registered, *viz.*, on the 8th and 9th, the 15th and 16th, the 18th and 19th, the 22nd and 23rd, and the 27th and 28th, but during the three first periods the showers were exceedingly light and local. During the two last periods rain extended to all parts of the province and was moderately heavy. The month's fall was heavier than usual and the following amounts exceeding 1·00″ in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kohat	Kohat	27th February	1·40
Peshawar	Charsadda	" "	1·37
	Nowshera	" "	1·35
	Katlang	" "	1·11
	Khan Mahi	" "	1·10
	Katlang	28th "	2·02
	Mardan	" "	1·66
Hazara	Haripur	" "	1·55
Peshwar	Lahar (Utman Balak)	" "	1·40
	Abazai	" "	1·40
	Nowshera	" "	1·38
	Khan Mahi	" "	1·35
Hazara	Abbottabad	" "	1·35
Peshawar	Swabi	" "	1·30
Hazara	Oghi	" "	1·18

Baluchistan received scattered showers throughout the onth, the most general fall occurring between the 20th d the 23rd. The total fall was somewhat heavier than ual and the following amounts of 1·00″ or more in 24 urs were registered :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
ETTA PISHIN	Killa Abdulla	16th February	1·25
LAN PASS	Spezand	20th ,,	1·20
	Hirak	,, ,,	1·00
HAGAI	Nushki	21st ,,	1·34
OB	Hindubagh	,, ,,	1·00
LAN PASS	Spezand	22nd ,,	3·00
	Kolepur	,, ,,	1·80
OB	Hindubagh	,, ,,	1·00
AL CHOTIALI	Mudgorge	23rd ,,	1·20

Showery weather prevailed in Kashmir during the month, e rain and snow falling principally between the 4th and e 9th, the 14th and the 18th, the 21st and 23rd, and on e 27th and 28th. The precipitation was irregularly stributed but was, on the whole, lighter than usual. The llowing gives the amounts exceeding 1·00″ in 24 hours uring the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
	Bisolee	4th February	1·02
	Kathua	16th ,,	1·05
MMOO	Manawar	,, ,,	1·03
	Punch	17th ,,	4·80
	Rampore Rajauri	18th ,,	1·20
SHMIR	Sonemarg	24th ,,	1·40
	,,	25th ,,	1·17
	Riasi	27th ,,	3·32
MMOO	Punch	,, ,,	2·23
	Ramban	,, ,,	1·84
	Ramnagar	,, ,,	1·70
SHMIR	Kolgam	,, ,,	1·61
MMOO	Sambha	,, ,,	1·37
SHMIR	Karnah	,, ,,	1·35
MMOO	Akhnur	,, ,,	1·30
SHMIR	Sri Protap Singh Pora	,, ,,	1·26
	Sonemarg	,, ,,	1·17
	Katli	27th February	1·12
JUMMOO	Jummoo	,, ,,	1·10
	Udumpore	,, ,,	1·04
KASHMIR	Sonemarg	28th ,,	3·70
JUMMOO	Rampur Rajauri	,, ,,	1·90
	Bisolee	,, ,,	1·76
KASHMIR	Srinagar	,, ,,	1·15
JUMMOO	Manawar	,, ,,	1·10

In western Rajputana there were a few light showers during the second half of the month but the small normal fall of the month was exceeded. In eastern Rajputana there occurred general showers between the 14th and the 17th and a few light local showers on the 24th and 27th. The total fall of the month considerably exceeded the normal but the individual falls were generally light. The following gives comparative data for the larger States :—

State.	Rainfall.			
	Average actual, February, 1905.	Average normal, February.	Departure from normal, February, 1905.	Percentage departure from normal.
	Inches.	Inch.	Inch.	
Jodhpur	0·21	0·11	+0·10	+ 91
Bikaner	0·19	0·24	−0·05	− 21
Jaipur	0·54	0·23	+0·31	+135
Alwar	0·42	0·34	+0·08	+ 24
Bharatpur	0·73	0·43	+0·30	+ 70
Dholpur	1·01	0·31	+0·70	+226
Kotah	0·26	0·26	0	0
Ajmer-Merwara	0·40	0·14	+0·26	+186
Udaipur	0·01	0·17	−0·16	− 94

Central India received only light scattered rain during the month and the total was less than half the normal. The following gives data for some of the larger States :—

State.	Rainfall.			
	Average actual, February, 1905.	Average normal, February.	Departure from normal, February, 1905.	Percentage departure from normal.
	Inch.	Inch.	Inch.	
Indore	0·01	0·24	−0·23	−96
Bhopal Agency	0·06	0·29	−0·23	−79
Gwalior	0·17	0·29	−0·12	−41
Rewah	0·29	0·65	−0·36	−55
Maihar	0·13	0·59	−0·46	−78

In the Central Provinces little or no rain fell until near the close of the month, when fairly general showers occurred giving an average actual fall for the month generally in excess of the normal. The following amounts exceeding 1·00″ in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Bilaspur . .	Bilaspur . .	5th February	1·42
Feudatory States .	Bhawanipatna .	23rd ,, .	1·02
Balaghat . .	Lanji . . .	27th ,, .	1·25
Bhandara .	Sakoli . . .	,, ,, .	1·06

There was practically no rain over the Bombay Presidency (with the exception of Sind) between the 1st and the 23rd February. On the 24th showers occurred, rain falling over parts of the Karnatak, the Deccan, and Gujarat between that date and the end of the month. In Sind there were three showery periods, *viz.*, between the 1st and the 4th, the 13th and the 15th, and the 22nd and the 27th. The month's rainfall was three times as heavy as usual in Sind but was much below the normal in other parts of the Presidency.

In Mysore there was a period of heavy showers between the 22nd and 24th, the weather having been rainless at other times. The small normal fall of the month was largely exceeded and the following amounts exceeding 1·00″ in 24 hours were registered during the rainfall period:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Tumkur. . .	Tumkur . .	22nd February.	4·10
	Maddagiri . .	,, ,, .	1·30
	Karatagere . .	,, ,, .	1·24
	Chiknayakanhalli .	23rd ,, .	1·35
Kolar . . .	Chikballapur . .	,, ,, .	1·17
Bangalore . .	Nelamangala . .	,, ,, .	1·10

The rainfall over the Madras Presidency, though generally light, was somewhat irregularly distributed, relatively to the normal. In the north and central divisions of the East Coast showers occurred during the first week and again between the 18th and the 28th and the average actual fall considerably exceeded the normal. Malabar, Central Madras and South Madras like Mysore received moderately heavy showers between the 22nd and 24th, and in the two first divisions the month's rainfall exceeded the normal. In the remaining divisions the rainfall was light and unimportant. The following gives comparative data of the 22 collectorates of the Madras Presidency:—

Collectorate.	Rainfall.			
	Average actual, February, 1905.	Average normal, February.	Departure from normal, February, 1905.	Percentage departure from normal.
	Inch.	Inches.	Inch.	
Ganjam	0·52	0·57	—0·05	— 9
Vizagapatam	0·95	0·38	+0·57	+150
Godavari	0·42	0·25	+0·17	+ 68
Kistna	0·69	0·19	+0·50	+263
Guntur	0·48	0·12	+0·36	+300
Nellore	0·38	0·21	+0·17	+ 81
Madras	0·31	0·29	+0·02	+ 7
Chingleput	0·34	0·37	−0·03	— 8
North Arcot	0·22	0·27	—0·05	— 19
South Arcot	0·19	0·48	—0·29	— 60
Tanjore	0·14	0·64	—0·50	— 8
Trichinopoly	0·01	0·47	—0·46	— 98
Madura	0·23	0·66	—0·43	— 65
Tinnevelly	0·73	1·06	—0·33	— 31
Malabar	0·40	0·31	+0·09	+ 29
South Canara	0	0·04	—0·04	—100
Salem	0·03	0·31	—0·28	— 90
Coimbatore	0·08	0·37	—0·29	— 78
Cuddapah	0·05	0·10	—0·05	— 50
Anantapur	0·13	0·04	+0·09	+225
Bellary	0·43	0·03	+0·40	+1,333
Kurnool	0·17	0·04	+0·13	+325

Snowfall.

I.—Afghan Mountain Districts.

(1) *Kabul*:—Snow fell at Kabul as follows:—

21st to 23rd February . . . 8½ Inches.
26th ,, . . . ¼ ,,

The depth of snow at the close of the month was 4 inches at Kabul, but on the surrounding hills there was more snow than this.

The snowfall was heavier than last year.

(2) *Wano*:—There were five falls of snow during the month, *viz.*, on the 10th, 11th, 21st, 22nd and 26th February. The falls were heavier than usual and descended to 3,500

et. At the close of the month snow lay in heavy drifts all the hills in the Agency.

(3) *Kurram* :—Snow fell as follows :—

21st to 23rd February	3″
25th and 26th ,,	3″
27th ,,	3″

The snowfalls were extensive but snow melted very on. All the passes were closed at the end of the month nd the total fall was heavier than that of the last year.

(4) *Kohat* :—Falls of snow were received on the 21st, 2nd, 26th, 27th and 28th February. The falls occurred ter than usual but were less extensive than in previous ears.

(5) *Hazara*, (*a*) Siran Range :—Snow fell between the 6th and 28th January and on the 15th, 17th, 18th, 21st, 3rd, and 26th February 1905, and was heavier than usual.

Hazara, (*b*) Dunga Galley and Khandiani :—Snow fell s follows :—

Date.	Dunga Galley, height 7,800 feet.		Date.	Khandiani, height 8,500 feet.	
	′	″		′	″
th February 1905 .	0	6	14th February	1	0
th ,, ,, .	0	6	17th ,,	1	3
th ,, ,, .	0	3	19th ,,	0	6
th and 18th February 1905.	1	6	21st ,,	2	6
nd and 23rd February 1905.	3	0	27th ,,	2	6
th and 28th February 1905.	3	0			

The total fall for the month was heavier than usual.

II.—Kashmir and Punjab Himalayas.

(1) *Leh* :—Snow fell frequently during the month but the alls were light and unimportant. There was very little now lying at the close of the month at Leh but at higher levations (13,000 feet) the depth of snow was about 10 nches.

(2) *Murree* :—The following gives the falls of snow at Murree and Kahuta during the month of February 905 :—

Murree.

	Inches.
9th February	4
15th ,,	2
16th ,,	7
17th ,,	9½
18th ,,	12½
19th ,,	1
22nd ,,	5
23rd ,,	11
24th ,,	½
27th ,,	3
28th ,,	21

Kahuta.

	Inches.
16th February	3
18th Do.	6

The total fall was apparently heavier than usual.

(3) *Dalhousie* :—There were three continuous falls of snow, the first lasting from the 5th to the 10th, the second from the 15th to the 24th, and the third on the 27th and 28th. The total fall was 10 feet which was much heavier than that of last year.

(4) *Chamba* :—Snow fell almost daily from the 4th to the end of the month over the whole division, and the total fall was heavier than usual.

The Sach and Padri Passes were closed at the end of the month, and the depth of snow was as follows :—

	Feet.	Inches.
Kilar	1	11
Kalatop	18	0
Chaori	10	0
Langera	10	0
Bhent	7	0
Bhandal	3	0
Deur	1	0
Tisa	2	0
Khangu	6	0
Chhatri	5	0
Alwas	8	0

(5) *Simla* :—Kilba. Snow fell as follows :—

	Descending to	Amount. Inches.
2nd February	5,750	½
4th ,,	5,750	1
5th ,,	5,750	1
6th ,,	5,750	1½
14th ,,	6,000	1
15th ,,	5,750	3
16th ,,	5,750	1
17th ,,	5,750	1½
18th ,,	6,000	1
19th ,,	6,000	1
22nd ,,	5,750	2
23rd ,,	6,000	1
27th ,,	6,000	½
28th ,,	6,000	3

All the passes were closed at the end of the month and the depth of snow on the various passes was as follows :—

	Feet.
Rupan Pass	16
Bruin ,,	16
Harang ,,	8
Shatul ,,	15
Buldar ,,	16
Runang ,,	12

III.—United Provinces Himalayas.

(1) *Almora* :—Heavy snow fell over the whole division between the 2nd and end of February 1905 and the snowline descended considerably. The accumulated snow on the well-known passes was as follows :—

	Feet.	Inches.
Unt Dhura	27	0
Ralam Dhura	25	6
Millam Dhura	21	0
Pindari, Kapini and Kaunela	20	0
Nirwi	36	0
Lipa Dhura	18	0

The snowfall was very heavy as compared with that of last year.

Crop Report.

Madras.—There was occasional rain during the month ut at the close the irrigation supplies were insufficient n parts throughout the Presidency except in Ganjam, Vizagapatam, Anantapur and in the hills. Harvests ontinued during the month with poor to fair outturn. Pasture was insufficient and fodder scanty over a considerble part of the Presidency but the condition of the cattle as generally good.

Bombay.—The reports at the close of the month showed hat the crops had been slightly damaged by frost in parts f Sind, Ahmedabad, Nasik, and Rajkot; were suffering rom insufficient moisture in parts of the Panch Mahals, Nasik and Poona and were generally in good condition lsewhere. Cotton had been slightly damaged by rain in arts of Bijapur and was withering in parts of Belgaum nd Baroda.

Bengal.—The harvesting of the spring crops and the ollection of opium commenced near the close of the nonth. The prospects of the standing crops had been njured to some extent during the month by rain and frost.

United Provinces.—The weather during the month was enerally cloudy and unfavourable for the crops and lamage to the crops from frost was reported from Jhansi nd Hamirpur.

Punjab.—The prospects and condition of the standing rops at the close of the month were fair in Rawalpindi nd Meanwali; average in Amritsar and Ferozepore; unavourable in Delhi and uncertain in Jullundur. Sunshine as urgently wanted to improve the condition of the rops, the intense cold and frost of January and February aving caused severe damage in the South-east Punjab nd some damage in the central and west Punjab.

North-west Frontier Province.—Rain fell during the month and did much good to the standing crops.

Burma.—At the close of the month the standing crops were in good condition.

Central Provinces.—The winter crops were generally in good condition and harvesting commenced during the month.

Assam.—The prospects of tea were good in Sylhet and Sibsagar and fair in other places. Prospects of linseed and early transplanted rice were good in Sylhet, while mustard was good in Sylhet and Darrang and fair in other districts.

Mysore.—The standing crops were in fair condition in Kadur and Shimoga and the prospects of the season were fair in Bangalore and indifferent in other parts.

Hyderabad.—The crops were in bad condition in four taluqs and had suffered in other four.

Rajputana.—The crops had been damaged by frost in most states and by insects in Tonk. The opium crop had been damaged by frost in Jaipur, Kotah, and Todgarh and cotton in Kotah.

Central India.—The standing crops at the close of the month were partially good in Bhopawar, and bad to fair elsewhere, much injury having been caused by frost. The opium crop was in bad condition in Gwalior, Indore, Bhopal and Malwa.

Kashmir, Jummoo.—The condition of the standing crops was fair.

Nepal.—The standing crops were in good condition.

W. L. DALLAS.

ble I.—Abstract of Observations taken at 8 A.M. at 231 Stations in India, Burma, etc., in February, 1905.

Table

Abstract of Observations taken at 8 A.M. at 231

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma Coast and Bay Islands.			+·019								87·9	−1·3	68·4	+0·7	78·1	−0·3	19·6					29·3
1	Car-Nicobar .	25	29·950		29·902	30·001	2nd	29·906	18th	·095	81·4	87·2		77·1		82·1		10·1	90·4	5th	72·1	27th	18·3
	Port Blair . .	61	29·965	+·038	29·957	30·009	23rd	29·927	18th	·082	77·1	87·3	−0·8	74·7	−0·2	81·0	−0·5	12·6	90·4	21st	70·6	25th	19·8
	Mergui ¶ . .	96	29·903	+·016	29·932	29·948	3rd	29·863	25th	·085	76·7	88·5	−1·1	71·7	+2·6	80·2	+0·8	16·8	91·9	11th	65·4	1st	26·5
	Tavoy . . .	26	29·992	+·014	29·949	30·062	3rd	29·949	27th	·113	72·9	90·9	−0·2	66·6	−0·2	78·8	−0·2	24·3	94·2	17th & 18th.	58·6?	1st	35·6?
	Moulmein . .	94	29·906	+·013	29·940	29·979	3rd	29·843	25th	·136	72·5	92·3	+0·8	68·4	+0·7	80·4	+0·8	23·9	95·5	18th & 24th.	62·4	4th	33·1
2	Rangoon† . .	57	29·951	+·006	29·947	30·010	3rd	29·898	25th	·112	71·8	90·3	−2·3	67·2	+1·3	78·8	−0·4	23·1	94·1	23rd & 26th.	63·8	1st & 5th.	30·3
	Bassein. . .	27?	29·991	+·029	29·957	30·036	12th	29·941	25th	·095	70·9	89·3	−0·7	66·7	+1·8	78·0	+0·6	22·6	93·7	19th	61·0	5th	32·7
	Diamond Island .	41	29·970	+·010	29·946	30·013	3rd	29·918	7th	·095	75·9	82·5	−1·7	72·5	+0·2	77·5	−0·8	10·0	87·3	18th	68·2	5th	19·1
5	Akyab . . .	20	30·009	+·015	29·973	30·070	3rd	29·914	7th	·156	64·7	81·2	−3·6	60·5	−1·0	70·9	−2·3	20·7	85·9	18th & 22nd.	51·1	4th	34·8
3	Toungoo . .	183	29·827	+·027	29·958	29·878	3rd	29·771	25th	·107	66·3	89·8	−1·1	58·2	−2·9?	74·1	−2·0?	31·6	95·9	28th	52·1	23rd	42·8
	II.—Burma Inland.			+·044								83·3	−4·6	55·5	−1·7	69·5	−3·2	27·8					43·0
3	Thayetmyo ¶ .	121	29·888	+·035	29·959	29·963	12th	29·829	7th	·134	66·9	90·1	−2·5	56·1	−0·8	73·2	−1·7	34·0	97·5	28th	45·0?	6th	52·5?
4	Minbu . .	*165*	29·866	+·052	29·978	29·947	12th	29·793	25th	·151	65·9	87·2	−4·4	59·9	−1·3	73·6	−2·9	27·3	94·2	28th	52·0	15th	42·2
	Yamethin . .	657	29·337	+·035	29·970	29·416	12th	29·271	26th	·145	65·7	87·6	−4·9	58·9	−1·7	73·3	−3·3	28·7	95·3	28th	50·2	13th	45·1
	Monywa . .	*280*	29·769		29·988	29·860	12th	29·693	7th	·167	62·8	83·6		54·4		69·0		29·2	92·3	28th	49·8	22nd	42·5
	Mandalay . .	250	29·762	+·039	29·974	29·846	12th	29·690	24th	·156	62·9	85·1	−4·8	57·9	−2·2	71·5	−3·5	27·2	94·5	28th	51·2	12th & 13th	43·3
	Myitkyina . .	458	29·552?		29·995?	29·703	12th	29·446	1st	·257	58·6	73·9		50·9		62·4		23·0	81·1	28th	41·3	13th	39·8
	Bhamo . .	*381*	29·653	+·059	30·013	29·725	12th	29·581	7th	·144	56·1	75·7	−6·5	50·7	−2·4	63·3	−4·5	25·0	87·5	11th	42·2	13th & 22nd.	45·3
4(a)	Maymyo . .	3,545									52·6	72·2		43·2		57·7		29·0	78·9	28th	35·2	13th	43·7
	Lashio . . .	*2,751*									53·6	75·8	−3·2	47·3	−1·4	61·6	−2·3	28·5	83·1	28th	38·1	12th	45·0
	III.—Assam.			+·053								70·6	−6·3	48·6	−6·2	59·6	−6·3	22·0					38·1
7	Silchar . . .	104	29·981	+·048	30·045	30·059	10th	29·886	6th	·173	56·5	74·3	−6·4	50·5	−5·1	62·4	−5·8	23·8	81·9	26th, 27th & 28th.	41·5	10th	40·4
9	Sibsagar . .	333	29·754	+·045	30·068	29·864	12th	29·623	7th	·241	52·4	67·4	−5·7	48·4	−4·9	57·9	−5·3	19·0	72·3	4 days.	37·5	13th	34·8
	Dhubri . . .	115	29·960	+·066	30·010	30·052	21st	29·847	7th	·205	52·7	71·1	−6·9	47·3	−8·7	59·2	−7·8	23·8	77·1	25th	37·3	9th	39·8
	Gauhati. . .	195	29·897		30·064	29·991	4th & 12th.	29·777	7th	·214	52·3	72·6		46·6		59·6		26·0	80·6	28th	37·5	3rd	43·1
	Tezpur . .	252	29·823		30·052	29·943	12th	29·686	7th	·257	52·6	71·0		49·4		60·2		21·6	79·0	28th	43·5	1st & 13th.	35·5
	Dibrugarh . .	353	29·721		30·059	29·812	12th	29·600	7th	·242	52·4	67·1		49·1		58·1		18·0	75·1	28th	39·9	13th	35·2
	IV.—Bengal and Orissa.			+·063								74·3	−7·1	52·5	−5·6	63·4	−6·4	21·8					41·9
6	Chittagong . .	87	29·982	+·052	30·022	30·047	4th	29·902	7th	·145	60·3	77·0	−5·3	54·4	−4·6	65·7	−5·1	22·8	83·4	27th	46·6	5th, 10th & 11th.	36·1
	Noakhali . .	43	30·017		30·009	30·109	3rd	29·905	7th	·204	59·2	75·3		52·4		63·8		22·9	82·1	26th, 27th & 28th.	41·5	3rd	40·1
	Comilla . .	36	30·036		30·021	30·136	3rd	29·934	7th	·202	57·3	76·6		?		?			85·4	28th			
	Sirajganj . .	49	30·036		30·037	30·129	3rd	29·940	7th	·189	54·6	73·2		49·8		61·5		23·4	82·8	28th	38·1	3rd	44·7
	Narayanganj. .	26	30·060	+·072	30·035	30·155	3rd	29·958	7th	·197	57·3	75·4	−6·8	52·8	−5·8	64·1	−6·3	22·6	86·6	16th	43·7	3rd	42·9
	Barisal . .	13	30·065	+·065	30·024	30·159	3rd	29·961	7th	·198	60·5	75·0	−6·7	52·0	−7·7	63·5	−7·2	23·0	84·3	26th	42·4	4th	41·9
	Mymensingh .	63	30·026	+·070	30·043	30·107	3rd	29·935	7th	·172	55·7	73·6	−4·8	50·8	−4·8	62·2	−4·8	22·8	80·7	25th	39·7	3rd	41·5
	Faridpur . .	46	30·044		30·043	30·131	3rd	29·948	7th	·183	57·1	74·0		50·1		62·1		23·9	83·4	28th	42·0	3rd & 10th	41·7
10	Jessore ¶ . .	33	30·050	+·065	30·032	30·141	3rd	29·953	7th	·188	58·1	73·4	−9·7	51·7	−5·6	62·6	−7·7	21·7	82·6	26th	43·1	4th	39·3
	Calcutta . .	21	30·067	+·064	30·035	30·155	2nd	29·958	7th	·197	59·3	75·7	−6·3	54·8	−5·8	65·1	−6·1	21·1	86·9	26th	45·9	10th	41·0
	Saugor Island .	25	30·045	+·054	30·015	30·148	3rd	29·924	17th	·224	61·5	75·7	−5·5	57·6*	−7·9*	66·7*	−6·7*	18·1	85·4	26th	45·9	3rd	39·5

* Mean of 27 days. † Observations of 20 days. ¶ Observations of 27 days.

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the rem

Note 2.—The data from which divisional means of the figure colu

'ations in India, Burma, etc., in February 1905.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 28th February 1905	Normal rainfall for period, 1st Dec. to 28th February.	Departure from normal of period, 1st Dec. 1904 to 28th bruary 1905	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													85	+1	·690	+·005	2·7	0				0·24	0·44	−0·23					I.—Burma Coast and Bay Islands
5	12	6	3					N 57° E	5·4			5·4	76		·818		8·0		2			0·48			5·73			0·38	Car-Nicobar.
1	16						11	N 11° E	5·3	5.1	+ 4	6·0	85	+ 1	·794	−.020	4·2	+0·8	0			0	0·40	−0.40	1·63	8·04	−6·41	0	Port Blair.
	1	1	3					S 68° E	2·7	2·0	+35	2·4	88	+5	·795	+·038	2·3	−1·3	4	2.80	+1·20	1·48	1·73	−0·25	2·04	3·02	−0·98	0·65	Mergui.
								Calm	1·1				91	+3	·755	+·061	2·8	+0·4	1	0·80	+0·20	0·27	0·65	−0·38	1·59	0·92	+ 0·67	0·22	Tavoy.
3	3		2				3	N 13° E	2·4	2·4	0	2·7	82	−2	·665	−·011	3·1	+1·8	0	0·50	−0·50	0	0·25	−0·25	0	0·66	−0·66	0	Moulmein.
2	3	1					4	N 2° E	4·0	3·9	+ 3		88	+3	·685	+·052	1·9	+0·7	0	0·40	−0·40	0	0·31	−0·31	0·04	0·52	−0·48	0	Rangoon.
8	2					5	13	N 34° W	7·2	3·8	+89		83	−4	·638	−·031	0·6	−1·4	0	0·30	−0·30	0	0·29	−0·29	0·12	0·56	−0·44	0	Bassein.
12	7	1	1				6	N 7° E	12·6	7·2	+ 75		73	−3?	·671	−·028	1·5	−0·8	0	0·40	−0·40	0	0·07	−0·07	0·05	0·98	−0·93	0	Diamond Island.
22	6							N 9° E	2·5	3·4	−26	2·4	84	+2	·522	−·018	1·1	−0·1	0	0·30	−0·30	0·08	0·12	−0·04	0·11	0·88	−0·77	0·08	Akyab.
5					1		3	N 19° W	4·8	1·9	+153	4·8	85	+1	·560	+·005	1·6	+0·3	0	0·30	−0·30	0·04	0·15	−0·11	0·25	0·10	−0·14	0·04	Toungoo.
													75	+3	·430	−·012	3·3	+0·9				0·33	0·15	+0·15					II.—Burma Inland.
5		2		2	1	8	8	N 56° W	5·9	4·2	+40		68	+2	·462	+·016	1·5	+0·9	2	0·10	+1·90	0·24	0·04	+0·20	0·34	0·21	+0·13	0·13	Thayetmyo
1			1	1	5	2	8	N 82° W	3·7			4·4	69	+5	·442	−·002	1·6	+0·8	0	0·10	−0·10	0·07	0·03	+0·04	0·61	0·66	−0·05	0·04	Minbu.
6			2	3				N 41° E	2·1			2·2	70	0	·452	−·015	1·9	+1·2	1	0·30	+0·70	0·38	0·38	0	0·66	0·95	−0·29	0·35	Yamethin.
						5	4	N 70° W	1·9				71		·409		1·6		1	0	+1·00	0·21	0	+0·21	0·54	0·15	+0·39	0·19	Monywa.
3					1		1	N 24° W	1·4			1·4	74	+5	·427	−028	9·2	+8·1?	0	0·30	−0·30	0·08	0·05	+0·03	0·68	0·39	+0·29	0·03	Mandalay.
	4	5	2		1			N 84° E	2·2*			2·2*	84		·418		4·1		3			0·56			0·85			0·23	Myitkyina.
5	6	4					1	N 37° E	1·7			2·0	89	+2	·403	−·031	3·3	+0·5	3	1·10	+1·90	0·78	0·39	+0·39	1·53	1·53	0	0·38	Bhamo.
				1	3			S 34° W	1·7				86		·347		1·1		3	0·30	+2·70	0·43	0·30	+0·13	1·23	0·81	+0·42	0·20	Maymyo.
2	6	3		5	4	1	2	S 55° E	3·1				82	0	·341	−·011	2·5	−1·9	1			0·67	0·29	+0·38	1·85	1·34	+0·51	0·42	Lashio.
													88	−1	·360	−·086	5·0	+1·1				0·66	1·49	−0·83					III.—Assam.
								Calm	0	2·8	−100	0	84	−3	·394	−·098	2·4	−1.3	2	3·70	−1·70	0·79	2·31	−1·52	1·02	3·49	−2·47	0·40	Silchar.
	1							N 45° E	1·4	2·2	−36	1·3	99	+1	·392	−·066	8·9	+3·0	2	4·90	−2·90	0·71	1·96	−1·27	2·17	3·86	−1·69	0·30	Sibsagar
3	6	8	2	1	5	2	1	N 74° E	4·3	4·0	−8	5·1	82	−2	·334	−·093	3·7	+1·5	2	1·20	+0·80	0·98	0·48	+0·50	1·05	0·98	+0·07	0·66	Dhubri.
1	1		2	2	1			S 31° E	1·6			1·8	84		·337		3·7		2	1·80	+0·20	0·35	0·73	−0·38	0·89	1·61	−0·72	0·16	Gauhati.
	8	4			1			N 61° E	3·4			3·6	87		·351		4·8		1	2·60	−1·60	0·21	0·87	−0·66	0·58	1·95	−1·37	0·16	Tezpur.
3	4	5	1	3	1	1		N 79° E	1·3			1·2	92		·354		6·3		4	6·70	−2·70	0·90	2·56	−1·66	3·02	4·89	−1·87	0·29	Dibrugarh.
													77	−6	·379	−·107	3·4	+1·0				1·38	0·90	+0·48					IV.—Bengal and Orissa
7	16		1	1			1	N 33° E	3·3	4·4	−25	3·0	78	−6	·419	−·104	2·4	+0·1	0	1·39	−1·39	0·20	0·98	−0·78	0·39	2·13	−1·74	0·09	Chittagong
2	5	2			1	8	10	N 40° W	2·5			2·8	80		·423		3·4		4	1·81	+2·19	1·93	1·00	+0·93	2·09	1·82	+0·27	1·02	Noakhali.
2	3			3		2	2	N 18° W	1·8			1·5	80		·389		3·4		2	2·18	−0·18	0·53	0·97	−0·44	0·56	1·73	−1·17	0·35	Comilla.
	2	1	1			2	2	N 9° W	1·5			1·5	89		·387		2·2		4	1·57	+2·43	0·83	0·91	−0·08	1·29	1·49	−0·20	0·31	Sirajganj.
4	3	1			1	3	12	N 33° W	3·0	2·6	+15	2·6	77	−7	·374	−·137	3·5	−0·7	2	2·12	−0·12	0·84	1·28	−0·44	1·12	1·82	−0·70	0·64	Narayanganj.
8	6	1	1	1	3	1	5	N 5° W	2·8			2·4	92	P	·493	−·066	3·3	−0·6	2	1·77	+0·23	1·35	1·04	+0·31	1·91	2·31	−0·40	0·92	Barisal.
1		3	2		1	1	7	N 27° W	2·1			1·8	76	−9	·344	−·113	9·0	+6.9?	2	1·48	+0·52	0·80	1·03	−0·23	1·04	1·58	−0·54	0·46	Mymensingh.
8			1	1		1	7	N 24° W	2·3			1·9	75		·363		2·3		2	2·00	0	1·42	1·32	+0·10	2·32	1·89	+0·43	1·19	Faridpur.
6	1							N 8° E	2·2	2·0	+10	2·2	77	−6	·383	−·119	2·6	+0·3	3	1·77	+1·23	1·48	1·16	+0·32	3·17	1·80	+1·37	1·07	Jessore§.
7	10	2		1	1	1	5	N 14° E	3·9	3·8	+3		71	−10	·377	−·140	3·6	+1·4	3	1·61	+1·39	1·62	1·00	+0·62	2·56	1·54	+1·02	1·34	Calcutta.
12	9	1	2	1	1		2	N 22° E	9·1	7·9	+15		80	−6	·459	−·183	4·6	+1·4	1	1·74	−0·74	1·59	1·12	+0·47	2·83	1·66	+1·17	1·55	Saugor Island.

any station, the data for that station are not utilized in calculating the provincial departures from normal.
s. 40, 42, and 44 are derived, are incomplete.

§ Wind observations of 23 days.

** Mean of 26 days.

Table

Abstract of Observations taken at 8 A.M. at 231 Stations

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10	Krishnagar	47	30·037		30·036	30·119	3rd	29·933	7th	·186	55·4	74·4		51·5		63·0		22·9	84·6	26th	39·4	3rd	45·2
	Midnapore	149	29·931		30·036	30·023	2nd	29·827	7th	·196	60·2	76·5		55·9		66·2		20·6	87·8	27th	45·2	3rd	42·6
11	Bankura	298	29·762		30·045	29·858	4th	29·638	17th	·220	58·9	74·1		54·2		64·1		19·9	87·1	27th	44·6	2nd & 3rd.	42·5
	Raniganj	334	29·755		30·067	29·847	21st	29·661	7th	·186	55·8	73·7		52·0		62·8		21·7	84·5	26th & 27th.	42·2	3rd	42·3
	Burdwan	99	29·986	+·063	30·041	30·080	3rd	29·891	7th	·189	57·9	75·2	-8·6	53·4	-5·2	64·3	-6·9	21·8	86·4	26th	40·2	3rd	46·2
	Naya Dumka	489	29·579		30·062	29·665	4th	29·477	7th	·188	56·7	71·7		50·9		61·3		20·8	83·4	28th	41·4	2nd	42·0
	Berhampore	67	30·024	+·070	30·044	30·115	3rd & 4th.	29·916	7th	·199	56·2	73·2	-8·8	51·7	-4·8	62·5	-6·8	21·5	84·2	28th	42·1	3rd	42·1
	Rampur Boalia	70	30·019		30·043	30·108	3rd	29·915	7th	·193	56·1	72·6		49·8		61·2		22·8	82·1	28th	39·0	3rd	43·1
	Malda	72	30·005		30·034	30·105	4th	29·902	24th	·203	55·5	70·9		48·8		59·9		22·1	80·1	25th & 26th.	39·0	3rd	41·1
	Bogra	61	30·005	+·074	30·023	30·092	3rd	29·915	7th	·177	54·2	73·4	-6·8	49·7	-4·8	61·5	-5·6	23·7	81·3	24th, 25th & 26th.	38·7	3rd	42·6
12	Dinajpur	123	29·955	+·070	30·042	30·041	4th	29·836	7th	·205	54·4	72·0	-7·1	45·5	-7·6	58·7	-7·5	26·5	80·3	24th & 26th.	34·0	3rd	46·3
	Rangpur	123	29·958*		30·047*	30·046	21st	29·844	7th	·202	52·4	71·4		?		?		?	78·3	24th	?		?
	Jalpaiguri	284	29·790	+·065	30·053	29·881	12th	29·672	7th	·209	51·6	69·4	-7·1	45·4	-7·4	57·4	-7·3	24·0	75·4	24th & 27th.	36·1	3rd	39·3
	Cooch Behar	156	29·916		30·042	30·015	21st	29·810	7th	·205	51·1	69·9		46·1		58·2		23·5	76·2	24th	37·6	3rd	38·6
17	Purnea	125	29·957	+·075	30·048	30·044	12th	29·837	7th	·207	51·3	71·4	-7·7	45·9	-5·5	58·6	-6·6	25·5	80·2	25th & 26th.	35·0	2nd	45·2
14	Balasore	50	30·025	+·054	30·031	30·136	12th	29·903	17th	·233	61·0	78·3	-7·1	55·7	-6·2	67·0	-6·7	22·6	89·4	26th	44·4	3rd	45·0
	False Point	21	30·045	+·044	30·009	30·147	12th	29·931	7th & 17th.	·216	66·8	76·4	-6·4	60·7	-4·1	68·6	-5·3	15·7	91·0	28th	48·0	13th	43·0
	Cuttack	80	29·981	+·044	30·008	30·101	12th	29·867	7th	·234	68·3	82·4	-7·7	65·3	-0·4	73·9	-4·1	17·1	93·9	28th	52·1	3rd	41·8
	Puri	24	30·038		30·001	30·151	12th	29·926	7th	·225	67·5	78·5		64·0		71·3		14·5	89·2	28th	53·6	3rd	35·6
	V.—Gangetic Plain and Chota Nagpur.			+·063								70·2	-9·5	47·6	-6·1	58·9	-7·8	22·6					44·3
15	Hazaribagh	2,007	27·987	+·027	30·053	28·077	11th	27·861	17th	·216	53·9	68·8	-9·2	48·3	-6·2	58·6	-7·7	20·5	79·7	27th	37·8	2nd	41·9
	Ranchi	2,128	27·869	+·032	30·062	27·947	21st	27·746	17th	·201	53·1	68·5	-9·7	49·2	-5·6	58·8	-7·7	19·3	83·2	27th	38·5	3rd	44·7
	Daltonganj	*730*	29·341		30·082	29·453	11th	29·187	16th	·266	53·3	73·4		45·0		59·7		27·4	85·0	25th, 26th, & 27th	32·5	3rd	52·5
	Purulia	*816*	29·236		30·049	29·326	4th	29·102	17th	·224	57·3	73·2		52·4		62·9		20·8	88·0	27th	41·9	3rd	46·1
	Chaibassa	*760*	29·291	+·060	30·049	29·391	3rd	29·163	17th	·228	56·5	75·4	-9·8	53·6	-4·7	64·5	-7·3	21·8	89·4	26th	43·5	3rd	45·9
16	Gaya	375	29·707	+·065	30·063	29·810	2nd	29·586	17th	·224	55·2	71·3	-10·0	49·5	-6·7	60·4	-8·4	21·8	83·4	28th	42·0	1st, 2nd & 3rd.	41·4
	Dehri	351	29·725		30·056	29·834	2nd	29·593	16th	·241	55·8	71·3		51·5		61·4		19·8	87·3	25th	42·0	3rd	45·3
	Patna	183	29·908	+·072	30·059	29·998	21st	29·799	7th	·199	54·3	70·2	-8·0	48·8	-4·8	59·5	-6·4	21·4	81·0	26th	36·3	2nd	44·7
	Arrah	190	29·918		30·077	30·007	11th	29·815	17th	·192	53·0	71·1		50·2		60·7		20·9	82·3	28th	40·0	2nd	42·3
	Buxar	239	29·838		30·053	29·933	2nd	29·713	17th	·220	53·4	71·4		48·1		59·8		23·3	84·1	28th	37·0	3rd	47·1
17	Bhagalpur	160	29·930		30·052	30·013	4th	29·817	7th	·196	57·4	70·9		49·6		60·3		21·3	80·3	24th	37·7	2nd	42·6
	Darbhanga	166	29·907	+·064	30·041	30·005	4th	29·789	7th	·216	51·8	69·8	-7·0	45·7	-8·7	57·8	-7·9	24·1	79·1	24th	34·2	2nd	44·9
	Muzaffarpur	178	29·915		30·063	30·006	21st	29·800	7th	·206	53·8	68·8		47·2		58·0		21·6	78·2	24th, 25th & 26th.	36·2	1st	42·1
	Motihari	224	29·853		30·057	29·948	4th	29·743	7th	·205	48·5	69·3		42·7		56·0		26·6	78·3	24th & 26th.	32·1	3rd	45·1
	Chapra	181	29·891		30·042	29·975	11th	29·788	7th	·187	52·8	70·8		47·1		59·0		23·7	82·3	26th	37·7	1st & 3rd.	44·1
18	Benares	267	29·817	+·069	30·061	29·933	2nd	29·676	17th	·257	53·3	70·6	-9·8	45·7	-6·3	58·2	-8·1	24·9	80·5	25th & 28th.	34·5	2nd	46·1
	Allahabad	309	29·773	+·066	30·061	29·695	2nd	29·609	16th	·286	52·9	70·9	-9·3	46·6	-5·2	58·8	-7·3	24·3	80·7	25th	34·1	2nd	46·
23	Gorakhpur	257	29·800	+·061	30·034	29·896	2nd	29·700	16th	·196	52·4	68·1	-9·9	46·2	-6·4	57·2	-8·2	21·9	77·1	26th & 27th.	37·0	1st & 2nd.	40·
19	Lucknow	368	29·702	+·066	30·060	29·827	2nd	29·570	16th	·257	51·2	68·5	-10·3	45·2	-5·7	56·9	-8·0	23·3	77·2	28th	34·6	1st & 2nd.	42·
20	Bahraich	401	29·651	+·069	30·048	29·746	2nd	29·557	16th	·189	49·3	67·4	-9·3	44·5	-6·2	56·0	-7·8	22·9	74·6	27th	32·6	2nd	42·
21	Cawnpore	416	29·661	+·062	30·070	29·784	2nd	29·531	16th	·253	51·5	68·8	-10·0	44·9	-6·6	56·9	-8·3	23·9	76·2	27th	33·1	2nd	43·
	Mainpuri	516	29·554	+·081	30·072	29·691	2nd	29·387	16th	·304	48·9	66·1	-10·7	44·0	-6·4	55·1	-8·6	22·1	73·3	14th & 27th.	31·3	2nd	42·

* Mean of 27 days.

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of a

Note 2.—The data from which divisional means of the figure columns Nos.

-continued.

India, Burma, etc., in February 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 28th Feb. 1905.	Normal rainfall for period, 1st Dec. to 28th February.	Departure from normal of period, 1st Dec. 1904 to 28th Feb. 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
5	2	1				1	3	N 6° W	1·6			1·8	79		·358		3·2		3	1·58	+ 1·42	2·79	1·10	+1·69	4·90	1·63	+3·27	1·92	Krishnagar.
15	2			3	1		4	N 7° W	3·3			2·9	67		·364		2·8		4	1·77	+ 2·23	2·48	1·09	+1·39	4·71	1·84	+2·87	1·12	Midnapore.
2	3				2	5	6	N 52° W	3·0			2·6	68		·348		3·2		4	1·88	+ 2·12	1·29	1·03	+ 0·26	2·49	1·50	+ 0·99	0·55	Bankura.
1	1	2	1		1		6	N 22° W	2·6				73		·311		3·1		3	1·52	+ 1·48	2·79	1·05	+ 1·74	3·90	1·56	+ 2·34	2·04	Raniganj.
7	3	1	1		1	1	2	N 6° E	2·1	2·3	− 9	2·1	70	+ 2	·347	−·069	3·0	+0·5	4	1·58	+ 2·42	2·36	0·92	+ 1·44	3·82	1·32	+ 2·50	1·06	Burdwan.
1		1	1					N 81° E	1·6			1·8	67		·318		3·1		4	1·62	+ 2·38	1·63	0·70	+ 0·93	2·38	1·45	+ 0·93	0·92	Naya Dumka.
		2	1			5		S 63° W	1·8	2·4	− 25	1·5	77	− 3	·355	−·090	3·5	+1·3	4	1·65	+ 2·35	1·35	0·97	+ 0·38	2·19	1·49	+ 0·70	0·73	Berhampore.
	1							N 45° E	2·0			2·0	79		·341		2·4		4	1·35	+ 2·65	1·22	0·84	+ 0·38	2·00	1·25	+ 0·75	0·57	Rampur Boalia.
4	2		2	3	4	5	8	N 70° W	5·3			4·9	75		·336		3·4		3	1·23	+ 1·77	2·26	0·75	+ 1·51	3·64	1·67	+ 1·97	1·57	Malda.
1	1			1	2	1		S 63° W	1·9			1·6	71	− 8	·307	−·114	2·1	+0·3	2	1·52	+ 0·48	1·49	0·85	+ 0·64	1·76	1·44	+ 0·32	0·76	Bogra.
2	3			3	8	7	2	S 72° W	2·8			2·7	71	− 9	·307	−·086	4·0	+2·5	2	1·39	+ 0·61	1·26	0·37	+ 0·89	1·41	0·92	+ 0·49	1·07	Dinajpur.
	2				9	1	7	W	2·6			2·5	87		·350		2·3		3	1·13	+ 1·87	1·28	0·43	+ 0·85	1·34	1·01	+ 0·33	0·95	Rangpur.
3	3	1	1		1	1	2	N 11° E	1·1			1·4	83	− 3	·323	−·059	2·6	+1·1	3	1·03	+ 1·97	1·22	0·45	+ 0·77	1·42	0·99	+ 0·43	0·53	Jalpaiguri.
	3	4						N 72° E	1·4			1·5	87		·327		3·1		3	1·21	+ 1·79	0·69	0·42	+ 0·27	0·69	0·93	− 0·24	0·30	Cooch Behar.
	4				7	3	5	N 84° W	4·4	2·5	+ 76	3·9	73	− 6	·307	−·086	1·2	−0·3?	3	1·13	+ 1·87	1·31	0·56	+ 0·75	1·55	1·13	+ 0·42	0·96	Purnea.
12	3	2			2		6	N 7° W	3·8			2·8	70	− 8	·399	−·127	4·0	+1·0	2	2·16	− 0·16	0·72	1·20	− 0·50	1·94	1·65	+ 0·29	0·54	Balasore.
13	5		1	2		3	1	N 4° E	7·6	7·5	+ 1	7·9	81	− 5	·554	−·113	5·5	+2·4	3	1·29	+ 1·71	0·96	0·95	+ 0·01	2·32	2·10	+ 0·22	0·43	False Point.
	7	8			1			N 72° E	3·0	2·2	+ 36		69	− 9	·458	−·104	4·7	+2·3	1	1·16	− 0·16	0·54	0·46	+ 0·08	1·05	0·89	+ 0·16	0·54	Cuttack.
7	10		1	2	2		1	N 29° E	11·3			11·1	73		·521		5·3		2	1·08	+ 0·92	1·22	0·99	+ 0·23	2·51	1·90	+ 0·61	0·62	Puri.
													73	+ 4	·304	−·063	3·4	+ 1·3				1·23	0·67	+ 0·56					V.—Gangetic Plain and Chota Nagpur.
4		2	1	5	4	2	7	N 87° W	7·9	6·5	+ 22	7·0	56	− 1	·240	−·064	3·8	+1·2	4	1·84	+ 2·16	1·39	0·76	+ 0·63	2·79	1·44	+ 1·35	0·59	Hazaribagh.
4		2	1	4	1	2	9	N 53° W	6·8			8·0	64	+ 5	·271	−·055	3·6	+1·5	4	2·10	+ 1·90	1·91	1·36	+ 0·58	4·47	1·74	+ 2·73	0·88	Ranchi.
1	1	3	1		2	1	1	N 16° E	3·9			3·2	74		·309		2·8		4	1·30	+ 2·70	0·93	0·53	+ 0·40	2·98	1·58	+ 1·40	0·46	Daltongani.
1	1	2		2	1	12	4	N 81° W	2·8			3·4	88		·334		3·2		5	1·97	+ 3·03	2·50	1·02	+ 1·48	4·92	1·64	+ 3·28	1·77	Purulia.
								Calm	1·3			1·2	87	+18	·414	?	2·5	+0·4	6	1·61	+ 4·39	3·30	1·26	+ 2·04	4·96	1·50	+ 3·46	1·31	Chaibassa.
2	3	1	2	2	2	8	1	W	5·5	2·6	+112	4·3	68	0	·303	−·080	3·8	+1·5	3	1·39	+ 1·61	1·41	0·63	+ 0·78	2·72	1·39	+ 1·33	0·56	Gaya.
2		2	1	4	9	6		S 48° W	5·9			5·2	67		·307		4·1		3	1·29	+ 1·71	1·33	0·52	+ 0·81	1·90	1·43	+ 0·47	0·60	Dehri.
	1	2	3	3	7	9		S 45° W	5·1	2·9	+ 76	5·8	69	+ 1	·300	−·071	3·4	+1·0	1	1·16	− 0·16	0·24	0·60	− 0·36	0·47	1·26	− 0·79	0·10	Patna.
	3		1	2	7	1		S 27° W	2·7			2·7	67		·280		1·2		1	1·10	− 0·10	0·17	0·61	− 0·44	0·50	1·62	− 1·12	0·10	Arrah.
		7	1	5	8	4	1	S 15° W	7·1			6·7	65		·275		3·6		1	1·39	− 0·39	0·36	0·52	− 0·16	1·19	1·50	− 0·31	0·19	Buxar.
1		2		2	2	8		S 74° W	3·4			3·1	66		·318		3·9		3	1·52	+ 1·48	1·72	0·68	+ 1·04	2·43	1·30	+ 1·13	1·11	Bhagalpur.
1	1	2		1	6	10	1	S 76° W	3·2	3·3	− 3	2·8	81	+ 4	·321	−·071	3·1	+1·5	3	1·23	+ 1·77	0·87	0·51	+ 0·36	1·05	1·20	− 0·15	0·29	Darbhanga.
		1			2	5	4	N 83° W	3·0				79		·335		2·0		4	1·27	+ 2·73	0·77	0·47	+ 0·30	1·54	1·33	+ 0·21	0·23	Muzaffarpur.
	1	1	1	1	7	5		S 53° W	4·3			4·1	89		·312		4·9		2	1·00	+ 1·00	1·15	0·37	+ 0·78	2·11	1·10	+ 1·01	0·76	Motihari.
3	3	1	2	1	7	2	1	S 56° W	3·1			2·8	76		·309		3·2		1	1·13	− 0·13	0·37	0·49	− 0·12	0·69	1·32	− 0·63	0·27	Chapra.
1		4	2		7	4	1	N 43° W	2·7	4·1	− 34	3·1	76	0	·321	−·057	4·1	+1·9	1	1·20	− 0·20	0·35	0·46	− 0·11	1·79	1·34	+ 0·45	0·26	Benares.
1	3	5	1	1	2	7	3	N 52° W	4·6	4·2	+ 10	4·0	76	+ 7	·315	−·046	3·9	+1·4	1	1·00	0	0·20	0·47	− 0·27	1·83	1·47	+ 0·36	0·12	Allahabad.
1		2	1		4	6	4	N 88° W	1·9	2·3	− 17		77	+ 4	·311	−·053	3·3	+1·4	4	1·30	+ 2·70	1·40	0·49	+ 0·91	2·69	1·39	+ 1·30	0·90	Gorakhpur.
	1	3	2	2	2	5	6	N 89° W	2·1	3·3	− 33	2·3	70	− 2	·269	−·075	3·8	+1·0	3	1·20	+ 1·80	1·51	0·44	+ 1·07	2·58	1·78	+ 0·80	0·93	Lucknow.
		2					3	N 3° W	1·1			1·0	85	+ 7	·305	−·063	4·4	+1·4	4	1·60	+ 2·40	2·33	1·01	+ 1·32	3·99	2·27	+ 1·72	1·95	Bahraich.
1	1		2			8	2	N 76° W	3·1				68	+ 1	·268	−·066	2·7	+0·8	3	1·00	+ 2·00	1·46	0·48	+ 0·98	2·90	1·33	+ 1·57	1·08	Cawnpore.
1	1	2	2	2	4	4	3	S 63° W	2·3			2·3	75	+ 3	·267	−·060	2·6	−1·2?	2	0·70	+ 1·30	1·28	0·96	+ 0·32	4·29	2·03	+ 2·26	0·9	Mainpuri.

ation, the data for that station are not utilized in calculating the provincial departures from normal.
and 44 are derived, are incomplete.

Tabl

Abstract of Observations taken at 8 A.M. at 231 Statio

Number of District.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Upper Sub-Himalayas.			+·063								60·5	-11·4	41·1	−6·1	50·8	−8·8	19·3					38·5
24	Bareilly . .	568	29·481	+·068	30·061	29·577	2nd	29·353	16th	·224	48·0	62·9	-12·1	43·9	−5·8	53·4	−9·0	19·0	70·8	14th	32·1	2nd	38·7
	Dehra Dun . .	2,233	27·747	+·035	30·095	27·856	20th	27·641	16th	·215	42·7	58·1	-11·1	39·4	−7·6	48·7	−9·4	18·7	69·0	26th	30·0	1st	39·0
	Roorkee . .	899	29·134	+·066	30·082	29·247	20th	29·010	16th	·237	44·4	62·0	-11·1	39·9	−7·8	51·0	−9·5	22·1	69·8	14th	28·2	2nd	41·6
22	Meerut . .	738	29·303	+·058	30·073	29·412	20th	29·149	16th	·263	46·1	63·0	-11·5	43·5	−4·9	53·3	−8·2	19·5	71·9	14th	31·6	2nd	40·3
26	Delhi . . .	718	29·335	+·060	30·080	29·452	2nd	29·188	16th	·264	47·7	61·8	-13·0	44·5	−7·3	53·2	−10·2	17·3	70·2	14th	33·5	2nd	36·7
28	Lahore . . .	702	29·358	+·061	30·101	29·472	20th	29·221	16th	·251	43·0	60·7	-12·0	39·5	−4·6	50·1	−8·3	21·2	69·8	26th	30·1	2nd	39·7
27	Sirsa . . .	662	29·404	+·067	30·095	29·530	20th	29·249	16th	·281	45·7	61·8	-13·4	41·6	−5·2	51·8	−9·3	20·2	71·2	28th	30·5	1st	40·7
	Patiala . . .	*818*	29·232		30·091	29·340	20th	29·081	16th	·259	45·9	59·6		42·0		50·8		17·6	67·9	14th	30·7	1st	37·2
29	Ludhiana . .	812	29·234	+·068	30·089	29·349	20th	29·108	16th	·241	44·8	59·0	-12·2	42·2	−5·3	50·6	−8·8	16·8	67·2	26th	30·0	1st	37·2
	Sialkot . . .	830	29·227	+·079	30·108	29·335	11th	29·088	16th	·247	43·9	59·9	-9·7	41·3	−4·8	50·6	−7·3	18·6	69·5	26th	32·5	1st	37·0
	Ambala . .	892	29·146	+·086	30·086	29·254	20th	28·998	16th	·256	45·0	61·8	-9·7	40·9	−6·9	51·4	−8·3	20·9	70·0	14th	30·7	1st	39·3
	Rawalpindi . .	1,674	28·340	+·040	30·150	28·458	11th	28·220	27th	·238	29·1	55·5	−9·3	35·0	−6·4	45·3	−7·9	20·5	63·9	11th & 15th.	29·0	1st, 2nd & 3rd.	34·9
	VII.—Indus Valley and North-West Rajputana.			+·066								66·3	-9·1	43·5	−6·0	54·9	−7·6	22·8					44·0
32	Peshawar . .	1,110	28·960	+·031	30·162	29·081	22nd	28·785	17th	·296	40·1	57·9	-8·2	35·3	−7·3	46·6	−7·8	22·6	67·2	14th	28·4	3rd	38·8
	D. I. Khan . .	590	29·525	+·065	30·125	29·662	11th	29·323	17th	·339	43·6	62·5	−9·4	37·9	−7·0	50·2	−8·2	24·6	71·3	13th	26·8	2nd	44·5
31	Khushab . .	612	29·479	+·082	30·126	29·589	20th	29·310	27th	·279	43·1	61·7	−7·0	39·1	−7·0	50·4	−7·0	22·6	70·3	14th & 26th.	28·4	2nd	41·9
	Montgomery . .	558	29·528	+·082	30·108	29·658	11th	29·361	27th	·297	44·7	62·1	-10·7	39·2	−7·2	50·6	−9·0	22·9	70·8	13th & 14th.	28·5	6th	42·3
	Multan . .	420	29·674	+·054	30·100	29·806	2nd	29·475	17th	·331	46·7	65·1	−8·6	43·0	−4·5	54·1	−6·6	22·1	73·8	26th	32·5	1st	41·3
47	Jacobabad . .	186	29·930	+·070	30·094	30·093	10th	29·793	15th & 17th.	·300	49·8	69·6	−8·3	44·3	−4·2	57·0	−6·2	25·3	77·9	16th	29·0	1st	48·9
	Hyderabad . .	96	30·034	+·075	30·092	30·193	11th	29·889	15th	·304	53·5	71·4	−9·4	49·3	−5·1	60·4	−7·3	22·1	83·1	14th	40·5	5th	42·6
	Kurrachee . .	30	30·099	+·071	30·081	30·238	11th	29·939	15th	·299	57·6	72·3	−7·4	54·2	−3·8	63·2	−5·6	18·1	80·4	20th	46·2	5th	34·2
51	Bikaner . .	*771*	29·283	+·059	30·099	29·435	11th	29·133	16th	·302	48·4	64·4	-11·5	44·7	−8·8	54·6	−10·2	19·7	76·1	14th	31·1	1st	45·0
	Pachpadra . .	*380*	29·707	+·069	30·076	29·837	11th	29·567	16th	·270	51·0	72·2	−10·9	43·5	−5·3	57·7	−8·1	28·7	84·1	14th	27·5	1st	56·6
	Jodhpur . .	782	29·289		30·112	29·443	11th	29·147	16th	·296	52·0	70·0		47·6		58·9		22·4	81·6	14th	33·6	1st	48·0
	VIII.—East Rajputana, Central India and Gujarat.			+·053								74·2	−8·3	49·2	−5·5	61·8	−6·9	25·0					45·8
50	Jaipur . . .	1,431	28·616	+·050	30·113	28·732	2nd	28·461	16th	·271	49·7	67·2	-11·4	44·0	−7·9	55·6	−9·7	23·2	75·2	13th	28·0	1st	47·2
	Bharatpur . .	585	29·485		30·081	29·627	2nd	29·311	16th	·316	48·4	65·7		41·2		55·0		21·5	73·9	27th	33·1	2nd	40·8
	Kotah . . .	819?	29·228		30·104	29·361	2nd	29·062	16th	·299	53·3	72·7		48·3		60·5		24·4	81·5	28th	37·0	1st	44·5
	Sambhar . .	1,254	28·789	+·055	30·106	28·919	2nd	28·638	16th	·281	46·9	66·7	-10·7	42·5	−7·2	54·6	−9·0	24·2	73·8	14th	26·0	1st & 2nd.	47·8
	Ajmer . . .	1,611	28·436	+·041	30·126	28·553	2nd	28·285	16th	·268	48·2	66·8	-11·0	44·8	−4·6	55·8	−7·8	22·0	75·4	14th	30·0	1st	45·4
	Udaipur . .	1,925	28·108		30·098	28·232	11th	27·963	16th	·269	53·4	72·5		45·2		58·8		27·3	81·4	14th	32·2	1st	49·2
46	Bhuj . . .	395	29·698	+·066	30·072	29·804	10th	29·574	15th	·230	59·0	77·2	−7·1	53·1	−5·0	65·1	−6·1	24·1	86·3	23rd	42·9	1st	43·4
	Jamnagar . .	61	30·043		30·049	30·153	11th	29·935	15th	·218	58·9	78·0		52·1		65·0		25·9	85·0	14th	42·7	7th	42·3
	Rajkot . . .	429	29·642	+·046	30·049	29·742	1st	29·543	15th	·199	58·0	80·5	−6·7	50·0	−4·5	65·3	−5·6	30·5	91·9	23rd	38·1	1st	53·8
	Veraval . .	*18*	30·068	+·065	30·028	30·147	2nd	29·993	4th	·154	63·3	77·1*	−4·4*	58·1*	−2·6*	68·1*	−3·5*	19·0	83·6	26th	51·8	1st	31·8
	Dwarka . .	37?	30·063		30·048	30·151	1st	29·955	15th	·196	64·1	74·4		58·4		66·4		16·0	80·9	26th	49·1	1st & 2nd.	31·8
	Bhavnagar Para.	55	30·037	+·045	30·036	30·141	10th	29·924	16th	·217	59·1	81·3	−3·2	51·6	−8·2?	66·7	-5·7?	30·2	92·1	27th	39·5	2nd	52·6
49	Nowgong . .	757	29·306	+·050	30·082	29·438	2nd	29·150	16th	·288	50·4	70·6	−9·7	41·8	−6·3	57·7	−8·0	25·8	80·5	25th & 27th	31·5	2nd	49·0
	Indore . . .	1,823	28·205	+·037	30·081	28·321	2nd	28·066	16th	·255	55·0	75·8	−7·5	45·7	−6·4	60·8	−7·0	30·1	88·6	24th	33·6	1st	55·0
	Neemuch . .	1,630	28·421	+·055	30·116	28·532	2nd	28·264	16th	·268	51·6	72·7	−8·5	45·2	−6·9	59·0	−7·7	27·5	83·0	24th	34·8	8th	48·2

* Mean of 27 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns

NOTE 2.—The data from which divisional means of the figure columns

—continued.

n India, Burma, etc., in February 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 28th Feb. 1905.	Normal rainfall for period, 1st Dec. 04 to 28th February.	Departure from normal of period, 1st Dec. 1904 to 28th February 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													83	+6	·251	—·047	4·9	+1·1				1·91	1·37	+0·56					VI.—Upper Sub-Himalayas.
		2				3	1	N 66° W	1·5	4·0	−63	1·4	88	+12	·302	−·022	4·8	+1·7	5	1·18	+3·82	1·66	0·74	+ 0·92	4·79	2·12	+ 2·67	0·87	Bareilly.
1	1					1		N 11° E	1·2	2·0	−40		79	+ 5	·225	−·056	6·0	+2·2	6	4·10	+1·90	3·82	2·21	+ 1·61	9·21	5·39	+ 3·82	1·76	Dehra Dun.
1	1	2	2	1			6	N 2° W	3·6	2·8	+29		84	+ 4	·258	−·050	4·4	+1·1	3	2·90	+0·10	2·06	1·32	+ 0·74	7·15	3·61	+ 3·54	0·94	Roorkee.
1	1	1	1	1	2	7	1	S 84° W	1·1	2·6	−58	1·1	76	+ 3	·248	−·055	4·3	+1·2	4	1·50	+2·50	1·19	0·90	+ 0·29	3·93	2·73	+ 1·20	0·50	Meerut.
1	6	2	1	1	1	5	8	N 28° W	4·0	3·6	+11	3·5	75	+10	·257	−·025	5·5	+1·8	2	1·40	+0·60	0·60	0·71	− 0·11	3·14	2·47	+ 0.67	0·20	Delhi.
	2	2				4	2	N 36° W	2·1	2·4	−13		87	+9	·249	−·046	4·4	+0·8	3	2·20	+0·80	1·12	1·10	+ 0·02	2·98	2·60	+ 0·38	0·80	Lahore.
	1	3			1	1		E	1·2	3·4	−65	1·0	80	+7	·251	−·037	4·9	+0·8	1	1·10	−0·10	0·19	0·33	− 0·14	2·06	1·48	+ 0·58	0·19	Sirsa.
6	3	6	3	1	1	1	4	N 41° E	4·8			4·8	80		·252		6·2		3			1·72			5·78			1·05	Patiala.
1	2		3					N 85° E	1·3	1·6	−19	1·2	84	+ 6	·253	−·055	4·5	0	6	2·40	+3·60	1·68	1·30	+ 0·38	4·93	3·92	+ 1·01	0·47	Ludhiana.
4	3	3	1		1	1	1	N 33° E	2·3	1·7	+35	2·0	82	+ 3	·240	−·067	3·4	+0·2	4	3·50	+0·50	2·66	1·80	+ 0·86	8·83	4·83	+ 4·00	1·04	Sialkot.
		1	7			1	13	N 45° W	3·5			3·1	89	+5	·268	−·056	6·4	+3·0	7	2·30	+4·70	3·57	2·41	+ 1·16	7·62	4·85	+ 2·77	1·48	Ambala.
	2			1	3	1	2	S 84° W	2·8	2·4	+17	2·6	86	+ 4	·210	−·053	4·1	−0·2	4	4·40	−0·40	2·68	2·24	+ 0·44	8·28	5·72	+ 2·56	1·73	Rawalpindi
													63	0	·220	−·051	3·6	+0·5				0·89	0·46	+0·43					VII.—Indus Valley and North-West Rajputana
				2		2		S 45° W	0·9	3·3	−73	1·0	68	−18	·174	−·078	4·2	−0·3	4	2·90	+1·10	1·91	1·22	+0·69	3·70	3·15	+ 0·55	0·70	Peshawar.
	2				1	5		N 35° W	1·3	2·0	−35	1·4	69	− 2	·201	−·059	3·0	−0·3	5	2·00	+3·00	1·10	0·77	+ 0·33	2·14	1·44	+ 0·70	0·49	D. I. Khan.
5	3	1		3	2	2		N 29° E	5·5			5·3	70	0	·199	−·033	3·8	+0·5	3	1·80	+1·20	1·48	0·69	+ 0·79	2·88	2·05	+ 0·83	1·07	Khushab.
6	3	2	2			3		N 33° E	5·3			5·0	72	+ 3	·217	−·058	4·2	+0·5	1	1·30	−0·30	0·77	0·67	+ 0·10	2·31	1·93	+ 0·38	0·48	Montgomery.
1	1	5		1		1		N 60° E	1·4	2·4	−42	1·3	68	0	·222	−·082?	3·5	+0·2	3	1·20	+1·80	0·50	0·43	+ 0·07	1·86	1·07	+ 0·79	0·16	Multan.
1	2	3	1	2	1	4		N 3° W	3·9	3·0	+30	4·1	67	+10	·246	−·003	3·0	−0·4	3	0·90	+2·10	0·54	0·34	+ 0·20	1·40	0·70	+ 0·70	0·20	Jacobabad.
1	1	1		3		9		N 24° W	6·5	7·0	− 7	5·8	56	− 1	·229	−·073	3·3	+0·6	3	0·60	+2·40	0·91	0·22	+ 0·69	1·60	0·51	+ 1·09	0·27	Hyderabad.
16	3				2	2		N 35° E	7·4	10·5	−30	6·5	65	− 4	·318	−·088	4·6	+2·5	5	0·80	+4·20	1·81	0·31	+ 1·50	3·31	1·10	+ 2·21	0·83	Kurrachee.
1	5	4	4	3	1	1		S 36° E	4·4	3·7	+19		54	+ 1	·192	−·056	4·2	+0·9	1	0·80	+0·20	0·19	0·26	− 0·07	1·69	0·82	+ 0·87	0·12	Bikaner.
8	5		1	1	1			N 45° E	6·0	3·3	+82	5·2	55	+ 2	·222	−·015	1·1	−1·7?	0	0·30	−0·30	0·22	0·08	+ 0·14	0·25	0·58	− 0·33	0·08	Pachpadra.
12	1	1		1	2			N 40° E	4·5			4·1	50		·202		4·6		0	0·50	−0·50	0·36	0·11	+ 0·25	0·54	0·49	+ 0·05	0·09	Jodhpur.
													53	−5	·242	−·090	2·4	+0·6				0·23	0·18	+0·02					VIII.—East Rajputana Central India and Gujarat.
8	1	3				5		N 24° E	4·3	4·4	−2		60	+ 3	·220	−·057	4·5	+1·6	1	0·50	+0·50	0·27	0·17	+ 0·10	1·73	0·96	+ 0·77	0·13	Jaipur.
	1	1	1	1	7	3		N 77° W	2·9			2·7	79		·277		3·9		2			1·14			3·62			0·73	Bharatpur.
1	4	1		1	3	3		N 6° W	2·8			2·2	48		·202		2·4		1	0·50	+0·50	0·23	0·25	− 0·02	0·60	0·69	− 0·09	0·17	Kotah.
1	2	1	2					N 59° E	4·9	5·3	−8		62	+ 3	·209	−·051	3·8	+1·3	1	0·50	+0·50	0·44	0·18	+ 0·26	1·27	0·92	+ 0·35	0·19	Sambhar.
4		5	1	1		1		S 82° E	4·7	2·5	+88	4·1	66	+ 2?	·232	−·052	3·7	+1·4	3	0·70	+2·30	0·75	0·24	+ 0·51	1·50	0·95	+ 0·55	0·40	Ajmer.
		1			1			S 23° W	1·9			1·7	51		·216		2·2		0	0·30	−0·30	0			0·10			0	Udaipur.
4	1	2			5	3		N 17° W	8·7	6·7	+30	7·3	52	− 7	·272	−·112	1·5	+0·2	0	0·30	−0·30	0	0·09	− 0·09	0·16	0·23	− 0·07	0	Bhuj.
9	9	1	1	3	2	2		N 65° E	10·8			13·1	48		·261		1·6		0			0			0			0	Jamnagar.
6	8	1			3	1		N 48° E	6·0	6·2	−3	5·9	42	− 17	·219	−·149	1·2	+0·2	0	0·30	−0·30	0	0·09	− 0·09	0	0·17	− 0·17	0	Rajkot.
12						2		N 16° E	8·4	5·8	+45	8·4	43	− 16	·259	−·142	0·9	−0·3	0	0·10	−0·10	0	0·01	− 0·01	0	0·10	− 0·10	0	Veraval.
													65		·401		1·7		1			0·24			0·25			0·24	Dwarka.
11	5				1	4		N 27° E	12·9																				
4				1	6	10		N 36° W	7·5			6·8	33	P	·182	P	1·5	+0·4	0	0·20	−0·20	0	0·07	− 0·07	0	0·21	− 0·21	0	Bhavnagar Para.
3	5		2	2	4	1		N 16° E	1·8	1·7	+6	1·8	65	− 2?	·248	−·087	3·3	+0·8	0	1·00	−1·00	0·09	0·48	− 0·39	1·54	1·74	− 0·20	0·06	Nowgong.
8	3	3			2	1		N 44° E	4·4	3·0	+47	3·6	42	− 10	·197	−·097	2·6	+1·3	0	0·50	−0·50	0·01	0·18	− 0·17	0·09	0·51	− 0·42	0·01	Indore.
9	4	1				2		N 29° E	6·3	9·1	−31	5·2	51	+ 3	·198	−·065	1·9	+0·6	0	0·50	−0·50	0	0·17	− 0·17	0·04	0·66	−0·62	0	Neemuch.

ny station, the data for that station are not utilized in calculating the provincial departures from normal.

, 40, 42 and 44 are derived are incomplete.

Table

Abstract of Observations taken at 8 A.M. at 231 Stations

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
45	Surat	39	30·041	+·052	30·027	30·137	2nd	29·951	4th	·186	62·2	84·2	−5·5	55·8	−3·2	70·0	−4·4	28·4	96·7	27th	46·3	1st	50·4
	Ahmedabad	163	29·922	+·067	30·045	30·045	11th	29·795	16th	·250	61·2	82·8	−4·7	55·2	−5·1	69·0	−4·9	27·6	93·2	27th	43·7	1st	49·5
	Deesa	466	29·610	+·057	30·060	29·730	11th	29·485	16th	·245	57·6	80·5	−6·0	49·4	−5·7	65·0	−5·9	31·1	89·6	27th	37·5	1st	52·1
22	Agra	555	29·510	+·051	30·073	29·649	2nd	29·347	16th	·302	50·1	65·6	−13·0	46·3	−6·0	56·0	−9·5	19·3	72·5	14th	33·9	2nd	38·6
21	Jhansi	858	29·220	+·060	30·097	29·349	2nd	29·050	16th	·299	54·0	71·6	−9·6	49·6	−5·8	60·6	−7·7	22·0	81·6	25th	38·1	2nd	43·5
	IX.—Deccan.			+·035								83·1	−5·1	54·1	−5·3	68·7	−5·2	29·0					49·2
38	Belgaum	2,539	27·460	+·010	29·978	27·513	12th	27·390	17th	·123	67·6	87·4	−1·2	57·8	−1·8	72·6	−1·6	29·5	92·3	25th	49·9	7th	42·4
	Sholapur	1,590	28·426	+·019	30·019	28·491	11th	28·357	16th	·137	65·7	90·4	−3·3	58·9	−4·2	74·2	−3·8	32·4	99·2	25th	48·1	8th	51·1
	Poona	1,810	28·190	+·025	30·073	28·260	11th	28·121	16th	·139	56·1	86·7	−4·6	52·0	−5·1	69·4	−4·9	34·7	97·0	27th	43·5	7th	53·5
	Bijapur	*1,948*	28·059	+·031	30·002	28·126	12th	28·004	16th	·122	67·4	89·6*	−0·8*	58·8†	−5·4†	74·8‡	−3·1	30·8	96·9	25th	49·1‡	9th	47·8
40	Malegaon	1,430	28·603	+·031	30·059	28·703	2nd	28·507	4th	·193	58·4	84·5	−5·4	49·1	−6·3	66·8	−5·9	35·4	96·9	25th	38·0	8th	58·9
	Ahmednagar	2,154	27·877	+·042	30·056	27·942	11th & 12th, 2nd	27·808	16th	·134	61·3	84·5	−3·6	51·2	−3·9	67·9	−3·8	33·3	94·4	25th	42·4	19th	52·0
41	Akola	930	29·107	+·042	30·039	29·231	2nd	28·997	16th	·234	59·3	84·8	−5·9	50·1	−7·4	67·5	−6·7	31·7	98·3	26th	38·4	2nd	59·9
	Amraoti	1,215	28·820	+·054	30·043	28·929	2nd & 11th.	28·718	16th	·211	62·1	84·2	−5·9	55·8	−5·9	70·0	−5·9	28·4	97·2	25th & 26th.	47·0	3rd	50·2
42	Khandwa (a)	1,044	28·991	+·036	30·058	29·117	2nd	28·862	16th	·255	54·5	81·8	−7·0	48·8	−7·1	65·3	−7·1	33·0	94·2	25th & 26th.	38·7	8th	57·5
	Hoshangabad	1,006	29·057	+·055	30·085	29·196	11th	28·901	16th	·295	56·7	77·8	−7·6	48·2	−7·8	63·0	−7·7	29·6	90·2	26th	36·1	2nd	54·1
	Nagpur	1,025	29·005	+·040	30·037	29·119	2nd	28·882	16th	·237	61·0	84·2	−5·1	54·3	−5·7	69·3	−5·4	29·9	97·1	25th & 26th.	45·6	1st & 2nd.	51·1
43	Chanda	*634*	29·417	+·053	30·032	29·533	2nd	29·310	17th	·223	61·7	86·1	−5·7	52·9	−6·3	69·5	−6·0	33·2	95·7	26th	41·0	2nd	54·7
	Seoni	2,033	27·987	+·030	30·064	28·095	11th	27·852	16th	·213	56·6	77·7	−6·1	48·0	−7·4	62·9	−6·8	29·7	93·3	25th	38·5	2nd	54·1
	Jubbulpore	1,327	28·701	+·037	30·069	28·838	11th	28·547	16th	·291	53·4	74·7	−7·7	45·5	−6·9	60·1	−7·3	29·2	87·4	28th	31·9	2nd	55·
	Saugor	1,807	28·211	+·036	30·074	28·338	11th	28·035	16th	·303	53·7	73·2	−8·1	47·7	−7·7	60·5	−7·9	25·5	87·4	28th	36·0	1st	51·
49	Sutna	1,040	29·002	+·047	30·074	29·126	11th	28·810	16th	·316	52·9	70·5	−9·1	46·1	−6·2	58·3	−7·7	24·4	80·8	25th & 26th.	34·0	2nd	46·
44	Raipur	970	29·057	+·032	30·030	29·179	2nd	28·913	16th	·266	60·1	79·1	−8·3	54·0	−6·5	66·6	−7·4	25·1	89·6	25th	44·8	2nd & 11th.	44·
	Pendra	2,123?	27·973?		30·069?	28·089	11th	27·837	16th	·252	53·8	73·3		48·3		60·8		25·0	86·8	27th	37·5	2nd	49·
	Sambalpur	486	29·562	+·034	30·022	29·678	11th	29·408	17th	·270	62·1	79·9	−8·1	57·2	−2·7?	68·6	−5·4?	22·7	91·1	25th & 26th.	46·7	12th	44·
39	Aurangabad	1,905	28·125		30·036	28·217	2nd	28·063	16th	·184	64·0	82·4		53·5		67·9		23·9	92·9	25th & 26th.	45·2	2nd & 9th.	47
	Indur	1,260	28·771		30·025	28·785	13th	27·737	23rd	·048	66·7	87·3		53·2		70·3		31·1	93·8	28th	49·1	11th	44
	Bidar	*2,165*	27·869		30·023	27·964	2nd	27·800	4th	·164	68·8	84·2		61·9		73·1		22·3	93·3	25th	52·3	2nd	41
53	Gulbarga	1,503	28·498	+·017	29·990	28·555	12th	28·435	17th	·120	68·7	90·5	−2·0	61·7	−2·6	76·1	−2·3	28·8	96·9	27th	53·9	2nd	43
	Raichur	1,326?	28·671	+·030	29·972	28·721	2nd	28·614	16th	·107	72·5	91·1	−1·7	66·8	−1·4	78·9	−1·6	24·3	97·9	28th	56·2	8th	41
	Hyderabad (Deccan).	1,690	28·317	+·030	30·001	28·387	2nd	28·246	6th	·141	67·9	87·8	−3·5	62·3	−1·1	75·1	−2·3	25·5	95·9	28th	53·3	3rd	42
	Hanumkonda.	871	29·140		29·985	29·224	2nd	29·050	17th	·174	70·1	87·4		63·6		75·5		23·8	97·9	28th	53·2	2nd & 3rd.	44
	X.—West Coast.			+·023								85·0	−1·7	69·0	−1·6	77·0	−1·7	15·8					2
37	Bombay	37	30·012	+·031	29·990	30·083	28th	29·940	26th	·143	66·9	79·9	−2·7	63·6	−5·1	71·8	−3·9	16·3	88·0	21st	57·0	7th	31
	Ratnagiri	110	29·917	+·035	29·970	29·993	28th	29·868	20th	·125	69·3	83·6	−2·8	62·4	−4·9	73·0	−3·9	21·2	92·8	14th	56·3	7th & 8th.	3
	Mormugao	*60*	29·959	+·026	29·955	30·037	27th	29·895	20th	·142	71·0	82·9	−2·0	67·7	−3·5	75·3	−2·8	15·2	89·0	27th	61·8	8th	2
	Goa	199	29·818	+·006	29·960	29·894	27th	29·757	20th	·137	73·0	81·3	P	P	P	P	P	P	84·5	13th	P	P	
	Karwar	44	29·985	+·027	29·964	30·067	27th	29·920	20th	·147	68·5	84·2	−2·1	64·3	−3·0	74·3	−2·6	19·9	87·8	3rd	59·5	8th & 18th.	2
33	Cochin	10	29·996	+·015	29·934	30·059	27th	29·913	19th	·116	78·4	89·7	−0·2	75·4	+1·7	82·6	+0·3	14·3	92·3	15th	71·7	1st & 4th.	2
	Calicut	27	29·988	+·019	29·944	30·056	27th	29·931	17th & 19th.	·125	77·6	87·9	−0·8	73·2*	+0·6*	80·6*	−0·1*	14·7	91·3	24th	69·2	8th & 18th.	2
	Mangalore	65	29·955	+·018	29·952	30·031	27th	29·901	19th	·130	77·3	85·1	−3·0	71·4	−0·9	78·3	−2·0	13·7	88·2	26th	65·0	1st	2
	Trivandrum	198	29·798	+·034	29·930	29·871	27th	29·731	19th	·140	76·8	85·4	+0·4	74·2	+1·2	79·8	+0·8	11·2	87·0	27th & 28th.	72·0	12th	1

* Mean of 27 days. †Mean of 23 days. ‡ Mean of 22 days.

N. B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the re

Note 2.—The data from which divisional means of the figure col

(a) Thermometers were removed to the temporary grass hut after 4 P.M. of 16th October 1904.

ontinued.

ndia, Burma, etc., in February 1905—continued.

Wind Direction.								Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.										Station.
Number of winds from																												
N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 28th Feb. 1905.	Normal rainfall for period, 1st Dec. to 28th February.	Departure from normal of period, 1st Dec. 1904 to 28th Feb. 1905.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
9	4			1		2	N 23° E	6·0	5·4	+11	5·6	50	−15	·297	−·140	0·6	−0·5	1	0·10	+ 0·90	0·24	0·68	+ 0·16	0·32	0·14	+ 0·18	0·24	Surat.
12	3			1		5	N 24° E	3·8			6·2	41	− 9	·229	−·092	1·5	+0·1	0	0·30	− 0·30	0	0·14	− 0·14	0	0·24	− 0·24	0	Ahmedabad.
12	6	1	1		4	1	N 45° E	10·3*	9·0	+14		33	−10	·170	−·077	2·1	+0·1	0	0·27	− 0·27	0	0·07	− 0·07	0·02	0·28	− 0·26	0	Deesa.
5		3		13	1	4	S 56° W	4·2	4·0	+ 5	5·0	69	+ 4	·255	−·055	4·3	+1·9	2	0·60	+ 1·40	0·97	0·29	+ 0·68	3·27	1·11	+ 2·16	0·72	Agra.
6	2	2	2	3	2	5	N	4·5	2·7	+67	5·5	69	+16	·293	P	2·0	+0·3	1	0·80	+ 0·20	0·29	0·41	− 0·12	1·84	1·27	+ 0·57	0·23	Jhansi.
												47	− 9	·277	−·096	1·6	+ 0·1				0·30	0·28	+ 0 02					IX.—Deccan.
8	3		1		1		N 40° E	7·4	10·0	−26		39	− 9	·269	−·077	2·0	+1·1	0	0·10	− 0·10	0	0·03	− 0·03	0	0·19	− 0·19	0	Belgaum.
10	2	3				8	N 24° E	8·5	6·5	+31	10·3	31	− 9	·213	−·097	1·1	+0·2	1	0·10	+ 0·90	0·20	0·03	+ 0·17	0·20	0·53	− 0·33	0·15	Sholapur.
	2	2	1	5	4	9	N 63° W	7·4	6·3	+17		46	− 6	·213	−·104	0·9	+0·1?	0	0·10	− 0·10	0	0·06	− 0·06	0	0·29	− 0·29	0	Poona.
3	5		4	1		7	N 4° E	4·9			4·8	43	−13	·302	−·135	0·7	−0·3	0	0·20	− 0·20	0	0·07	− 0·07	0	0·10	− 0·10	0	Bijapur.
2	1		1	2	6	8	N 51° W	5·5	5·0	+10	6·3	33	−24	·179	−·174	0·3	−1·0	0	0·10	− 0·10	0	0·03	− 0·03	0·01	0·40	− 0·39	0	Malegaon.
					3	17	N 45° W	6·8			8·3	43	−16	·249	−·133	0·6	−0·3	0	0·30	− 0·30	0	0·40	− 0·40	0	0·91	− 0·91	0	Ahmednagar.
4	3	1			4	4	N 3° W	4·5	3·8	+18	4·0	39	− 6	·212	−·077	1·3	−0·2	1	0·30	+ 0·70	0·12	0·17	− 0·05	0·12	1·25	− 1·13	0·12	Akola.
9	6	1	1	4	1		N 73° E	7·5	3·7	+103	6·8	38	−11	·230	−·119	1·0	−0·3	0	0·60	− 0·60	0·06	0·21	− 0·15	0·21	1·13	− 0·92	0·06	Amraoti.
4				1		5	N 11° W	4·7	3·6	+31	4·5	39	− 7	·195	−·074	1·2	0	0	0·30	− 0·30	0·01	0·05	− 0·04	0·06	0·74	−0·68	0·01	Khandwa.
17	4	4		2	1		N 61° E	3·8	2·9	+31	3·9	43	−15	·210	−·113	1·6	+0·2	0	0·50	− 0·50	0	0·27	− 0·27	0·30	1·06	− 0·76	0	Hoshangabad.
8	2	1	1			3	N 18° E	5·9	5·1	+16	4·7	38	−14	·230	−·130	1·2	−0·6	1	0·90	+ 0·10	0·76	0·38	+ 0·38	1·02	1·29	− 0·27	0·70	Nagpur.
	2	2	1			2	N 63° E	2·2	2·7	−19	2·0	49	−11	·311	−·108	1·4	+0·1	1	0·60	+ 0·40	0·17	0·49	− 0·32	0·17	1·13	− 0·96	0·17	Chanda.
11	4	1	2	1		2	N 39° E	6·3	2·9	+117	5·3	45	−17	·221	−·1462	1·2	−1·0	1	1·50	− 0·50	0·40	0·88	− 0·48	0·87	1·93	− 1·06	0·40	Seoni.
9	2	2	8		1	1	N 86° E	3·1	2·5	+24	2·7	64	− 2	·285	−·062	1·1	−1·0	1	1·10	− 0·10	0·23	0·56	− 0·33	1·06	1·61	− 0·55	0·22	Jubbulpore.
7	9	4		4	1		N 89° E	7·5	2·8	+168	6·7	45	− 7	·191	−·089	1·6	+0·2	1	0·80	+ 0·20	0·31	0·41	− 0·10	1·06	1·75	− 0·69	0·21	Saugor.
1	2	1	1		5	6	N 54° W	3·1	4·7	−34	2·9	59	0	·243	−·065	3·8	+2·1	1	1·50	− 0·50	0·33	0·65	− 0·32	3·53	2·00	+ 1·53	0·12	Sutna.
10	1		2	1	2		N 36° E	2·7	3·7	−27	3·2	60	+ 7	·334	P	2·6	+0·5	4	0·70	+ 3·30	1·00	0·35	+ 0·65	2·42	0·80	+ 1·62	0·37	Raipur.
2	2	2	3	1		4	N 14° E	5·0			4·3	58		·258		2·0		1			0·34			1·97			0·32	Pendra.
13	4	4	2	2			N 68° E	5·2	1·7	+206	5·1	67	0	·391	−·067	3·4	+1·4	3	1·00	+ 2·00	1·40	0·51	+ 0·89	3·54	1·03	+ 2·51	0 68	Sambalpur.
6	4				4		N 39° E	8·5			8·4	26		·175		0·6		1	0·20	+ 0·80	0·11	0·11	0	0·31	0·84	− 0·53	0·11	Aurangabad.
1						11	N 38° W	4·7			4·0	49		·320		2·5		1	0·40	+ 0·60	0·30	0·13	+ 0·17	0·30	0·51	− 0·21	0·23	Indur.
7	4		2	5	3	2	N 9° E	7·3			6·1	52		·391		3·4		2	0·40	+ 1·60	1·40	0·18	+ 1·22	1·40	0·72	+ 0·68	0·93	Bidar.
11	6	3	3		1		N 65° E	9·2			8·1	54	P	·395	P	0·1	−0·8	1	0·40	+ 0·60	0·12	0·29	− 0·17	0·12	0·36	− 0·24	0·12	Gulbarga.
5	5	5	2	2	2	3	N 82° E	8·5			8·1	44	− 8	·377	−·061	2·0	+1·0	0	0·20	− 0·20	0·06	0·24	− 0·18	0·06	0·24	− 0·18	0·06	Raichur.
2	2	4				1	N 64° E	3·0			2·9	57	−10	·411	−·084	2·1	+0·7	0			0·10	0·15	− 0·05	0·10	0·38	− 0·28	0·06	Hyderabad (Deccan).
1		8	2			6	N 16° E	8·0			7·0	52		·406		1·5		1	0·60	+ 0·40	0·31			0·31			0·31	Hanumkonda
												73	−3	·613	−·049	1·6	+0·3				0·13	0·21	−0·08					X.—West Coast.
10	2	1			1	1	N 24° E	11·3	10·7	+ 6		63	− 8	·428	−·151	1·0	−0·2	0	0·10	− 0·10	0·03	0 02	+ 0·06	0·08	0·18	− 0·10	0·08	Bombay.
9	12	3					N 68° E	11·5	9·8	+17	11·4	60	− 5	·423	−·116	0·4	−0·3	0	0·10	− 0·10	0	0·03	− 0·03	0	0·23	− 0·23	0	Ratnagiri.
3	4	11	4	1		1	S 52° E	8·9				80	− 2	·613	−·073	1·0	+0·4	0			0	0·05	− 0·05	0	0·05	− 0·05	0	Mormugao.
4	17		2				N 77° E	7·6				72	− 2	·587	−·054	0·4	−0·2	0			0	0·06	− 0·06	0	0·31	− 0·31	0	Goa.
11	13	1					N 67° E	5·8				75	− 9	·525	−·088	0·8	+0·3	0	0	0	0	0·02	− 0·02	0	0·18	− 0·18	0	Karwar.
13	12						N 65° E	8·0				79	+ 4	·778	+·037	2·7	+1·1	2	1·70	+ 0·30	0·98	0·87	+ 0·11	0·98	3·07	− 2·09	0·59	Cochin.
11	3					1	N 37° E	8·6			8·5	78	0	·743	+·008	2·0	0	0	0·40	− 0·40	0	0·15	− 0·15	0·06	1·31	− 1·25	0	Calicut.
5	12	2					N 77° E	5·0	3·5	+43		76	− 1	·712	+·007	2·0	+0·3	0	0·10	− 0·10	0	0·03	− 0·03	0	0·53	− 0·53	0	Mangalore.
5	1				1	4	N 8° E	5·1				76	− 2	·712	−·011	3·9	+1·3	1	1·10	− 0·10	0·12	0·64	− 0·52	0·68	3·51	− 2·83	0·10	Trivandrum.

y station, the data for that station are not utilized in calculating the prvoincial departures from normal.
40, 42 and 44 are derived are incomplete.

Table

Abstract of Observations taken at 8 A.M. at 231 Stations

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XI.—South India.			+·017								89·5	+0·6	68·9	+1·6	79·2	+1·1	20·6					31·6
57	Pamban	37	29·992	+·030	29·956	30·049	27th	29·905	19th	·144	80·2	86·4	+1·5	74·5	−0·4	80·5	+0·6	11·9	90·3	23rd	70·2	2nd	20·1
	Tinnevelly	168	29·866	+·032	29·969	29·930	27th	29·780	19th	·150	78·8	93·9	+1·9	73·6	+0·9	83·8	+1·4	20·3	97·3	4 days	68·9	16th & 17th.	28·4
	Madura	147	29·583	+·019	29·972	29·647	4th	29·501	19th	·146	78·0	92·6	+0·6	70·6	+1·1	81·6	+0·9	22·0	96·4	22nd	65·6	5th	30·6
	Periyakulam	945	29·077		29·976	29·149	27th	29·003	19th	·146	75·0	93·7		67·5		80·4		26·2	97·1	27th	60·1	4th	37·0
34	Salem	940	29·103	+·001	29·997	29·167	27th	29·031	7th	·136	77·3	95·6	+2·0	70·2	+4·7	82·9	+3·4	25·4	98·7	28th	62·6	15th	36·1
	Coimbatore	1,348	28·670	+·007	29·988	28·723	27th	28·612	8th	·111	73·2	93·2	+1·2	68·6	+3·1	80·9	+2·2	24·6	96·9	27th	63·3	2nd	33·6
35	Mercara	3,781	26·309	+·025	26·242	26·387	27th	26·252	19th	·135	65·7	81·8	+0·6	59·9	+1·1	70·9	+0·9	21·9	85·0	26th	54·1	7th	31·9
36	Chitaldroog	2,405	27·604	+·014	29·961	27·685	27th	27·555	7th	·130	73·5	89·7	+0·4	65·6	−0·3	77·6	+0·1	24·1	93·6	27th	59·9	17th & 18th.	33·7
	Bangalore	3,021	27·019	+·003	29·989	27·090	27th	26·958	7th	·132	68·4	87·4	+1·6	62·1	+2·5	74·7	+2·1	25·3	90·8	28th	56·4	1st	34·4
	Hassan	3,091	26·957	+·016	29·991	27·042	27th	26·900	7th	·142	69·1	88·4	+2·1	58·7	+1·1	73·6	+1·6	29·7	91·9	22nd	53·7	7th	38·2
	Mysore	2,518	27·510	+·018	29·987	27·593	27th	27·448	19th	·145	71·7	90·0	+1·2	65·6	+2·7	77·9	+2·0	24·4	93·4	27th	62·0	1st, 3rd & 7th.	31·4
56	Negapatam	31	29·992	+·011	29·952	30·018	27th	29·910	19th	·138	78·6	87·7	+3·3	74·0	+1·9	80·9	+2·6	13·7	90·4	21st & 24th.	68·0	1st	22·4
	Cuddalore	12	30·021	+·020	29·962	30·077	27th	29·938	19th	·139	76·6	88·0	+2·6	70·2	+1·3	79·1	+2·0	17·8	94·2	24th	63·7	1st	30·5
	Trichinopoly	255	29·778	+·009	29·971	29·842	27th	29·712	19th	·130	76·6	93·5	+1·2	70·5	+2·1	82·1	+1·7	23·0	97·1	20th	65·9	4th	31·2
	Madras	22	30·017	+·012	29·970	30·070	3rd	29·938	7th	·132	76·8	86·9	0	69·9	+1·9	78·4	+1·0	17·0	91·0	28th	62·0	1st	29·0
	Vellore	707	29·312		29·976	29·370	27th	29·238	8th	·132	73·8	88·4*		67·9		78·2*		20·5	94·4	28th	62·7	1st & 15th.	31·7
55	Nellore	52	29·979	+·027	29·965	30·047	3rd	29·883	7th	·164	71·2	89·6	−1·0	70·1	+1·0	79·9	0	19·5	97·8	28th	65·6	1st & 3rd.	32·2
	Masulipatam	15	30·025	+·016	29·975	30·101	3rd	29·911	17th	·190	76·6	86·0	−0·8	71·2	+2·9	78·6	+1·0	14·8	92·1	28th	65·2	1st	26·9
54	Cuddapah	433	29·577	+·014	29·954	29·633	2nd	29·490	7th	·143	78·3	95·7	+0·6	71·9	+2·8	83·9	+1·7	23·8	101·7	28th	66·9	1st	34·8
	Kurnool	945	29·076	+·012	29·961	29·142	2nd	29·009	17th	·133	73·4	93·3	−1·2	66·7	+1·9	80·0	+0·1	26·6	98·7	26th & 28th.	54·4	8th	44·3
	Bellary	1,475	28·520	+·005	29·969	28·574	2nd	28·471	16th	·103	72·4	91·0	−0·2	67·5	+2·1	80·7	+1·0	26·5	99·0	28th	61·6	8th	37·4
52	Cocanada	26	30·022	+·025	29·984	30·094	3rd	29·929	7th	·165	75·5	84·7	−1·1	71·0	+1·4	77·9	+0·2	13·7	95·1	28th	65·5	1st	29·6
	Waltair(Vizag.)	*226*	29·812	+·014	29·984	29·890	12th	29·702	7th	·188	74·4	81·4	?	71·2	?	76·2	?	10·2	86·4	28th	66·9	3rd	19·5
	Gopalpur	72	29·981	+·048	29·999	30·090	12th	29·867	17th	·223	70·2	78·7	−4·8	65·9	−2·0	72·3	−3·4	12·8	89·2	28th	55·0	13th	34·2
	XII.—Hill Stations.																						
48	Pishin											41·3		26·4		33·9		14·9	49·7	20th	16·3	1st	33·4
	Quetta	5,502	24·634	−·026	24·594	24·740	10th	24·536	22nd	·204	29·4	41·9	−11·2	25·1	−6·6	33·5	−8·9	16·8	49·7	14th	14·8	1st	34·1
	Kalat										32·6	43·8	−12·2?	23·3	−1·4?	33·6	−6·8?	20·5	56·3	11th	13·0	27th	43·1
	Chaman	4,311	25·741	+·018	25·703	25·852	9th	25·631	22nd	·221	34·2	45·4	−11·6	29·5	−7·2	37·6	−9·4	15·9	57·3	21st	17·1	27th	40·1
30	Leh	11,503	19·477	−·134	19·445	19·757	11th	19·277	17th	·480	6·7	24·2	−7·2	2·6	−7·2	13·4	−7·3	21·6	36·3	26th	−7·1	4 days	42·
	Srinagar	5,204	24·894	−·060	24·866	25·106	11th	24·701	17th	·405	27·6	37·0	−5·3	21·9	−2·4	31·0	−3·9	12·1	45·5	27th	18·1	1st & 10th.	27·
	Sonemarg	*8,764*	21·712		21·680	21·917	11th	21·547	17th	·370	7·7			1·0							−14·9	1st	
	Astor (Kashmir)	*7,955*	22·440		22·410	22·701	11th	22·215	16th	·486	16·1	33·5		12·8		23·2		20·7	42·5	16th	0·5	10th	2·
	Minimarg	*9,359*	21·214		21·182	21·441	11th	21·041	17th	·400	7·7	29·8		0·7		15·3		29·1	44·3	27th	−14·0	1st & 3rd.	58·
	Skardu	*7,505*	22·816		22·786	23·178	11th	22·570	17th	·608	12·0	31·5		8·0		19·8		23·5	48·0	21st	−4·9	10th & 11th.	52·
	Dras	*10,059*																					
	Gilgit	4,890	25·158		25·131	25·488	11th	24·911	27th	·577	34·1	46·2	− 5·1	29·7	−6·9	38·0	−6·0	16·5	52·1	27th	21·6	4th	30·
32	Chitral	*5,486*	?								27·7	43·4		24·0		33·7		19·4	50·1	21st, 25th & 26th.	10·0	1st	40·
	Killa Drosh	4,700?									28·2	42·6		24·9		33·8		17·7	50·7	21st	17·5	5th	33·
	Para Chinar	6,000	24·409		24·376	24·518	20th	24·263	19th	·255	24·9	41·0		19·1		30·1		21·9	46·5	26th	6·4	1st	4 0·

N. B.—Elevations in italics indicate barometrical determinations. * Mean of 27 days.

Note 1.—When a query is inserted against any reading or in the return

Note 2.—The data from which divisional means of the figure colum

Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

I—*continued.*

in India, Burma, etc., in February, 1905—continued.

Wind Direction. Number of winds from: Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 28th February 1905.	Normal rainfall for period, 1st Dec. to 28th Feb.	Departure from normal of period, 1st Dec. 1904 to 28th Feb. 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														75	+2	·662	+·034	3·2	+1·2				0·38	0·38	—0·01					XI.—South India.
6	3	9	9	1					N 62° E	6·6			7·0	83		·855		2·7		0	0·50	— 0·50	0	0·73	— 0·73	10·90	12·37	— 1·47	0	Pamban.
	15	5				1	7		N 6° W	4·5			4·3	73	— 4	·721	+·009	4·6	+2·3	1	1·80	— 0·80	0·44	1·48	— 1·04	4·17	6·25	— 2·08	0·37	Tinnevelly.
1	6	15	3			1	2		N 35° E	5·5	5·0	+ 10	6·3	79	+ 4	·761	+·074	3·0	+1·0	1	0·90	+ 0·10	1·25	0·51	+ 0·74	2·41	2·62	— 0·21	1·25	Madura.
6	1	1	2	4	3	1			S 51° E	3·1			3·4	68		·591		2·2		1	1·40	— 0·40	0·43	0·97	— 0·54	0·76	3·16	— 2·40	0·42	Periyakulam.
1	1	2	20	1	1	2			N 88° E	6·8	5·6	+ 21	6·0	72	— 2	·681	+·047	2·4	+0·3	0	0·50	— 0·50	0	0·33	— 0·33	0·25	1·82	— 1·57	0	Salem.
		7	19	1					N 82° E	5·1	3·2	+ 59	4·7	86	+ 3	·710	+·048	4·1	+1·6	0	0·80	— 0·80	0	0·46	— 0·46	0·14	1·75	— 1·61	0	Coimbatore.
	5	23							N 37° E	5·4	4·0	+ 38	5·0	72	+ 2	·463	+·015	2·0	—1·0?	2	0·30	+ 1·70	0·54	0·14	+ 0·40	0·54	0·67	— 0·13	0·35	Mercara.
	1	1		4	4		4	5	2	S 19° W	4·3			3·7	57	+ 6	·475	+·051	1·8	+0·3	1	0·10	+ 0·90	0·17	0·07	+ 0·10	0·17	0·17	0	0·17	Chitaldroog.
	1			9	11	5	2			S 48° E	7·2	3·6	+100	6·3	73	+ 3	·509	+·031	2·4	+0·7	0	0·20	— 0·20	0	0·09	— 0·09	0·14	0·71	— 0·57	0	Bangalore.
	2	3	5	6	2	3	4	1	S 51° E	2·1			2·1	72	+ 5	·510	+·031	4·6	+2·2	0	0·10	— 0·10	0·05	0·06	— 0·01	0·05	0·24	— 0·19	0·05	Hassan.
	2	1	2	8	8	4	1	2	S 14° E	5·5			5·9	73	+ 5	·564	+·056	3·9	+1·7	0	0·30	— 0·30	0·06	0·22	— 0·16	0·06	0·39	— 0·33	0·06	Mysore.
		7	1	2	2		1	6	N 26° E	12·2	3·6	+239	10·7	78	— 2	·774	+·020	5·0	+0·6	0	0·80	— 0·80	0	0·58	— 0·58	10·24	14·74	— 4·50	0	Negapatam.
									Calm.	2·8			3·5	86	— 3	·802	+·022?	3·7	+0·2	0	0·70	— 0·70	0·03	0·71	— 0·68	6·80	9·70	— 2·90	0·03	Cuddalore.
	1	2							N 31° E	3·4	4·1	— 17		80	+ 2	·729	+·044	2·0	—0·7?	0	0·50	— 0·50	0	0·79	— 0·79	1·64	3·82	— 2·18	0	Trichinopoly.
	4	4	1	3	10	5	1		S 9° E	5·9	5·0	+ 18		81	— 1	·753	+·011	3·2	+0·5	1	0·60	+ 0·40	0·31	0·23	+ 0·08	5·57	6·77	— 1·20	0·18	Madras.
	1	4		1		2		4	N 11° W	4·0			4·0	81§		·675§		2·4		0	0·50	— 0·50	0	0·13	— 0·13	1·46	3·50	— 2·04	0	Vellore.
	1		11	14	2				S 63° E	3·9				86	+ 1	·728	?	3·6	+1·1	2	0·30	+ 1·70	1·09	0·10	+ 0·99	4·04	2·29	+ 1·75	0·73	Nellore.
	3	4	3	10	3				S 72° E	7·4	5·1	+ 45	6·5	85	— 1	·785	+·037	3·2	+0·6	1	0·30	+ 0·70	0·65	0·22	+ 0·43	3·77	1·07	+ 2·70	0·65	Masulipatam
		4	7	14	1			2	S 74° E					69	+ 3	·668	+·054	2·4	+1·5	0	0·20	— 0·20	0	0·07	— 0·07	0·29	1·37	— 1·08	0	Cuddapah.
			2	3	2		2		S 10° W	5·0				62	+ 4	·528	+·050	1·7	+0·9	0	0·10	— 0·10	0·06	0·02	+ 0·04	0·06	0·21	— 0·15	0·06	Kurnool.
1	2	2	5	2	1	6	6		S 81° W	4·6	4·0	+ 15	4·0	60	+ 4	·488	+·020	2·4	+0·9	1	0·10	+ 0·90	0·16	0·02	+ 0·14	0·16	0·22	— 0·06	0·16	Bellary.
3	9						1		N 29° E	8·1			6·8	83	+ 9	·729	+·091	3·6	+1·4	2	0·50	+ 1·50	0·51	0·37	+ 0·14	1·14	1·28	— 0·14	0·33	Cocanada.
2	9	1	2	3	8	3			N 18° E	12·5				73	+ 2	·626	—·022	6·1	+4·1	2	0·50	+ 1·50	2·60	0·17	+ 2·43	4·04	2·13	+ 1·91	1·98	Waltair (Vizag.).
13	2			1	3		9		N 21° W	12·5	9·6	+ 30	12·3	76	— 2	·570	—·047	2·9	+0·5	2	0·90	+ 1·10	0·85	0·48	+ 0·37	2·06	1·35	+ 0·71	0·55	Gopalpur.
																														XII.—Hill Stations.
																				6	6·40	— 0·40	2·16	2·86	— 0·70	6·82	6·22	+ 0·60	0·55	Pishin.
1	1	1	1	1			1		N 66° E	1·6	4·4	— 64	1·7	93	+19	·156	—·010	5·3	+1·5	7	6·40	+ 0·60	3·48	2·21	+ 1·27	8·60	5·05	+ 3·55	0·86	Quetta.
8		2		14		4			S 18° W					79		·151				5	5·20	— 0·20	2·14	1·26	+ 0·88	5·74	2·70	+ 3·04	0·64	Kalat.
1	2		5	2	2				S 38° E	5·5			6·1	80	+16	·159	—·023	3·7	—0·4	7	4·30	+ 2·70	1·78	1·75	+0·03	5·42	3·97	+ 1·45	0·45	Chaman.
					7	21			S 80° W	1·8				45	— 2	·030	—·006	6·8	+0·8	0	1·00	— 1·00	0·16	0·35	— 0·19	0·81	0·85	—·0·04	0·05	Leh.
			2	3		1	2		S 18° W	1·7			1·6	93	+ 4	·139	—·019	9·7	+2·1	6	6·40	— 0·40	2·14	2·80	— 0·66	9·26	7·20	+ 2·06	1·15	Srinagar.
			1	2	1		1		S 15° W	2·4			2·2	98?		·066		5·5		10			10·03			37·75			3·70	Sonemarg.
				14	5				S 12° W	4·8			4·4	64		·065		4·8		1			0·24			5·98			0·19	Astor (Kashmir.)
		5	9	5	3	1	1		S 75° E	5·2			5·5	79		·054		4·7		8			3·89			17·01			1·05	Minimarg.
	1		1	1	3	1			S 7° W	1·6			1·6	97?		·081		5·1		1	2·60	— 2·60	0·21	1·15	— 0·94	2·03	3·57	— 1·54	0·15	Skardu.
																				1	8·20	— 7·20	0·87	2·57	— 1·70	6·48	8·74	— 2·26	0·82	Dras.
						1	2		S 60° W	2·7			2·4	53	— 3	·104	—·032	7·0	+0·5	0	0·90	— 0·90	0	0·16	— 0·16	0·19	0·46	— 0·27	0	Gilgit.
						1			W	2·5			2·2	86		·130		3·4		2			0·40			2·51			0·30	Chitral.
		12		1	2				S 89° E					71		·111		3·6		0			0			1·16			0	KillaDrosh.
4	3				1				N 11° E	4·4			4·0	94		·129		3·3		4	4·80	— 0·80	1·02	1·93	— 0·91	7·64	3·35	+ 4·29	0·34	Para Chinar.

ny station, the data for that station are not utilized in calculating the provincial departures from normal.
s, 40, 42, and 44 are derived are incomplete.

§ Mean of 2 days.

Table

Abstract of Observations taken at 8 A.M. at 231 Stations

Number of District.	Station.	Elevation of bar-ciatern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
29	Murree	6,333	23·785	−·043	23·754	23·893	11th	23·661	17th	·232	28·4	35·1	−12·9	21·9	−12·6	28·5	−12·8	13·2	44·1	26th	13·0	1st	31·1
	Kailang	*10,087*	20·772		20·727	21·008	11th	20·584	8th	·424	14·0	29·7	−3·8	9·3	−4·1	19·5	−4·1	20·4	39·9	25th	−3·0	10th	42·9
	Poo											36·7		20·9		28·8		15·8	48·5	26th	14·5	10th	34·0
	Simla	7,224	23·013	−·065	22·975	23·099	25th	22·901	7th	·198	29·3	35·7	−10·2	25·5	−10·1	30·6	−10·2	10·2	46·3	26th	18·5	1st	27·8
	Sarain		23·079			23·184	22nd	22·962	7th	·222	23·4	35·1		19·6		27·4		15·5	47·0	26th	10·5	1st	36·5
25	Chakrata	7,022	23·210	−·058	23·170	23·291	22nd	23·102	7th	·189	29·8	39·7	−11·5	26·4	−9·7	33·1	−10·6	13·3	50·0	14th	19·4	8th	30·6
	Ranikhet	6,069	24·058	−·042	24·017	24·145	22nd	23·934	7th	·211	33·3	42·4	−13·2	30·4	−10·4	36·4	−11·8	12·0	54·3	26th	22·5	18th	31·8
	Muktesar	7,600	22·734		22·692	22·842	26th	22·593	7th	·249	29·6	37·1		26·2		31·7		10·9	50·1	24th	17·9	16th	32·2
13	Yatung	10,480										36·4		14·2		25·3		22·2	50·1	27th	4·1	19th	46·0
	Darjeeling*	7,376	22·950	−·035	22·905	23·036	21st	22·801	7th	·235	33·9	43·1	−4·8	28·9	−6·7	36·0	−5·8	14·2	51·2	25th & 28th.	23·0	11th	28·2
8	Shillong	4,900	25·184		25·136	25·300	21st	25·071	7th	·229	47·3	58·1		36·7		47·4		21·4	69·6	26th	29·0	4th	40·6
	Cherra Poonjee	4,309	25·740		25·691	25·822	21st	25·627	7th	·195	48·6	57·8		42·5		50·2		15·3	65·7	28th	33·0	3rd	32·7
50	Mount Abu	3,945	26·101	−·009	26·051	26·188	11th	25·992	16th	·196	51·5	59·4	−9·4	46·1	−7·5	52·8	−8·5	13·3	69·1	27th	37·5	6th	31·6
42	Pachmarhi	3,528	26·511	−·010	26·458	26·675	11th	26·103	16th	·272	54·8	69·5	−6·0	45·4	−6·1	57·5	−6·1	24·1	83·1	25th	33·3	8th	49·8
34	Wellington	6,200	24·309	+·008	24·242	24·391	27th	24·256	7th	·135	58·0	72·4	+1·6	49·0	+1·9	60·7	+1·8	23·4	75·2	8th & 21st.	40·7	1st	34·5
	Ootacamund	*7,322*	23·691		23·027	23·181	27th	22·955	26th	·226	55·7	66·8		46·3		56·6		20·5	71·0	10th	40·7	3rd	30·3
57	Kodaikanal	7,688	22·876		22·811	22·941	27th	22·835	7th	·106	53·6	66·2		48·0		54·7		18·2	69·4	18th	43·8	4th	25·6
	XIII.—Extra India.																						
	Trincomalee	12	29·987	+·013	29·925	30·040	28th	29·902	19th	·138	76·4	85·2	+0·2	74·2	−0·9	79·7	−0·4	11·0	87·5	22nd	69·5	15th	18·0
	Colombo	10	29·954	+·006	29·920	30·024	28th	29·879	19th	·145	78·4	87·3	−1·0	73·0	+0·1	80·2	−0·5	14·3	92·5	14th	68·5	12th	24·0
	Meshed	3,104									32·2			26·1	−2·3						16·0	1st	
	Teheran(*b*)	*4,002*	26·051			26·350	26th	25·800	20th	·550	27·4	46·0	−6·0	25·2	−7·6	35·6	−6·8	20·8	58·5	20th	15·0	1st	43·1
	Ispahan(*b*)	*5,817*	24·289			24·540	26th	24·120	10th	·420	29·7	47·5	−6·7	23·3	−5·8	35·4	−6·3	24·2	57·3	20th	11·2	1st	36·1
	Bushire	14	30·136	+·050	30·109	30·332	27th	30·002	20th	·330	53·1	62·3	−3·4	50·2	−2·6	56·3	−3·0	12·1	69·7	20th	42·3	4th & 5th.	27·4
	Bahrein	30	30·138			30·312	26th	29·973	2nd	·339	61·0	66·4		56·4		61·4		10·0	74·2	19th	51·3	1st & 7th.	22·4
	Jask	13	30·089	+·037	30·059	30·279	27th	29·941	21st	·338	63·0	71·6	−3·3	59·5	−2·3	65·6	−2·8	12·1	77·3	20th	51·3	27th	26·3
	Muscat*	20	30·099	+·045	30·067	30·292	27th	29·902	21st	·390	68·6	70·9	−1·9	66·9	−0·9	68·9	−1·4	4·0	75·4	22nd	61·1	28th	14·1
	Baghdad	220	30·043	+·080	30·257	30·229	27th	29·728	9th	·501	44·9	64·1	−0·5	37·7	−4·0	50·9	−2·3	26·4	72·2	18th	29·8	1st & 3rd.	42·1
	Busrah		30·305			30·482	27th	30·096	9th	·386		61·3							70·2	17th			
	Aden	94	29·982	+·035	30·009	30·029	12th	29·887	23rd	·142	76·2	?	?	73·6	+0·3	?	?	?	?	25th	70·9	21st & 22nd.	?
	Perim	201	29·853	+·064	29·991	29·923	7th	29·805	23rd	·118	77·2	83·2	−0·2	74·4	+0·2	78·8	0	8·8	85·3	27th	73·2	14th	12·1
	Kabul		24·284			24·454	25th	24·132	23rd	·322	14·5	33·4	−14·9	7·9	−15·1	20·7	−15·0	25·5	41·1	21th & 28th.	−0·4	1st, 2nd & 3rd.	41·5
	Kashgar*	4,255	25·679			25·895	19th	25·368	22nd	·527	11·9	33·1	−11·8	7·4	−14·8	20·3	−13·3	25·7	45·8	21st	−5·3	9th	51·1
	Minicoy	7	30·014		29·947	30·082	27th	29·961	1st	·121	81·2	85·3	−1·1						88·5	27th			
	Zanzibar	73	29·938	+·030	29·938	29·970	3rd	29·862	24th	·108	82·6	88·3	+1·3	80·4	+0·1	84·4	+0·7	7·9	91·0	24th	79·0	8th & 9th.	12·0
	Do. Dunga¶	*15*	29·860		29·942	29·901	27th	29·790	24th	·111	81·5	92·1		75·6		83·9		16·5	94·7	17th	73·2	16th	21·5
	Penang(*a*)	20	29·938		29·883	29·980	3rd	29·907	8th & 13th.	·073	79·8	90·3		72·7		81·5		17·6	93·0	18th, 22nd & 23rd.	67·0	18th	26·0
	Singapore(*a*)	10	29·975		29·906	30·050	28th	29·939	12th	·111	81·6	87·8		72·5		80·2		15·3	91·9	26th	68·9	3rd	23·0

(*a*) 9 hours' observations.
(*b*) Aneroid uncorrected.
* Observations of 27 days.
† Mean of 26 days.
¶ Observations of 26 days.

N.B.—Elevations in italics indicate barometrical determinations.
Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

Note 1.—When a query is inserted against any reading or in the returns of an
Note 2.—The data from which divisional means of the figure columns Nos. 4

—concluded.

n India, Burma, etc., in February, 1905—concluded.

Wind Direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrum entsl errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December 1904 to 28th Feb. 1905.	Normal rainfall for period, 1st Dec. to 28th Feb.	Departure from normal of period, 1st Dec. 1904 to 28th Feb. 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
3	1	1	3	8	1			1	S 61° E	5·0	8·2	− 39	5·4	89	+ 25	·137	−·007	4·6	−0·2	11	2·70	+8·30	7·78	3·84	+ 3·94	21·21	8·65	+12·56	2·10	Murree.
	1			6	2	4	10	4	S 61° W	0·3				59		·058		6·4		3			0·77	3·02	− 2·25	3·53	7·02	− 3·49	0·40	Kailang.
																		7·1		2			0·67	3·93	− 3·26	2·61	8·18	− 5·57	0·15	Poo.
4			2	2					S 72° E																					
4	3			6	15				S 15° E	5·7	2·5	+128	5·5	73	+ 17	·121	−·010	5·1	+0·6	12	4·00	+8·00	4·67	3·00	+ 1·67	8·46	6·94	+ 1·52	0·79	Simla.
17	1	1	1	1	5		1	1	S 18° E	1·3			1·3	94		·121		6·3		15			13·09			26·23			2·50	Sarain.
9	19								N	4·5	5·4	−17	5·4	81	+ 17	·139	−·010	5·2	+1·6	13	5·30	+7·40	9·49	4·20	+ 5·29	21·26	9·09	+12·17	4·16	Chakrata.
24		3				1			N 45° E	1·4	2·0	−30	1·6	87	+ 21	·165	−·030	6·1	+2·2	10	4·50	+5·50	3·97	2·16	+ 1·81	10·29	5·66	+ 4·63	0·88	Ranikhet.
2	2		11	3	3	2	4	1	S 66° E	7·5			6·9	81		·132		7·3		6			5·23			14·43			3·01	Muktesar.
																				3	2·17	+5·83	2·70	0·62	+ 2·08	4·60	1·69	+ 2·91	0·70	Yatung.
10		2	3	4		2	5	1	S 3° E	6·4	5·1	+25	5·9	90	+ 6	·177	−·034	3·7	−1·1	3	2·52	+0·48	0·94	1·01	− 0·07	1·19	1·95	− 0·85	0·49	Darjeeling.
19						8	1		S 49° W	1·0			1·1	52		·175		2·3		2	1·90	+0·10	1·48	0·79	+ 0·69	1·77	1·60	+ 0·17	1·25	Shillong.
4	1	4		2	1	8	8		S 66° W	7·9			7·0	56		·199		3·0		2	3·10	−1·10	0·65	2·08	− 1·43	0·96	3·12	−2·16	0·43	Cherra Poonjee.
3	6	3	1	1		5	3	6	N 40° W	7·6	5·6	+36	7·7	35	− 7	·139	−·067	2·9	+0·9	0	0·50	−0·50	0	0·29	− 0·29	0	0·83	−0·83	0	Mount Abu.
1	2	3	4	3	1	7	3	4	S 12° W	4·9	3·8	+29	5·0	43	− 8	·196	−·099	0·9	−1·3	1	1·00	0	0·15	0·47	− 0·32	1·56	1·59	−0·03	0·12	Pachmarhi.
25		2	1						N 67° E	2·1	2·7	−22		75	+ 11	·361	+ ·047	3·3	+1·4	4	1·90	+2·10	6·27	1·52	+ 4·75	7·81	6·26	+1·55	1·97	Wellington.
5	1	3	8	5	3	1	1	1	S 75° E	4·0			3·8	57		·255		2·9		4	1·20	+2·80	2·15	0·38	+ 1·77	2·51	2·38	+ 0·13	0·70	Ootacamund.
	10	4	5	4	2			3	N 42° E	12·8				64		·262		2·5		2	2·30	−0·30	1·66	1·48	+ 0·18	5·12	8·22	−3·10	1·27	Kodaikanal.
																														XIII.—Extra India.
																													0·72	Trincomalee
24		2				1	1		N 23° W	1·0				88	+ 7	·805	−·006	3·3	+0·2	2			0·93	1·98	− 1·05	23·02	23·26	− 0·24	1·61	Colombo.
	4	6	13	4			1		N 74° E	6·6	6·2	+ 6		80	+ 8	·782	−·006	4·5	+2·1	3			2·74	2·29	+ 0·45	8·71	12·28	− 3·57	0·09	Meshed.
														89		·163		3·0	−1·6	0			0·09	1·03	− 0·94	1·99	2·14	− 0·15	0·60	Teheran.
3	12	10		1	1			1	N 21° E	1·2†			1·6†	76	?	·117	?	1·7	−2·2	1			0·60	0·82	− 0·22	5·00	3·48	+ 1·52	0	Ispahan.
21	1	1			1		4		N 72° W	2·4			3·1	60†	−20	·103†	−·036	2·9	−0·3	0			0	0·17	− 0·17	1·97	0·97	+ 1·00	0·32	Bushire.
5	2	8	4	2	1			6	N 36° E	9·4			10·3	80	+ 4	·322	−·041	3·7		3			1·09	2·35	− 1·26	7·07	8·71	− 1·64	0·45	Bahrein.
3	10	2	1				1	11	N 18° W	12·2††			10·5††	77		·420		2·4		1			0·15			0·55			0·78	Jask.
5	3	8	7	1		1	1	2	N 50° E	11·3			9·4	71	− 5	·420	−·077	5·0	+2·5	3			1·29	0·97	+ 0·32	1·68	2·62	− 0·91	1·06	Muscat.
12	4			1	1		1	8	N 37° W	4·6			4·2	64	− 7	·455	−·056	3·2	+0·8	4			1·83	0·78	+ 1·05	3·10	2·32	+ 0·78	0·23	Baghdad
19	3			1	2		1	2	N 45° W	2·0	4·3	−53	2·6	60	−10	·185	−·076	2·0	−0·6	1			0·26	2·17	− 1·91	1·91	5·19	− 3·28	0·33	Busrah.
	1		1	1	5	5	3	11	S 88° W											2			1·26			1·88				
	3	14	8	2				1	N 55° E	10·7	12·3	−17	8·7	81	+ 5	·722	+ ·047	3·0	−3·4	0			0	0·29	− 0·29	1·77	0·98	+0·79	0	Aden.
			8	17	2			1	S 56° E	17·8‡			18·0	76	− 2	·717	+ ·001	3·6	−2·0	0			0·06	0·26	− 0·20	1·07	0·68	+ 0·39	0·06	Perim.
		3	5	15	2	1		1	N 71° E					65		·060		2·7	−0·1	0			0	0·98	− 0·98	0·32	2·51	− 2·19	0	Kabul.
26							1	1	S 45° W	1·0			1·0					4·9	−0·1	0			0·07	0·12	− 0·05	0·57	0·58	−0·01	0·05	Kashgar.
	18	6	2		1			1	N 15° E	4·8			5·1	71	− 6	·765	−·031	3·1	0	0			0	0·35	− 0·35	5·16	7·10	−1·94	0	Miniccy.
	14	13	1						N 23° E	7·9			7·4	78	0	·873	+·009	6·0	−0·1	0			0·08	1·38	− 1·30	6·83	7·52	−0·69	0·08	Zanzibar.
																		5·0		0			0			5·24			0	Do. Dunga.
3	5	18							N 36° E	5·9‡			5·8‡	79		·846		0		4			3·06			8·71			1·75	Penang.
3	7	12	3		2			1	N 37° E	10·3								5·0		11			10·35			23·47			3·95	Singapore.
	3	19	1			1	1	3	N 31° E	5·4																				

station, the data for that station are not utilized in calculating the provincial departures from normal.
42 and 44 are derived are Incompiete.

‡ Mean of 25 days.

†† Mean of 22 days.

Table II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Stations in India, Burma, etc., in February, 1905.

Tabl

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 6

Station.	Elevation of barometer cistern above sea-level in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	Temperature of Air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three preceding columns
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Port Blair	61	29·980	29·878	·102	29·927	+·035	29·919	87·4	74·8	12·6	90·4	70·5	19·9	82·4	85·6	80·2	− 0·4	71·9	76·6	77·7	75·4
Rangoon††	57	·918	·825	·123	·883	−·009	·877	90·3	67·0	23·3	94·3	63·8	30·5	83·4	88·6	76·6	− 0·7	63·7	71·1	71·6	68·8
Diamond Island	41	·997	·884	·113	·939	+·008	·915	82·7	72·6	10·1	87·3	68·2	19·1	81·0	81·1	77·3	− 0·6	66·9	71·7	71·5	70·0
Cocos Island	119	·913	·804	·109	·857		·909	82·7	73·9	8·8	86·4	72·0	14·4	80·1	79·5	77·4		69·2	73·1	73·0	71·8
Akyab	20	30·037	·928	·109	·974	+·021	·937	81·5	60·5	21·0	85·9	51·3	34·6	73·2	77·7	70·6	− 2·2		65·6	67·2	
Chittagong	87	·010	·907	·103	·953	+·054	·991	77·2	54·3	22·9	83·5	46·6	36·9	68·4	74·5	65·5	− 4·9	52·3	60·6	62·0	58·3
Calcutta (Alipore)	21	·100	·968	·132	30·026	+·069	·993	75·8	54·6	21·2	86·9	45·9	41·0	67·8	74·7	64·4	− 5·9	51·6	57·4	60·6	56·5
Saugor Island	25	·073	·948	·125	29·997	+·051	·967	75·5	58·3†	17·2	85·5	45·7	39·8	63·1	73·0	65·7	− 6·4	54·6	60·5	62·1	59·1
False Point	21	·072	·959	·113	30·002	+·042	·965	76·5	61·2	15·3	90·9	48·0	42·9	73·2	73·4	67·6	− 4·9	59·1	65·3	65·7	63·4
Hazaribagh	2,007	28·016	27·912	·104	27·956	+·024	·979	69·5	48·4	21·1	84·0	37·6	46·4	60·8	67·2	58·4	− 7·4	43·8	49·7	52·7	48·7
Allahabad	309	29·801	29·679	·122	29·729	+·061	30·006	71·7	46·6	25·1	84·2	34·3	49·9	63·0	70·6	58·1	− 6·8	44·9	54·8	58·8	52·8
Dehra Dun	2,233	27·782	27·710	·072	27·739	+·036	·057	58·3	39·8	18·5	69·1	30·1	39·0	50·4	54·0	48·5	− 9·1	37·4	44·9	46·2	42·8
Roorkee	899	29·168	29·085	·083	29·120	+·069	·045	62·4	40·7	21·7	69·8	28·4	41·4	52·4	59·0	50·2	− 8·8	39·8	47·6	49·6	45·7
Meerut	738	·325	·252	·083	·287	+·057	·037	63·5	43·6	19·9	71·9	31·6	40·3	53·5	60·9	52·2	− 7·9	41·6	47·5	50·4	46·5
Lahore	702	·391	·304	·087	·338	+·057	·059	61·1	40·6	20·5	70·0	30·1	39·9	51·8	59·1	49·7	− 7·6	38·0	47·3	50·0	45·1
Ludhiana	812	·255	·188	·067	·213	+·057	·050	59·2	42·3	16·9	67·2	30·0	37·2	51·1	57·7	49·5	− 8·6	40·8	47·4	49·2	45·8
Peshawar	1,110	28·995	28·910	·085	28·944	+·042	·110	57·8	35·6	22·2	67·0	28·4	38·6	50·4	56·5	45·6	− 7·7	33·3	42·8	45·0	40·4
Jacobabad	186	29·955	29·851	·104	29·896	+·073	·054	69·9	44·4	25·5	78·1	29·4	48·7	60·8	66·9	56·4	− 6·0	40·3	52·3	54·5	49·0
Kurrachee	30	30·126	30·015	·111	30·063	+·069	·059	72·3	54·5	17·8	80·5	46·2	34·3	65·4	70·1	62·9	− 5·5	49·8	51·6	58·2	54·2
Jaipur	1,431	28·645	28·541	·104	28·582	+·044	·038	67·8	44·7	22·9	75·1	29·7	45·4	58·6	65·4	55·0	− 9·2	39·3	48·3	50·4	46·0
Udaipur	1,925	·127	·005	·121	·062		29·994	72·8	45·7	27·1	82·2	32·4	49·8	63·1	71·6	59·4		41·4	51·3	56·0	49·6
Deesa	466	29·632	29·510	·122	29·566	+·055	·998	80·7	49·8	30·9	89·7	37·6	52·1	70·6	78·5	65·3	− 5·6	41·2	53·1	56·6	50·3
Jamnagar	61	30·061	·944	·120	·997		30·003	78·2	52·1	26·1	85·0	42·8	42·2	70·0	76·0	64·2		45·2	55·3	56·8	52·4
Belgaum	2,539	27·477	27·349	·128	27·409	+·010	29·851	87·5	57·8	29·7	92·3	49·9	42·4	77·4	85·7	71·5	− 1·5	51·4	57·4	61·4	56·7
Sholapur	1,590	28·410	28·280	·160	28·365	+·006	·891	90·5	58·1	32·4	99·4	48·1	51·3	76·6	88·7	74·0	− 3·7	47·4	57·0	62·4	55·6
Akola	930	29·131	·972	·159	29·044	+·034	·934	85·1	50·5	34·6	98·5	38·6	59·9	73·3	84·1	67·4	− 6·3	42·4	56·2	60·7	53·1
Buldana	2,132	27·898	27·777	·121	27·829	−·015	·925	79·8	55·5	24·3	92·6	45·1	47·5	70·3	78·1	67·3	− 6·5	44·4	52·0	55·8	50·7
Khandwa	1,044	29·016	28·869	·147	28·935	+·041	·957	82·3	48·7	33·6	94·4	36·7	57·7	68·7	81·3	65·3	− 6·9	41·1	51·9	58·3	50·4
Nagpur	1,025	·031	·882	·149	·949	+·039	·947	84·5	54·5	30·0	97·2	45·4	51·8	70·4	82·3	69·1	− 5·2	46·4	55·4	60·9	54·2
Do. (Sanitary Commr.'s Office)	1,013	·036	·880	·156	·950		·938	85·0	54·3	30·7	98·0	46·5	51·5	71·9	83·3	69·3		46·4	56·3	61·9	54·9
Hyderabad (Deccan).	1,690	28·339	·199	·140	·292	+·038	·897	87·9	62·5	25·4	95·8	53·3	42·5	78·2	88·1	74·9	− 2·2	56·3	63·9	66·7	62·3
Bombay	37	30·032	29·914	·118	29·967	+·034	·945	80·0	63·6	16·4	87·9	56·7	31·2	72·0	74·8	70·9	− 3·9	56·3	61·4	65·2	61·0
Karwar	44	29·990	·881	·109	·933	+·018	·911	84·3	64·3	20·0	87·8	59·5	28·3	79·5	82·7	73·4	− 2·5	61·5	68·1	70·7	66·8
Periyakulam	945	29·084	28·915	·169	29·011		29·883	93·9	67·5	26·4	97·1	60·1	37·0	82·9	92·2	80·6		63·7	70·9	72·0	68·9
Salem	940	·108	·928	·180	·922	−·018	·891	95·5	70·2	25·3	99·3	62·6	36·7	83·4	93·6	81·8	+3·3	67·2	72·4	75·1	71·6
Chitaldroog	2,405	27·613	27·480	·133	27·543	+·006	·848	89·7	65·6	24·1	93·4	59·9	33·5	79·8	88·0	77·0	+0·1	58·4	65·6	67·3	63·8
Bangalore	3,021	·036	26·901	·135	26·966	−·003	·857	87·7	62·0	25·7	91·0	56·4	34·6	76·9	85·5	74·2	+2·2	58·8	64·7	64·6	62·7
Hassan	3,091	26·971	·841	·130	·903	+·012	·852	86·6	58·7	29·9	91·9	53·7	38·2	78·9	85·9	73·0	+1·6	56·5	65·2	65·4	62·4
Mysore	2,518	27·523	27·372	·151	27·445	+·003	·857	90·2	65·6	24·6	93·3	61·7	31·6	78·7	88·3	77·2	+2·0	62·5	67·6	67·1	65·7
Madras	22	30·033	29·900	·135	29·962	−·004	·915	87·2	70·2	17·0	91·3	63·9	27·4	83·3	83·1	78·2	+1·6		73·7	74·0	72·4
Bellary	1,475	28·538	28·380	·158	28·451	−·012	·864	94·0	67·4	26·6	99·0	61·6	37·4	80·4	91·2	80·5	+0·9	57·9	68·6	72·2	66·2
Waltair	226	29·838	29·718	·120	29·768	+·017	·939	81·6	70·8	10·8	86·4	67·0	19·4	78·5	78·6	75·3	−1·9	66·6	69·7	70·7	69·0

† Mean of 27 days.

†† Observations of 19 days.

ions in India, Burma, etc., in February, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind Direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.
													Total number of 10 hours and 16 hours winds from																
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
.837	.842	.832	—.005	87	75	69	80	+1	3·6	3·6	3·6	+0·5		1	50	1	1				3	N 43° E	N 42° E	% 91	% 71	143*	120	0	0	Port Blair.
.558	.551	.589	—.016	83	52	41	65	—4	1·5	1·7	1·6	—0·2	3	15	6		3	1		3	7	N 4° W	S 42° W	55	16	31*	91	0	0	Rangoon.
.656	.648	.649	—.058	73	62	60	68	—7	1·4	1·5	1·5	—0·7		8	8	1	3	1		1	34	N 25° W	N 33° W	68	85	315*	211	0	0	Diamond Island.
.728	.728	.727	+.004	78	71	72	78	+3	2·0	2·0	2·0	+0·1		42	7	2					5	N 4° E	N 6° E	91	86	325		0	0	Cocos Island.
.534	.535				66	56			1·5	1·2	1·4	+0·1			10	13	5		1	12	15	N 1° E	N 21° W	23	43	64*	84	0·08	0·08	Akyab.
.437	.398	.420	—.111	87	62	47	67	—5	2·0	2·1	2·1	0		11	20	1	1	2	3	3	15	N 1° E	N 42° W	55	27	71*	94	0·20	0·09	Chittagong.
.345	.352	.376	—.109	81	50	41	60	—6	3·6	3·2	3·4	+1·2		12	12	6	2	2	4	5	13	N 3° W	N 73° W	42	25	96*	79	1·62	1·34	Calcutta. (Alipore).
.445	.427	.439	—.177	77	62	52	66	—10	3·3	3·5	3·4	+0·6		25	11	3	4	3	4	1	5	N 13° E	S 54° W	50	19	218*	209	1·59	1·55	Saugor Island.
.531	.549	.542	—.110	88	63	65	74	—6	5·3	4·5	4·9	+1·8		4	23	9	6	9	2	2	1	N 76° E	S 11° E	46	17	181*	187	0·96	0·43	False Point.
.230	.232	.245	—.028	67	42	34	50	+6	3·0	3·6	3·3	+0·8		13	2	4	2	7	5	4	19	N 42° W	N 60° W	37	54	169*	173	1·39	0·59	Hazaribagh.
.332	.350	.337	+.010	88	57	45	68	+10	3·6	3·4	3·5	+1·1	1	6	7	8	3	2	2	11	16	N 27° W	N 63° W	34	34	89*	108	0·20	0·12	Allahabad.
.237	.224	.231	—.051	80	64	55	68	+6	5·9	7·6	6·8	+2·4	12	3	5	3	2	4	10	16	1	S 72° W	S 85° W	30	29	28	41	3·82	1·76	Dehra Dun.
.271	.237	.260	—.037	92	68	47	71	+10	4·2	4·6	4·4	+1·0	10	1	4		9		5	3	24	N 53° W	N 60° W	32	31	64	67	2·06	0·94	Roorkee.
.256	.235	.256	—.045	85	61	44	65	+6	4·9	5·0	5·0	+1·9	14	4	2	6	2	1	5	7	15	N 51° W	N 61° W	28	47	26*	62	1·19	0·50	Meerut.
.270	.244	.247	—.040	82	69	49	69	+7	4·5	4·9	4·7	+0·8	9	6	6	6	2	1		16	10	N 37° W	N 30° W	34	30	47	53	1·12	0·80	Lahore.
.285	.242	.266	—.042	89	74	51	74	+9	3·5	4·0	3·8	—0·4	6	2	1		18		22	7	S 69° W	N 51° W	25	38	22*	46	1·71	0·47	Ludhiana.
.185	.161	.179	—.065	78	51	37	58	—2	3·4	4·3	3·9	—0·4	21	5	6	4		3	2	9	6	N 35° W	N 12° W	20	9	23*	77	1·91	0·70	Peshawar.
.286	.265	.259	+.020	67	54	42	57	+13	2·9	3·0	3·0	—0·2	7	10	3	5	2	5	1	5	18	N 29° W	N 21° E	36	23	90*	72	0·54	0·20	Jacobabad.
.292	.337	.350	—.095	70	47	48	61	—2	3·8	3·9	3·9	+1·3		4	13	7	4	4	9	6	9	N 2° E	N 80° W	11	22	158*	235	1·81	0·83	Kurrachee.
.215	.184	.201	—.061	62	44	29	49	+2	3·9	4·4	4·2	+1·1		3	11	8	3	3	8	11	9	N 40° W	N 20° W	14	33	105	91	0·27	0·13	Jaipur.
.24	.262	.242		69	41	33	48		2·0	2·1	2·1		27	1	2	3	3		2	11	7	N 70° W		20		15*		0	0	Udaipur.
.182	.175	.174	—.049	41	24	17	27	—3	1·7	2·0	1·9	—0·3		8	11	7	5		3	11	10	N 6° W	N 2° W	31	30	246	206	0	0	Deesa.
.253	.215	.262		52	34	24	42		1·3	1·2	1·3			11	21	8			2	7	7	N 18° E		55		313*		0	0	Jamnagar.
.230	.246	.289	—.065	64	24	20	42	—4	1·7	2·2	2·0	+0·8		8	6	7	3	4	13	10	5	N 37° W	S 63° E	17	11	187	233	0	0	Belgaum.
.231	.239	.237	—.087	39	23	17	27	—7	0·8	1·4	1·1	—0·4	1	7	11	2	9	2	7	5	12	N 13° W	S 42° E	18	23	243*	180	0·20	0·15	Sholapur.
.245	.233	.221	—.069	45	28	19	32	—5	1·2	1·6	1·4	—0·1	11	3	6	7	3		2	3	21	S 25° W	N 12° W	25	26	99*	103	0·12	0·12	Akola.
.180	.185	.181	—.030	35	22	18	29	—6	0·5	1·9	1·2	—0·5		10	4	4	2	2	4	12	18	N 45° W	N 22° W	48	27	157*	154	0·10	0·08	Buldana.
.194	.222	.200	—.094	48	26	18	32	—6	0·9	1·3	1·1	—0·3	5	11	9	3	3	2	2	4	7	N 14° W	N 15° W	45	31	110*	98	0·01	0·01	Khandwa.
.270	.282	.263	—.081	49	34	24	37	—6	1·1	2·1	1·6	—0·6	5	4	23	3	5	2	3	4	7	N 34° E	N 42° E	37	19	115*	106	0·76	0·70	Nagpur.
.279	.302	.273		51	33	25	37		1·4	2·2	1·8		1		24		15	1	8		7	N 75° E		32		62*		0·83	0·72	Do. (Sanitary Commr.'s Office).
.431	.420	.413	—.029	67	44	33	49	—1	1·5	2·4	2·0	0	26	6	3	7	8	2	2	1	1	S 88° E	S 51° E	21	27	73*	98	0·10	0·06	Hyderabad (Deccan).
.415	.502	.451	—.168	60	52	57	60	—11	1·5	0·9	1·2	0		11	10	4		1	1	4	25	N 18° W	N 1° W	64	57	258	250	0·08	0·08	Bombay.
.537	.594	.525	—.144	84	53	53	68	—7	0·1	0·1	0·1	—0·5		2	5	2			1	23	23	N 40° W	N 53° W	71	73	139	98	0	0	Karwar.
.596	.517	.563		80	53	34	54		2·1	4·0	3·1		2	3	3	10	23	11	2	1	1	S 48° E		61		82*		0·43	0·42	Periyakulam
.654	.630	.657	+.065	85	57	40	65	+2	2·0	3·8	2·9	+0·6	3	1	3	41			1	6	1	N 85° E	S 88° E	64	51	142*	127	0	0	Salem.
.456	.415	.431	+.060	64	45	31	49	+7	1·4	1·8	1·6	—0·5	1	5	6	12	9		2	7	14	N 21° E	N 89° E	21	35	94*	151	0·17	0·17	Chitaldroog.
.473	.370	.440	+.033	83	51	30	57	+3	1·8	2·5	2·2		4	4	4	16	11	6	6	4	1	S 59° E	S 69° E	37	59	153*	120	0	0	Bangalore.
.470	.392	.438	+.045	87	48	32	58	+3	3·1	5·3	4·2	+0·5		3	8	10	9	9	10	5	2	S 34° E	S 84° E	27	58	50*	67	0·05	0·05	Hassan.
.539	.405	.496	+.059	84	55	30	58	+5	4·5	4·5	4·5	+1·4	1	5	9	12	12	6	3	5	3	S 80° E	N 87° E	32	56	146*	190	0·06	0·06	Mysore.
.705	.720	.720	+.005		62	63	74	—4	4·3	1·9	3·1	—0·1			2	21	21	6	6			S 54° E	S 84° E	73	72	142	20	0·31	0·18	Madras.
.566	.559	.494	+.104	55	54	38	49	+8	2·8	2·9	2·9	+0·9	1	5	5	6	7	7	8	8	9	S 62° W	S 57° E	11	43	99*	96	0·16	0·16	Bellary
.614	.652	.646	—.009	79	63	68	72	+4	6·2	5·5	5·9	+4·1			22	7	1	19	6	1		S 65° E	S	36	43	141		2·60	1·98	Waltair.

† Mean of 26 days.

*Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64

Station.	Elevation of barometer above sea-level, in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	Temperature of Air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Temperature, Wet-bulb. Mean minimum	Mean 10 hours.	Mean 16 hours.	Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Quetta . .	5,502	24·660	24·598	·062	24·622	−·025	24·582	42·0	26·0	16·0	49·6	17·6	32·0	36·3	38·6	33·8	−8·4	25·6	33·4	34·5	31·2
Leh . . .	11,503	19·493	19·412	·081	19·452	−·141	19·420	21·7	3·0	21·7	36·3	−7·1	43·4	15·4	21·7	12·1	−6·7	0·3	8·9	14·0	7·7
Srinagar . .	5,204	24·926	24·852	·074	24·885	−·052	24·856	37·5	25·5	12·0	45·3	18·1	27·2	30·0	35·6	29·7	−3·3	23·8	28·6	33·5	28·6
Sarain . .		23·102	23·045	·057	23·062			35·4	19·6	15·8	47·0	10·5	36·5	21·8	31·5	27·3			28·4	29·6	
Simla (Ridge) .	7,224	·046	22·997	·049	·015	−·063	22·973	35·8	25·6	10·2	46·3	18·5	27·8	32·5	32·6	30·5	−10·1	24·0	29·5	30·2	27·9
Chakrata . .	7,022	·232	23·189	·043	·195	−·060	23·154	39·6	26·4	13·2	50·0	19·4	30·6	34·0	34·4	32·8	−10·7	25·8	30·9	31·3	29·3
Ranikhet . .	6,069	24·094	24·032	·062	24·056	−·039	24·015	42·6	30·6	12·0	54·2	22·4	31·8	37·5	38·9	36·4	−11·6	29·9	34·0	34·7	32·9
Muktesar . .	7,600	22·775	22·721	·054	22·741		22·699	37·2	26·1	11·1	50·1	17·9	32·2	32·2	33·5	31·5		24·3	30·1	31·4	28·6
Katmandu . .	4,388	25·728	25·609	·119	25·666	+·018§	25·620	59·1	34·6	24·5	72·3	27·2	45·1	46·3	56·6	46·7	−5·8§	33·2	41·1	45·9	40·1
Darjeeling**. .	7,376	22·949	22·915	·034	22·929	−·060	22·884	43·3	29·4	13·9	55·8	22·8	33·0	37·8	40·4	36·2	−5·4	28·2	36·2	38·5	34·3
Mount Abu .	3,945	26·128	26·057	·071	26·083	−·011	26·034	59·5	46·1	13·4	69·1	37·5	31·6	51·8	56·5	52·5	−8·5	37·1	43·0	43·5	41·2
Pachmarhi . .	3,528	·525	·442	·083	·475	−·024	·422	70·6	45·4	24·6	83·1	33·3	49·8	60·2	68·0	57·6	−5·7	39·3	47·1	51·3	45·9
Chikalda . .	3,642	·431	·330	·101	·372	−·030	·316	72·2	51·3	20·9	84·4	40·9	43·5	62·2	70·9	61·6	−6·9	42·6	48·0	52·4	47·7
Kodaikanal . .	7,688	22·900	22·829	·071	22·865		22·800	66·2	48·0	18·2	69·4	43·8	25·6	61·0	59·7	57·1		43·0	50·4	53·5	48·9
Ootacamund .	7,322	23·118	23·048	·070	23·073		23·009	67·1	46·3	20·8	71·1	40·9	30·2	62·6	63·0	56·5		42·2	51·9	53·3	49·1
Dodabetta . .	8,539?	22·094	22·040	·054	22·057		21·994	59·2	44·5	14·7	62·7	41·7	21·0	55·7	54·8	51·6			46·9	48·5	
Aden . . .	94	29·997	29·883	·114	29·934	+·028	29·961	?	73·6	?	?	70·9	?	77·8	80·3	?	?	?	73·5	69·3	?
Perim . . .	201	·860	·749	·111	·799	+·061	·935	83·4	74·4	9·0	85·3	73·2	12·1	79·7	80·8	77·9	0	63·9	72·5	73·0	69·8
Minicoy . .	7	30·020	·941	·079	·983		·916	85·4			88·5			83·5	82·9				75·1	75·0	
Zanzibar . .	73	29·937	·800	·137	·871	+·026	·869‡	88·4	80·4	8·0	91·0	79·0	12·0	83·6‡	87·8	83·4	+0·7	75·3	77·9‡	78·3	77·2
Port Victoria (Seychelles).	15	·984	·899	·085	·950	+·021§	·889	83·9	78·2	5·7	87·1	76·2	10·9	81·7	82·6	80·0	+0·9§	71·0	76·4	76·8	75·7
Mauritius (Pamplemouses).	181				·762	+·021	·887				87·5	69·5	18·0			78·9	+0·4				74·9

** Observations of 26 days.

N.B.—Elevations in italics indicate barometric determinations.

§ Departures from old normals.

NOTE.—The barometric readings are not reduced to sea-level in the cases

ncluded.

ns in India, Burma, etc., in February, 1905—concluded.

Vapour Tension.				Humidity.					Cloud.				Wind direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.
[illegible] hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from								Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
													Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.								
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
																								%	%					
164	·159	·163	—·008	96	76	69	83	+16	4·5	5·9	5·2	+1·0	15	4	1	1	4	4	2	21	4	S 88° W	N 84° W	37	30	42*	84	3·48	0·86	Quetta.
023	·036	·027	—·040	46	23	32	38	−25	5·5	7·8	6·7	−0·1							24	32		S 71° W	S 9° W	93	25	43	31	0·16	0·05	Leh.
146	·172	·139	—·035	82	86	81	83†	− 1	8·7	7·4	8·1	+1·5	16	5	3		9	2		2	19	S 82° W	S 9° W	16	8	40*	84	2·14 (a)	1·15 (a)	Srinagar.
125	·148				71	84			7·3	7·8	7·6		36	5	4	5	1	2		2	1	N 45° E		14		31*		13·09	2·50	Sarain.
136	·148	·143	—·016	83	74	80	82	+21	7·1	8·0	7·6	+1·9	1	6			2	46	1			S 1° E	S 11° E	75	25	132*	120	4·67	0·73	Simla
144	·147	·152	—·021	92	73	74	83	+17	5·6	7·1	6·4	+1·5	19	23				13		1		N 6° W	S 6° W	18	4	131*	151	9·49	4·16	(Ridge). Chakrata.
163	·161	·172	—·032	93	73	70	82	+18	6·5	7·5	7·0	+2·5	33	1	5	2	1		6	5	3	N 73° W	S 57° W	9	18	42*	62	3·97	0·88	Ranikhet.
149	·158	·151		83	84	84	87		7·7	8·5	8·1		5		1	7	9	11	4	18	1	S 22° W		36		166*		5·23	3·01	Muktesar.
207	·193	·204	—·056	87	64	43	68	− 1	3·4	5·0	4·2	+0·7	13	3	2	11	1	1	3	18	4	N 71° W	N 87° W	18	47	19*	29	2·68	1·12	Katmandu.
201	·217	·197	—·026	88	87	85	90	+ 7	5·2	6·2	5·7	−0·3	4		5	2	11		14	10	6	S 48° W	S 83° W	23	31	145¶	132	0·94	0·49	Darjeeling.
150	·139	·142	—·046	39	34	30	38	+ 4	2·6	2·9	2·8	+0·1		12	5	2	1	1	12	7	16	N 51° W	N 66° W	47	28	189*	146	0	0	Mount Abu.
187	·195	·192	—·068	56	34	27	43	− 6	1·1	1·4	1·3	−1·0		13	8	5	4	1	9	7	9	N 22° W	N 69° W	28	25	123*	106	0·15	0·12	Pachmarhi.
183	·191	·190	—·083	46	31	24	38	− 5	1·1	1·5	1·3	−0·5	14	15	3		1	4	3	2	14	N 29° W	N 81° W	41	24	189*	156	0·39	0·37	Chikalda.
263	·350	·284		70	49	69	62		2·7	6·8	4·8		1	14	6	7	12	15			1	S 77° E		36		308*		1·66	1·27	Kodaikanal.
277	·310	·287		72	49	54	61		2·8	5·2	4·0		2	10	10	15	8	5	3	2	1	N 77° E		41		93 83		2·15	0·70	Ootacamund.
233	·279				52	65			2·9	6·0	4·5			5	23	15	9	4				N 70° E		69		210‖		2·97	1·42	Dodabetta.
768	·569	?	?	?	81	55	?	?	2·7	0·9	1·8	−2·2		2	13	16	20	4			1	S 81° E	N 89° E	69	72	432*	367	0	0	Aden.
707	·713	·643	—·078	54	70	68	66	−10	1·8	0·1	1·0	−1·4§				1	15	23	15	2		S 2° W	N 89° E	78	67	122*	461	0·06	0·06	Perim.
762	·763				66	67			3·0	3·9	3·5			38	9	6				1	2	N 12° E		84				0	0	Minicoy.
885‡	·842	·863	+·007	78	77‡	64	75	− 2	6·1‡	3·3	4·7	+0·1		18	19	13	2				3	N 38° E	N 33° E	73	55	176*	161	0·08	0·08	Zanzibar.
840	·850	·850	+·008	81	77	76	81	− 2	7·1	6·8	7·0	+0·5§	6	11	5	4				3	27	N 23° W	N 21° W	64	53	160	145	8·08	2·40	Port Victoria (Seychelles).
		·788	+·031				80	+ 2			5·9	−0·4										S 31° E	S 81° E			190	264	3·33	0·93	Mauritius (Pamplemousses).

* Corrected.

† Mean of three previous columns.

¶ Mean of 25 days.

‖ Mean of 21⅔ days.

‡ Mean of 27 days.

(a) Snow water.

plateau stations, the elevations of which exceed 3,100 feet.

. C P. O.—No. 419 Meteo.—23-5-05.—385.—C. T.

V. I.—Jan. 06.—5,600

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric ssure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the re observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of nbert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are icated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the nth is shewn by the following notation:—

Velocity of	0 to 2 miles per hour	...	one feather added to the wind arrow.
,, ,,	2 to 5 ,, ,, ,,	...	two feathers ,, ,, ,, ,,
,, ,,	5 to 10 ,, ,, ,,	...	three ,, ,, ,, ,, ,,
,, ,,	10 to 20 ,, ,, ,,	...	four ,, ,, ,, ,, ,,
	over 20 ,, ,, ,,	...	five ,, ,, ,, ,, ,,

Zinco. S. I. O., Calcutta.
LITHO. S.S. MUNDLE.

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal amounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020" or two hundredths of an inch, &c. Continuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted lines that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuous and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative departures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

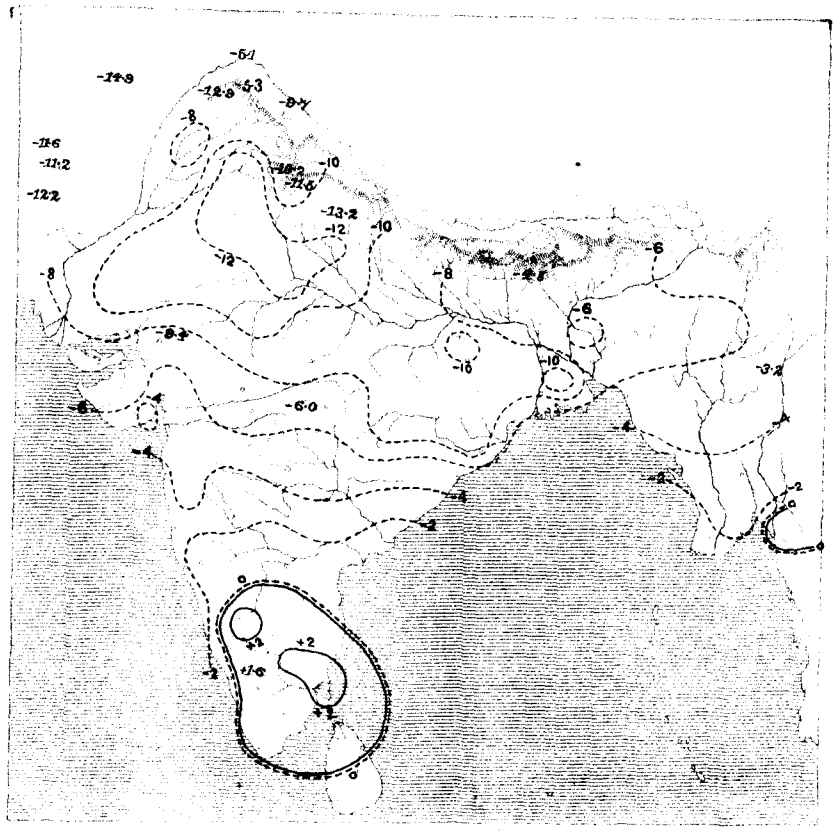
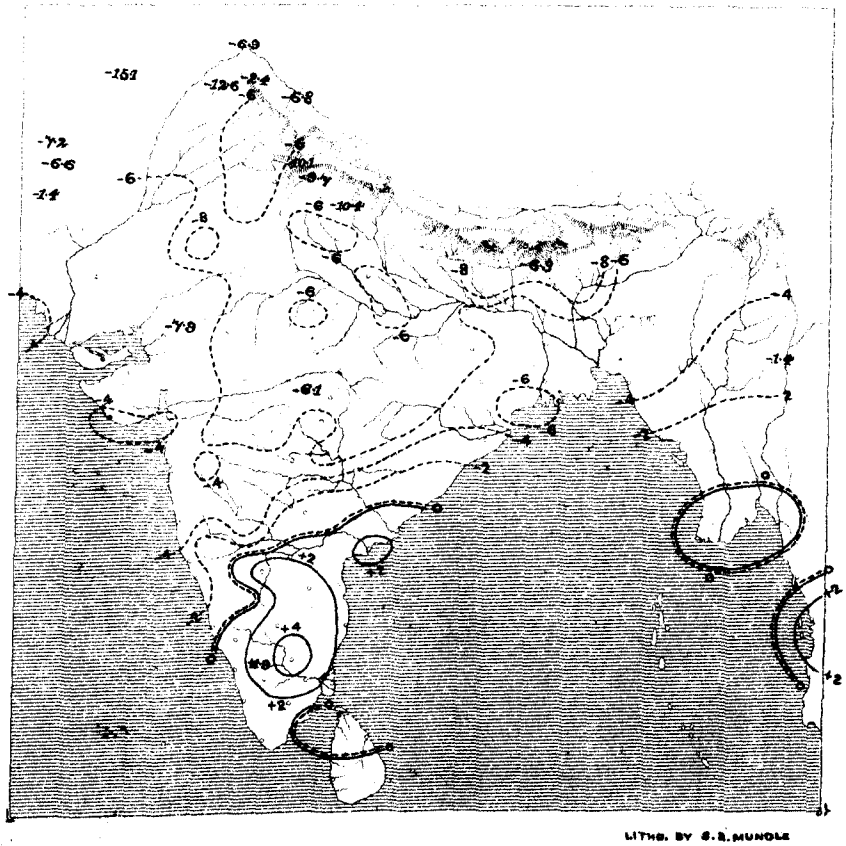


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S.E. MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

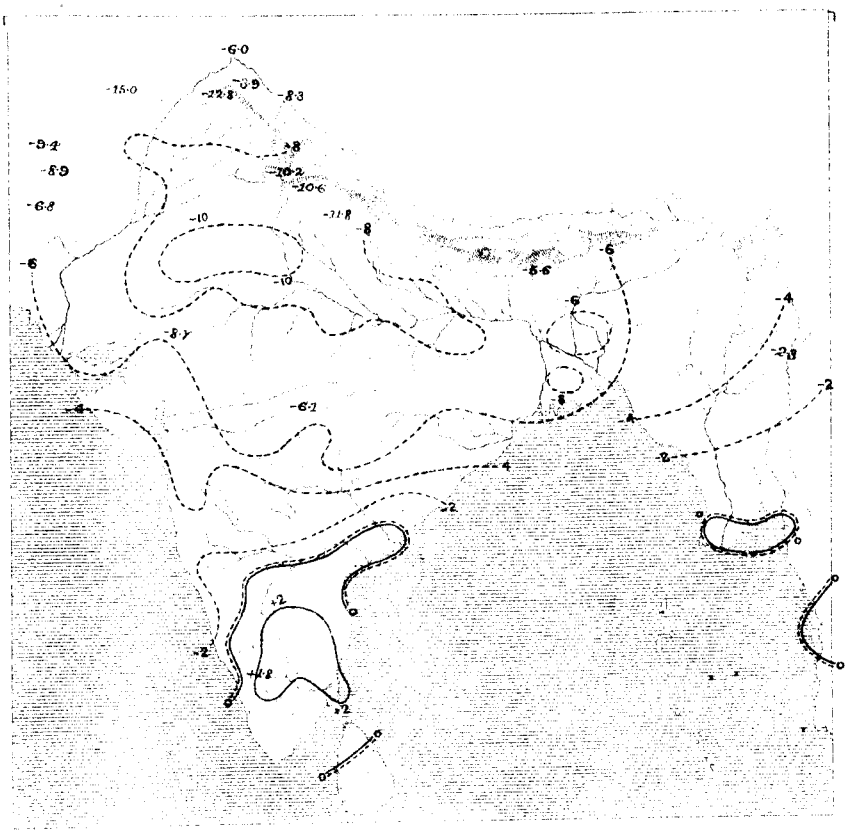
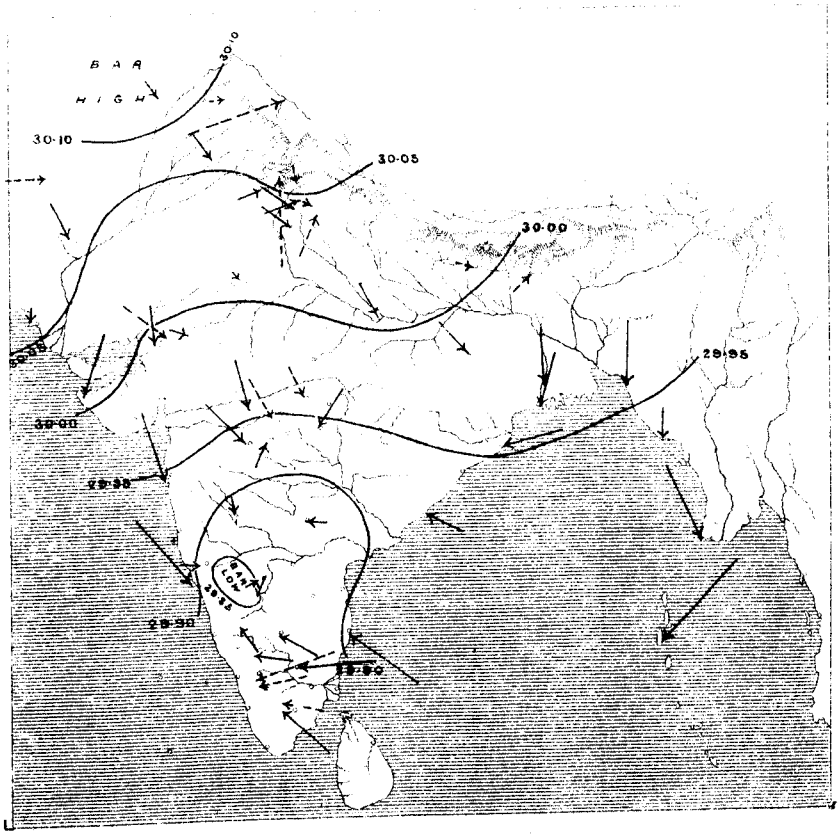


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY A. S. MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 A. M.

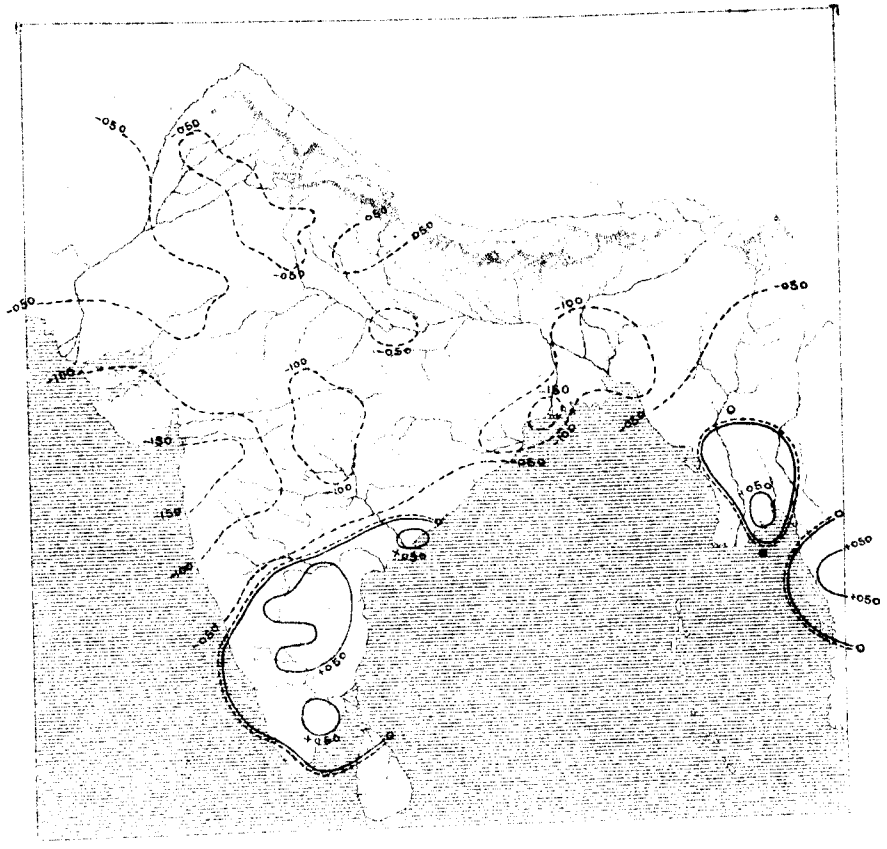


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 A. M.

LITHO. BY G.B. MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 A. M.

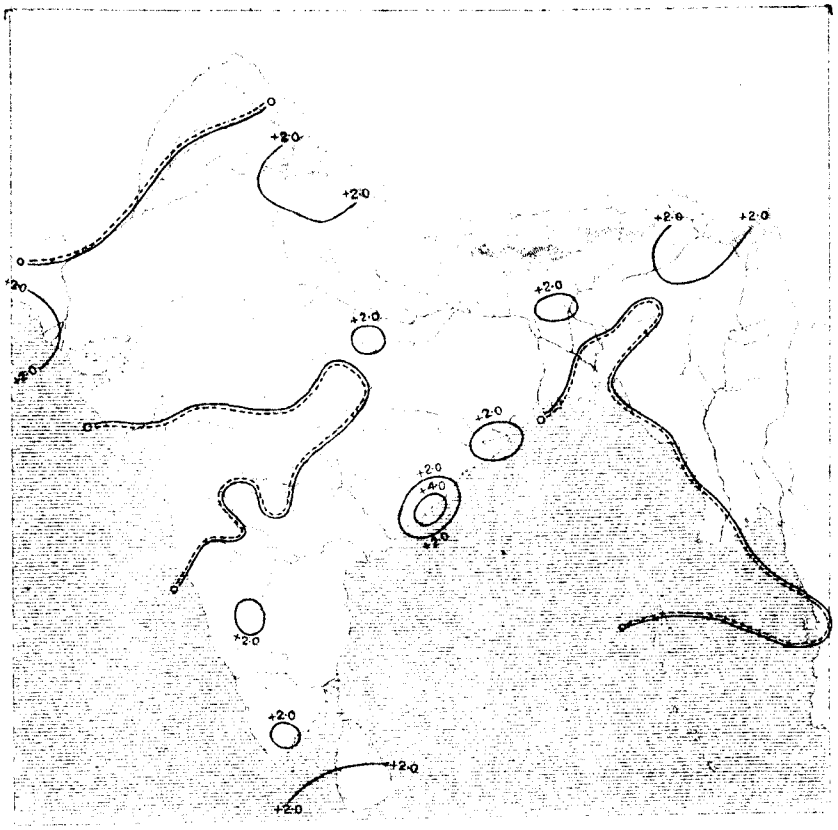
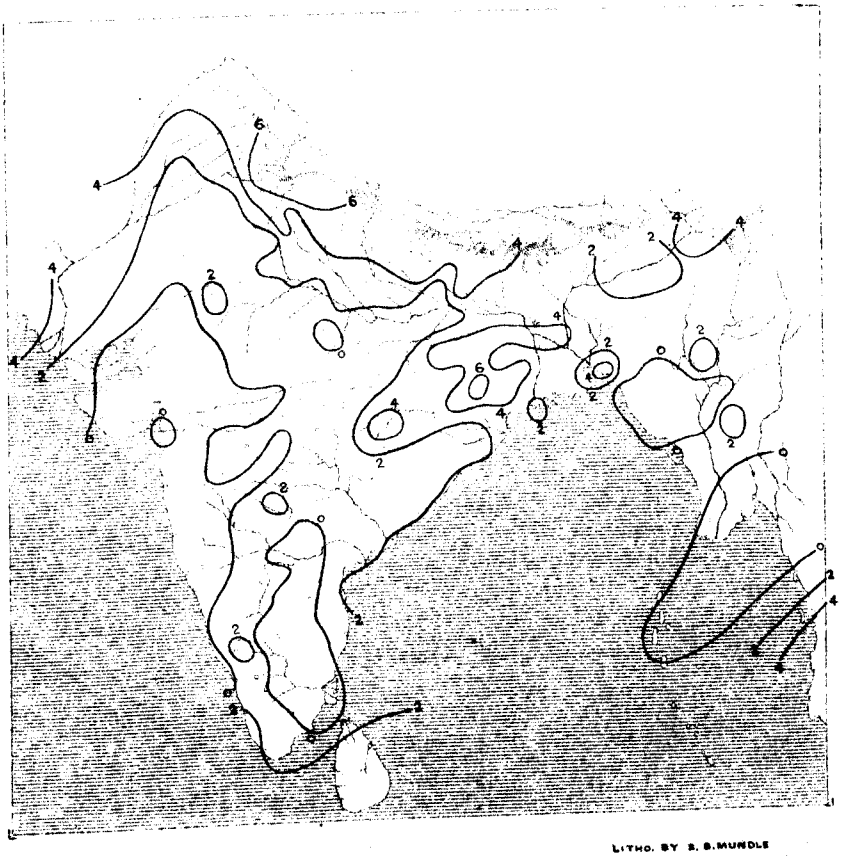


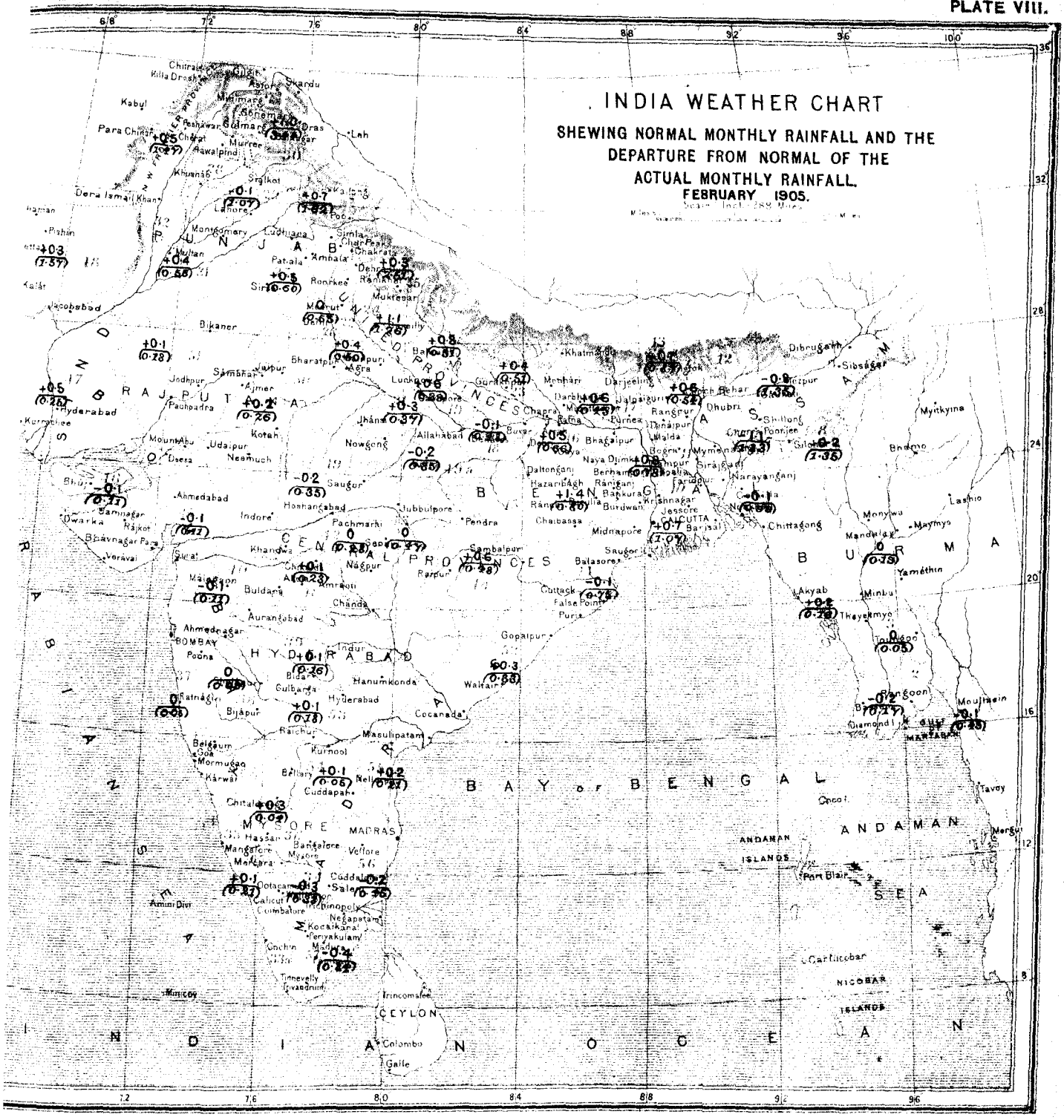
CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.



LITHO. BY S. S. MUNDLE

. 9, W., I.—Jan. 05.—5,600.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar haracter. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above e give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained eferring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. Sind
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province
33. Malabar
33a. Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a. Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

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GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, MARCH, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of March, 1905, is based on observations ken daily at 8 A.M. at 232 stations, and on additional servations taken at 10 A.M. and 4 P.M. at 64 stations. the rainfall summary the rainfall data of the meteorological observatories and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the preparation of the review are utilized and brief notes on Solar and Magnetic disturbances are supplied by the Observatories.

Summary of the chief features of the weather in India during the month of March, 1905.

The low temperature conditions which first showed mselves over the Indian region, about the 20th of uary 1905, and which continued throughout February, re as marked in March as in the two preceding months: weather was at the same time more unsettled than ual over northern India, more particularly in the north-st.

During the first four days of the month occasional owers occurred over Kashmir, northern India, and the st of the Central Provinces, and the mean temperature was lower than usual in all divisions except adras and Burma. The deficiency was greatest in the rth-west and amounted to more than 15° at the stations which comparative data are given below:—

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
1st March.	Peshawar	—18·3
	Ambala	—17·3
	Deesa	—16·9
	Hyderabad (Sind)	—16·1
1st "	D. I. Khan	—15·9
	Bhuj	—15·7
	Multan	—15·6
	Bikaner	—15·2

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
2nd March	Bikaner	−15·5
	Rajkot	−15·1
3rd „	Hyderabad (Sind)	−15·7
4th „	Jaipur	−16·6
	Agra	−16·5
	Jhansi	−15·5
	Meerut	−15·5
	Delhi	−15·4
	Neemuch	−15·1
	Bikaner	−15·1

On the 5th and 6th a slight change occurred over the more central districts and on these two days a slight excess of mean temperature, mainly due to high night temperatures, was registered in the following divisions:—

DATE.	PROVINCE OR DIVISION.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
5th March	Berar	+2·2
	Bombay Deccan	+0·4
6th „	Berar	+4·5
	Central Provinces	+0·8
	Bombay Deccan	+0·6
	Gujarat East	+0·4

Between the 7th and the 14th daily rain fell over the north-eastern districts and the mean temperature was consequently very low over the Gangetic Plain and the north-east of India. At the same time showers diminished in the north-west and after the 9th, temperature rose, and was generally above the normal over Sind, Gujarat, parts of Central India and the Bombay Deccan from the 10th to the 15th. This is shown below:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	10th March.	11th March.	12th March.	13th March.	14th March.	15th March.
	°	°	°	°	°	°
Sind	+1·7	−0·8	+ 2·2	+ 3·9	+5·2	−0·5
Gujarat	+0·5	+1·2	+ 1·7	+ 1·4	+0·7	+1·6
Central India	−3·0	−0·2	− 2·8	− 3·8	+0·2	+2·1
Bombay Deccan	−0·2	+1·7	+ 2·1	+ 2·8	+2·4	+3·4

During this period the mean temperature was steadily low over the more northern provinces of India—more especially in the north-east—and as the period advanced these low temperatures extended eastward into Burma. This is shown below:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	10th Mar.	11th Mar.	12th Mar.	13th Mar.	14th Mar.	15th Mar.
	°	°	°	°	°	°
North-west Frontier Province	−10·6	−6·8	−4·6	−2·7	−5·8	−3·2
Punjab	−8·2	−9·0	−6·4	−4·1	−4·2	−4·0
Rajputana	−1·8	−6·1	−3·9	−3·6	+2·4	+2·9
United Provinces of Agra and Oudh	−6·2	−7·4	−8·0	−7·4	−6·0	−3·2
Bihar	−7·7	−4·4	−12·0	−7·1	−7·3	−6·1
Chota Nagpur	−5·7	−3·7	−7·6	−5·9	−6·7	−2·8
Orissa	+1·0	+0·2	−0·6	−2·4	−3·4	−1·2
Bengal	−7·5	−4·0	−9·0	−7·2	−5·7	−4·4
Assam	−7·0	−4·0	−9·1	−4·7	−3·4	−5·6
Burma	+0·8	+1·1	+1·2	+0·4	−2·0	−2·7

This cool weather did not affect the greater part of the Peninsula where during this period, with the exception of the West Coast, the mean temperature was steadily high. The following gives data:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	10th March.	11th March.	12th March.	13th March.	14th March.	15th March.
	°	°	°	°	°	°
Berar	−1·6	+1·5	+ 3·0	+1·4	0	+0·9
West Coast	−1·4	−1·0	− 0·2	−0·5	−0·1	−0·1
Bombay Deccan	−0·2	+1·7	+ 2·1	+2·8	+2·4	+3·4
Mysore	+1·9	+2·6	+ 2·4	+1·9	+1·3	+1·6
Madras Coast	+1·7	+1·7	+ 1·6	+1·7	+3·3	+1·9
Madras Deccan	+1·0	+2·5	+ 2·8	+3·9	+4·2	+4·3
South India	+1·8	+1·5	+1·6	+2·9	+3·7	+3·2

On the 15th showers recommenced in the north-west and continued intermittently up to the 22nd, while in the north-east there was no change of weather, scattered rain falling daily. In consequence the relatively high temperatures over parts of north-west and central India and the

north Deccan disappeared and the mean temperature again became lower than usual in all provinces except parts of Madras and Mysore. These conditions lasted till the 22nd, as is shown by the following comparative data for all divisions:—

Province or division.	Departure from normal of		
	Mean maximum temperature, 22nd March.	Mean minimum temperature, 22nd March.	Mean temperature, 22nd March.
	°	°	°
Burma	−6·8	−2·1	−4·5
Assam	−4·2	−3·1	−3·7
Bengal	−7·0	−4·8	−5·9
Orissa	−3·1	−2·2	−2·7
Bihar	−0·9	−2·7	−1·8
Chota Nagpur	−2·2	−4·5	−3·4
United Provinces of Agra and Oudh	−8·4	−8·1	−8·3
Punjab	−10·8	−7·6	−9·2
North-west Frontier Province	−8·6	−9·1	−8·9
Sind	−4·9	−7·2	−6·1
Rajputana	−7·2	−9·3	−8·3
Gujarat	−7·3	−3·9	−5·6
Central India	−7·2	−5·4	−6·3
Central Provinces	−5·5	−4·5	−5·0
Berar	−7·8	−7·8	−7·8
West Coast	−2·5	−4·9	−3·7
Bombay Deccan	−7·6	−6·9	−7·3
Mysore	+1·0	−0·2	+0·4
Madras Coast	+0·8	+3·1	+2·0
Madras Deccan	−2·7	−2·3	−2·5
South India	+3·1	+3·6	+3·4

On the 23rd a stormy period commenced in the north-west. The first storm appeared over lower Sind on the 23rd; thence it advanced north-north-eastward to the west Punjab which it reached on the 26th. It then marched eastward through the Punjab breaking up in the Simla and Mussooree hills on the 27th. The second storm of this period appeared over upper Sind on the 28th. It advanced north-eastward into the Central Punjab and filled up over the east Punjab on the 30th. Both storms occasioned very unsettled weather over the hills and plains of north-west India and gave heavy snow to Kashmir. The following were some of the principal amounts reported:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kohat	Fort Lockhart	25th March	1·75
Kashmir	Sonemarg	26th „	6·11
Peshawar	Malakand	„ „	2·73
	Nahakki	„ „	2·50
	Landi Kotal	„ „	2·32
	Peshawar	„ „	1·68
	Parachinar	„ „	1·57
Kohat	Hangu	„ „	1·52
Jummoo	Ramban	„ „	1·51
Kushmir	Sonemarg	27th „	4·41
Hazara	Abbottabad	„ „	2·28
Kashmir	Uri	„ „	1·80
	Sonemarg	28th „	4·28
	Uri	„ „	1·75
Jummoo	Ramban	„ „	1·65
Kashmir	Karnah	„ „	1·62
	Sonemarg	29th „	2·15
Hazara	Oghi	„ „	1·94
Peshawar	Charsadda	„ „	1·71
	Malakand	„ „	1·65
Garhwal	Joshimath	„ „	1·61
Peshawar	Landi Kotal	„ „	1·55
Simla	Kilba	30th „	2·05

In consequence of this snow and rainfall a rapid fall of temperature occurred in the north-west where, from the 23rd to the close of the month, the mean temperature was largely below the normal. This is shown below:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of								
	23rd Mar.	24th Mar.	25th Mar.	26th Mar.	27th Mar.	28th Mar.	29th Mar.	30th Mar.	31st Mar.
	°	°	°	°	°	°	°	°	°
United Provinces	−10·4	−9·7	−7·9	−4·1	−1·9	−1·0	−2·8	−3·9	−10·3
Punjab	−8·4	−5·8	−3·9	+2·7	−2·9	−3·2	−3·1	−11·9	−14·3
North-west Frontier Province.	−6·4	−1·6	−0·2	−3·1	−8·0	−7·9	−8·8	−17·6	−14·7
Sind	−3·4	−1·6	+0·9	+0·7	−3·0	−4·6	−13·5	−16·3	−13·9
Baluchistan	+3·0	+4·3	+5·3	−1·9	−15·1	−11·3	−28·5	−32·3	−23·5
Rajputana	−7·2	−7·2	−4·4	+0·9	−1·3	+3·2	−5·1	−12·7	−17·3
Gujarat	−5·0	−3·7	−1·4	−1·2	−2·7	−5·1	−6·6	−14·1	−15·6
Central India	−9·5	−7·3	−5·3	−2·0	−0·6	−1·5	−3·9	−8·8	−14·7

In north-east India and Burma no change of weather occurred, fine to showery weather prevailing throughout the whole period from the 23rd to the close of the month. As a result the mean temperature, though unsteady, was lower than usual on most days. The following gives comparative data for each alternate day from the 23rd to the 31st:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	23rd March.	25th March.	27th March.	29th March.	31st March.
	°	°	°	°	°
Burma	−4·9	−4·4	−4·0	−1·7	−1·0
Assam	−7·7	−5·4	−3·6	+0·4	−1·3
Bengal	−9·2	−5·3	−3·3	−0·8	−1·1
Orissa	−3·2	−3·8	−1·9	−1·3	−2·2
Bihar	−8·1	−6·8	−2·7	−0·3	−2·4
Chota Nagpur	−7·8	−5·6	−2·0	−2·0	−4·4

The Madras coast districts remained, to a great extent, outside the influence of the actions which resulted in these large changes of temperature and the mean temperature in parts of that Presidency was steadily excessive. The following gives comparative data for each alternate day from the 23rd onward for the Madras districts:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	23rd March.	25th March.	27th March.	29th March.	31st March.
	°	°	°	°	°
Madras Coast	+1·5	−0·2	+0·4	+1·4	+2·2
Madras Deccan	−2·4	−0·6	−1·2	−0·6	−6·0
South India	+2·7	+1·4	+1·0	+1·5	+2·4

Solar and Magnetic Disturbances.

The following reports on solar, magnetic and seismic disturbances during the month of March 1905 have been received from the observatories :—

SOLAR OBSERVATIONS, MARCH 1905.

Kodaikanal.

Complete observations were possible on every day of the month except the 28th, when prominences could not be observed, and the 22nd when the prominence observations were incomplete.

Twenty new groups of spots were observed during the month, equally divided between the northern and southern hemispheres. Of these no less than 6 were returns of spots seen in previous rotations. Early in the month two spots of very large size, both easily seen without a telescope, were on the disc at the same time. One of these (No. 468) was the third appearance of the great spot of January and February and, though still a large spot, it was much smaller than it had been and continued to decrease slowly till it disappeared much broken up on the 10th. It re-appeared again on the 25th, for the fourth time, smaller but more compact than at the time of its disappearance. Spectroscopically the spot had become a quiet one. Early in the month a few disturbances were noted in it but they were slight compared with what had been seen in its previous appearances.

The other big spot was No. 491 which appeared at the east limb on the 1st and was the return of No. 465 seen from February 2nd to 14th. It had increased greatly in size since it was last seen and as a group now rivalled the great spot in size, though the central umbra was not quite so large. It was a greatly disturbed spot but decreased in size as it crossed the sun's disc and by the time when that region of the sun reappeared, all that remained of it was a small dot in a large field of faculæ.

Prominences.—Some very tall prominences were observed during the month. On the 1st when spot No. 491 was coming round the limb there was a large and rapidly changing prominence which reached a height of about three minutes (80,000 miles) and next day near the same place an eruptive jet was observed to reach a height of nearly 4 minutes. The whole of the limb near it was greatly disturbed and displacements of the C and F lines indicated rapid motion alternately towards and away from the earth. Even on the following day a prominence nearly 2 minutes high was seen at the limb near the same place which showed how very large the disturbed area surrounding the spot was. Prominences more than two minutes high were observed on March 8th, 11th, 13th and 30th. On the 15th a long series of prominences extended from position angle 230° to 287° and on the 23rd nearly 70° of the eastern limb was covered with prominences. Only three metallic prominences, all showing rapid motion were observed.

There was a great magnetic disturbance from 18^h, on the 2nd to midnight and a moderate disturbance from midnight to 14^h, on the 3rd. It began when the great spot was within a few degrees of the central meridian.

There were moderate disturbances on the 5th, 7th, and 16th. On the 5th, No. 493 and on the 7th No. 491 were close to the central meridian. On the 16th no spot was nearly central but there was a considerable display of prominences near the equator.

C. MICHIE SMITH,

Director,

Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay:—Note on the Magnetic Record.

During the month the traces showed 12 calm days, 15 days of small, 3 days of moderate and 1 day of great disturbance.

The selected quiet days of the month were the 9th, 11th, 13th, 18th and 26th.

The mean observed absolute values of the several elements as also the ranges and the summed ranges of the

orizontal Force and Declination for the month were as llows :—

Declination	0° 13′ 4″ East.
Horizontal Force	·37413 C. G. S. unit.
Dip	21° 55″·0.
Horizontal Force range	·00060 C. G. S. unit.
„ „ summed range	·00391 C. G. S. unit.
Declination range	2′·56.
„ summed range	9′·32.

NOTE.—(Summed range means sum without regard to signs of 24 ordinates diurnal inequality.)

Three small seismic disturbances were recorded during ıe month, on the 5th, 19th, and 22nd :—

Magnetic Disturbances, March, 1905.

March, 1905.		March, 1905.		March, 1905.	
1	S.	11	C.	21	C.
2	G.	12	C.	22	S.
3	M.	13	C.	23	S.
4	S.	14	C.	24	S.
5	M.	15	S.	25	C.
6	S.	16	S.	26	C.
7	M.	17	C.	27	S.
8	S.	18	C.	28	S.
9	C.	19	S.	29	S.
10	C.	20	C.	30	S.
				31	S.

The magnitudes of the disturbances are determined from Horizontal Force aces.

C=calm; S=small; M=moderate; G=great, and VG=very great.

Days are reckoned from midnight to midnight.

N. A. F. Moos,
Director,
Govt. Observatory, Bombay.

Alipore, Calcutta.—List of displacements recorded by ne Seismograph at the Alipore Observatory, during larch, 1905.

Number.	Date, 1905.	P. T. Commencement. G.M.T.	L. W. commencement.	Maxima. G. M. T.	End.	Maximum amplitude in m. m.	Duration.	REMARKS.
		H. M.	H. M.	H. M.	H. M.		H. M.	
	4-3-05	16-21·9	16-37·2	16-38·2	17-13·8	1·00	0-51·9	
		18-51·5	19-3·7	19-9·8	19-34·2	0·50	0-42·7	
		23-38·3	23-45·9	23-56·6	513 0-46·5	2·25	1-8·2	
	14-3-05	10-56·0		10-58·5	11-3·6	0·50	0-7·6	
	16-3-05	14-8·3			14-11·8		0-3·5	Thickening of line.
	19-3-05	0-10·8	0-21·5	1-0·7	2-39·3	2·75	2-28·5	
	22-3-05	3-50·6	4-19·6	4-25·2	5-53·1	5·25	2-2·5	
	22-3-05	6-4·8		6-14·0	6-49·6	0·50	0-44·8	

Sensibility . . . . 1 m. m. =0″·38 of tilt.

The local times of the commencement :—

Date 1905.	H. M.
March 4	22-15·2
„ 5	0-44·8
„ 5	5-31·6
„ 14	16-49·3
„ 16	20-1·6
„ 19	6-4·1
„ 22	9-43·9
„ 22	11-58·1

G. W. KUCHLER,
Asst. Meteo. Reporter to the Govt. of India.

Royal Alfred Observatory, Mauritius :—Groups of sun spots and faculæ were observed on all days except the 7th 12th, 19th to 21st and 28th to 31st. In addition single spots were observed between the 4th and the 6th and on the 8th. On the 22 days on which groups of spots were observed, the following were the numbers recorded :—

1 Group was observed on	. 11th, 13th, 14th and 15th.
2 Groups were „ „	. 6th, 8th, 10th, 16th, 17th and 18th.
3 „ „ „ „	. 1st, 2nd, 5th, 9th, 24th, 26th and 27th.
4 „ „ „ „	. 22nd, 23rd and 25th.
5 „ „ „ „	. 3rd and 4th.

A group of two moderate sized sun spots was observed on March 25th in approximately the same latitude and longitude as the large group which reached the maximum in February.

Magnetic disturbances during March 1905 :—

Day.	Hours.	Disturbances.
1	16½-23	Decrease of H. F. (·00046).
2 to 3	5-5	Large disturbance.
5		Accentuated diurnal variation in H. F. Range =(·00067) with superposed wave 13h.–16½h. (–·00035).
6	0-6	Small fluctuations in H. F.
	18-23	
7 to 8	0-18	Loss of Register.
14 to 15	0-18	
16	0-24	
30	...	Accentuated diurnal variation in H. F. Range (·00062).

A. WALTER,
for *Director, R. A. Observatory.*

Weather in Indian Monsoon Region.

The month of March is ordinarily a month of transition and is usually a period of fairly uniform pressure, light winds and quiet weather. During the month under review, however, conditions departed considerably from the normal over the South-east Trades region. The following gives data:—

Element.	Mauritius.	Zanzibar.	Seychelles.
	"	"	"
Pressure departure	−·048	+·023	+·019
	°	°	°
Mean wind direction (easterly deflection.)	− 8	− 18	+ 25
Mean wind velocity departure(in miles *per hour*).	− 39	+ 23	+ 12
Rainfall departure	+5·16	−1·56	−9·54

The above shows that pressure was considerably below the normal at Mauritius while it was slightly in excess at the more northern stations of Zanzibar and the Seychelles. The mean wind direction was more southerly and less easterly than the average both at Mauritius and Zanzibar and was more easterly than usual at the Seychelles, while the velocity was below the normal at Mauritius and above at the two northern stations. The month's rainfall was considerably in excess at Mauritius, normal at Zanzibar and in considerable defect at the Seychelles. Both over the Arabian Sea and over the Bay the wind was stronger than usual. This is shown below:—

March.	Arabian Sea.	Bay of Bengal.
Actual mean force (Beaufort Scale) .	2·9	2·8
Normal mean force (Beaufort Scale) .	2·7	2·4

Over the Trades-monsoon area, as a whole and also in the Sudan the pressure considerably exceeded the normal from the 1st to the 11th. It then fell to below the average and continued low till the close of the month. The principal downward movements of pressure in the Caspian area occurred on the 6th, the 20th and 21st and the 29th and in western Siberia between the 5th and the 8th, the 14th and the 17th, the 22nd and the 30th and 31st. The changes registered in the Caspian region apparently agreed with those over Asiatic Turkey and the Persian Gulf region, but the Siberian changes were not reproduced over the Indian area.

Depressions and cyclonic storms of the month.

The weather was disturbed and showery over northern and particularly over north-eastern India—during the month under review, but the barometric depressions which were associated with this disturbed weather were ordinarily of very slight intensity and, beyond occasioning extensive rainfall, were of very little importance.

The following gives a brief account of the more important disturbances or storms of the month:—

Small storm of the 7th and 8th:—On the 7th the weather was unsettled in Baluchistan and the west Himalayas where the barometer was falling rapidly to very rapidly. On the 8th the barometer was giving way rapidly in the north-west and a small storm was shown over the Punjab with its centre near Montgomery. The weather was unsettled over upper India with rain on the plains and snow on the hills. A rapid recovery of pressure occurred during the day and the small storm had filled up by the following morning.

Between the 9th and the 13th a very shallow low pressure area lay over the head of the Peninsula, the depression drifting slowly east and west between Berar on the one hand and the north-west of the Bay on the other. The depression was of very little importance — measured barometrically—but it was associated with extensive rainfall on its northern sides.

Between the 13th and 14th a shallow depression entered north-west India; crossing the Indus to the south of Jacobabad on the 13th and lying over western Rajputana on the 14th. It occasioned a good deal of unsettled weather in the north-west but disappeared during the 14th—15th.

Small storm of the 21st and 22nd:—A brisk local fall of the barometer occurred on the morning of the 21st over west Bengal and neighbouring districts. Within this area a shallow depression was developed occasioning southerly winds at the head of the Bay and giving moderately heavy rain to parts of Bengal. The storm drifted eastward during the day and was shown over Deltaic Bengal and the head of the Bay on the morning of the 22nd when the barometer read 0·127″ below the normal at Saugor Island. The storm apparently filled up during the 22nd and had disappeared by the morning of the 23rd.

Storms of the 23rd to the 30th:—These were the two most important storms of the month. Both followed the same general direction of movement and both occasioned very unsettled weather in the north-west.

March 23rd:—On this day the barometer was rising slowly all over north-west India and rapidly in Kashmir, but the wind was westerly at Kurrachee, southerly at Hyderabad and easterly at Jacobabad and a shallow depression was passing through lower Sind.

March 24th:—The barometer had fallen briskly to rapidly over north-west India and the shallow depression which was passing through lower Sind on the morning of the 23rd, had advanced north-north-eastward into upper

Sind. The barometer was lowest and 0·080″ lower than usual at Jacobabad. The winds were irregularly cyclonic in the neighbourhood of the storm, but the weather was only slightly disturbed.

March 25th :—The storm had continued to travel north-north-eastward, but the movement had been very slow. The storm had, however, grown considerably deeper and the barometer was falling briskly to rapidly over north-west India. The centre of the storm was close to Jacobabad where pressure was 0·169″ below the normal. Owing to the intensification of the storm the winds had increased in strength in the north-west and had drawn into a well-marked cyclonic circulation. Snow and rain had commenced on and near the hills and the weather was becoming unsettled all over north-west India.

March 26th :—The advance of the storm north-north-eastward had been maintained and the centre of the depression lay within the region outlined by the stations of Khushab, Dera Ismail Khan, Multan and Montgomery. The barometer had fallen between 0·10″ and 0·20″ over the Punjab and the barometric gradients to the south and east of the storm had become much steeper. The winds were cyclonic and strong to a gale around the storm and snow was falling on the hills and rain on the neighbouring plains.

March 27th :—The depression moved to the eastward through the Central Punjab during the 26th at the same time filling up, and the reports of the 27th showed a considerable barometric rise all over the Punjab. The centre was close to Lahore at 8 A.M. The winds still exhibited a cyclonic circulation and were strong to a gale in force, while rain and snow continued to be reported from the hills and their neighbourhood.

March 28th :—By the morning of the 28th the depression noticed above was breaking up in the Simla and Mussooree hills, but the barometer was falling briskly to rapidly over Baluchistan and Sind and a fresh depression was crossing the Indus in the neighbourhood of Jacobabad where the barometer marked 0·27″ below the normal. Snow continued in Kashmir and rain on the outer hills.

March 29th :—The second storm, like its predecessor, moved in a north-north-east direction and at 8 A.M. on the 29th the centre lay near Dera Ismail Khan, where the barometer was 0·361″ below the normal. Strong cyclonic winds were blowing around the depression; rain had fallen in upper India, especially in the hill and submontane districts, and snow was falling in Baluchistan and Further Kashmir.

March 30th :—This depression also passed eastward through the Central Punjab and was shown close to Lahore at 8 A.M. on the 30th. The barometer had risen very rapidly over the Punjab and the departure of pressure from the normal at Lahore was only—0·043″, so that, the storm had decreased greatly in intensity and was of little importance. Snow continued over Kashmir and rain over the outer hills and the submontane districts.

Pressure.

The mean 8 A. M. pressure of the whole Indian land area for the month of March 1905, was 0·005″ above the normal. The general departures have thus exceeded the normal for the past eight months.

The actual distribution of pressure, on the mean of the month, is shown in Pl. I. Pressure was very uniform everywhere, but was slightly lower over Bengal, the east of the Peninsula and in Central Burma than in other parts of the area. Pressure was higher than usual at the majority of stations, but small areas of deficient pressure were shown over the upper Assam Valley, over the east of the Central Provinces and over parts of the North-west Frontier Province and of the Punjab. The principal departures were as follows :—

STATIONS.	Positive departures.	STATIONS.	Negative departures.
	″		″
Veraval	+·049	Sibsagar	—·017
Mormugao	+·043	Peshawar	—·011
Mainpuri	+·040	Sambalpur	—·010
Ratnagiri	+·039	Saugor	—·006
Minbu	+·038	Jubbulpore	—·005
Cawnpore	+·038	Raipur	—·005
Port Blair	+·038	Rawalpindi	—·005
Bhamo	+·035	Madras	—·005
Mergui	+·035		

Relatively to the general condition, *viz.*, +·015″, pressure was high over the west of the Peninsula, Gujarat, Sind, the east Punjab, the Gangetic Plain, west and central Bengal, and Burma and was low elsewhere. The anomalies were generally slight or small but exceeded 0·020″ at the following places :—

STATIONS.	Positive anomalies.	STATIONS.	Negative anomalies.
	″		″
Veraval	+·034	Sibsagar	—·032
Mormugao	+·028	Peshawar	—·026
Ratnagiri	+·024	Sambalpur	—·025
Mainpuri	+·025	Saugor	—·021
Cawnpore	+·023		
Minbu	+·023		
Port Blair	+·023		

The mean pressure of the month was below the normal at all the hill stations except Lashio and Wellington. The deficiency increased to the northward and apparently with elevation and was greatest at Leh (11,503 feet). The departures of pressure from the normal were hence the opposite of those at the level of the plains in most areas, and in all the divisions except Burma and South India, the

vertical pressure gradients were steeper than usual. The following gives data for 10 pairs of stations:—

HILL STATION.	Departure from normal pressure, March, 1905.	PLAIN STATION.	Departure from normal pressure, March, 1905.	Departure of pressure defference.
	"		"	"
Quetta	—·035	Jacobabad	+·016	+·051
Leh	—·147	Lahore	+·009	+·156
Murree	—·084	Peshawar	—·011	+·073
Simla	—·065	Ludhiana	+·019	+·084
Chakrata	—·063	Roorkee	+·021	+·084
Ranikhet	—·043	Bareilly	+·023	+·066
Darjeeling	—·049	Dhubri	+·016	+·065
Lashio	+·039	Bhamo	+·035	—·004
Mount Abu	—·035	Deesa	+·021	+·056
Wellington	+·007	Coimbatore	+·004	—·003

The preceding data show that all over northern India, but especially in the north-west, the vertical pressure gradient was much steeper than usual. This condition has now continued more or less for the past 5 months, as is shown by the following table:—

STATIONS.	VERTICAL PRESSURE GRADIENT OF				
	March 1905.	Feby. 1905.	Jany. 1905.	Dec. 1904.	Nov. 1904
	"	"	"	"	
Quetta-Jacobabad	+·051	+·096	+·072	+·012	—·020
Leh-Lahore	+·156	+·195	+·120	—·001	—·011
Murree-Peshawar	+·073	+·074	+·035	—·007	—·006
Simla-Ludhiana	+·084	+·133	+·057	—·008	+·013
Chakrata-Roorkee	+·084	+·124	+·051	+·011	+·013
Ranikhet-Bareilly	+·066	+·110	+·047	+·014	+·018
Darjeeling-Dhubri	+·065	+·101	+·042	+·028	+·023

The departures of pressure from the normal at the extra-Indian stations for the month of March 1905 were as follows:—

STATION.	Departure from normal of mean 8 A. M. pressure of March 1905.
	"
Trincomalee	+·023
Colombo	+·010
Bushire	—·005
Jask	—·020
Muscat	+·012
Baghdad	—·107
Aden	—·007
Perim	+·012
Zanzibar	+·032
Seychelles	+·019
Mauritius	—·048

The mean pressure was considerably below the normal at Mauritius, largely below the normal at Baghdad and slightly or very slightly below in the Persian Gulf region and at Aden, but was above the normal in all other places.

The following summarises the chief features of the mean pressure conditions of the month:—

(1) The mean pressure of the whole Indian land area was ·015″ above the normal.

(2) Pressure was very uniform throughout the Indian land area, but was slightly lower than elsewhere over Bengal and the east of the Peninsula.

(3) Pressure was, relatively to the general condition in local excess over the west of the Peninsula, Sind, Gujarat, the east Punjab, the Gangetic Plain, the greater part of Bengal and Burma and was in local defect elsewhere.

(4) Pressure was lower than usual at the hill stations with the exception of Lashio and Wellington and the vertical pressure gradients—especially in the north-west were much steeper than usual.

(5) Pressure, on the mean of the month, was lower than usual at Baghdad, in the Persian Gulf region, at Aden and at Mauritius, but was in excess at the remaining extra-Indian stations.

The following table gives the mean pressure departures and anomalies of the month for the eleven meteorological provinces of India:—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of March 1905.	Pressure anomaly, March 1905.
	"	"
Burma Coast and Bay Islands	+·024	+·009
Burma Inland	+·028	+·013
Assam	+·004	—·011
Bengal and Orissa	+·017	+·002
Gangetic Plain and Chota Nagpur	+·022	+·007
Upper Sub-Himalays	+·015	0
Indus Valley and North-West Rajputana	+·012	—·003
East Rajputana, Central India and Gujarat	+·019	+·004
Deccan	+·006	—·009
West Coast	+·029	+·014
South India	+·010	—·005

Temperature.

The low temperature conditions which appeared over e Indian land area and neighbouring countries, about e 20th January 1905, and continued throughout February, ere as marked in March as in the two preceding onths.

The mean day or maximum temperature of the month March was below the normal at all stations, both on e hills and plains except those in Mysore, Southern adras and the north of Ceylon. The excess in this ea was generally small and only exceeded 2°·0 at the four aces for which comparative data are given below :—

Station.	Mean maximum temperature.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	°	°	°
iddalore	93·0	89·3	+3·7
nnevelly	99·6	96·5	+3·1
mban	90·9	88·8	+2·1
incomalee	90·1	88·0	+2·1

In all other areas, as mentioned above, the mean day mperature was lower than usual. The amount of the de-iency generally increased from the south towards the rth and was greatest over the east and south Punjab id the neighbouring districts of the United Provinces. t the following stations the deficiency was more than °:—

Station.	Mean maximum temperature.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	°	°	°
udhiana	73·1	84·4	−11·3
ahore	74·0	85·1	−11·1
irsa	77·7	88·6	−10·9
elhi	76·7	87·4	−10·7
gra	80·8	91·1	−10·3

It naturally follows that the highest maximum temeratures recorded were considerably lower than those reviously registered in the month of March. The following gives data of the highest recorded reading in each division of India during the month under review together with the highest temperature previously recorded at the different stations mentioned :—

Province or division.	Station.	Highest maximum temperature recorded in March 1905.	Date on which recorded.	Highest maximum temperature recorded in March previous to 1905.	Year in which recorded
		°		°	
Burma	Thayetmyo	102·5	29th and 31st	108·7	1890
Assam	Dhubri	91·7	31st	98·3	1876
Bengal	Bankura	99·6	31st	107·6	1892
Orissa	Cuttack	99·4	16th	108·5	1902
Bihar	Daltonganj	98·6	29th	106·1	1899
Chota Nagpur	Chaibassa	99·9	30th	108·1	1892
United Provinces	Jhansi	98·7	27th	110·0	1892
Punjab	Sirsa	92·3	26th	111·4	1892
N.W.F. Province	D. I. Khan	86·8	25th	106·5	1892
Sind	Jacobabad	98·5	25th and 26th	111·8	1892
Baluchistan	Chaman	73·3	25th	85·3	1899, 1900
Rajputana	Pachpadra	98·9	14th	113·0	1892
Gujarat	Ahmedabad	102·3	14th	109·3	1902
Central India	Indore	95·6	15th	106·1	1892
CentralProvinces	Nagpur	102·6	16th	112·8	1892
Berar	Akola	101·3	15th	111·6	1892
West Coast	Cochin	92·3	6 days	98·1	1878
Bombay, Deccan	Sholapur	102·2	15th	110·7	1892
Mysore	Mysore	98·4	22nd	99·1	1903
Madras, Coast	Nellore	102·8	30th	110·8	1892
Madras Deccan	Cuddapah	106·2	20th, 21st and 23rd	110·3	1892, 1902.
South India	Trichinopoly	105·2	31st	108·2	1892

The above shows that practically everywhere the highest temperatures recorded in the different divisions during March of the present year have been exceeded in previous years.

At all the hill stations except Wellington the mean maximum temperature of the month was lower than usual. The deficiency was, on the whole, greatest at the stations on the outer ranges of the north-west Himalayas, but in Baluchistan it was almost equally great. The

following gives comparative data for the stations at which the mean deficiency exceeded 9°:—

Hill station.	Mean maximum temperature.		
	Actual, March 1905.	Normal, March.	Departure from normal March 1905.
	°	°	°
Murree	46·3	58·3	—12·0
Chakrata	51·7	61·7	—10·0
Simla	47·0	56·4	—9·4
Quetta	54·1	64·5	—10·4
Chaman	57·6	67·3	—9·7
Kalat	55·1	64·6	—9·5

The departures of the mean minimum or night temperature from the normal were generally similar to those of the maximum, but the area of excess was greater in extent. The mean minima were higher than usual over the whole of the east of the Peninsula, the extreme south of the Peninsula, Ceylon, the Burma coast and part of Central Burma. The excess amounted to more than 2° at the following stations :—

Station.	Mean minimum temperature.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	°	°	°
Salem	74·4	70·8	+3·6
Madras	75·3	72·2	+3·1
Nellore	75·2	72·4	+2·8
Masulipatam	75·1	72·3	+2·8
Pamban	78·7	76·1	+2·6
Negapatam	77·9	75·5	+2·4
Madura	75·1	72·8	+2·3
Trichinopoly	75·0	72·8	+2·2
Cuddalore	74·4	72·2	+2·2
Cuddapah	77·2	75·0	+2·2

Over the whole of the remainder of the country the mean minimum temperature was in defect. The greatest deficiency was reported from the Rajputana desert (Bikaner—6°·6), but the defect amounted to over 4° at the following considerable number of stations :—

Station.	Mean minimum temperature.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	°	°	°
Bikaner	58·1	64·7	—6·6
Peshawar	46·8	51·9	—5·1
Delhi	57·2	62·2	—5·0
Rawalpindi	45·8	50·7	—4·9
Dehra Dun	50·2	55·0	—4·8
Ambala	52·6	57·1	—4·5
D. I. Khan	51·0	55·5	—4·5
Barisal	64·8	69·2	—4·4
Bareilly	54·8	59·0	—4·2
Roorkee	51·9	56·1	—4·2
Meerut	53·6	57·7	—4·1
Khushab	52·7	56·8	—4·1

The mean night temperature was lower than usual at all the hill stations, and, as was the case with the departures from normal of the mean maximum temperature, the defect was greatest at the stations on the outer ranges of the north-west Himalayas. This is shown below :—

Hill station.	Mean minimum temperature.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	°	°	°
Quetta	35·0	40·0	—5·0
Chaman	40·3	44·1	—3·8
Kalat	31·1	32·3	—1·2
Murree	32·2	43·3	—11·1
Simla	36·6	46·0	—9·4
Cherat	39·6	47·9	—8·3
Chakrata	36·6	44·3	—7·7
Ranikhet	42·2	49·1	—6·9
Gilgit	40·9	45·3	—4·4
Leh	16·7	21·1	—4·4
Srinagar	34·2	37·1	—2·9
Darjeeling	40·5	42·3	—1·8
Mount Abu	55·0	61·5	—6·5
Pachmarhi	59·0	60·4	—1·4
Lashio	55·2	55·7	—0·5
Wellington	53·1	52·2	+0·1

The absolutely lowest temperatures recorded at some of the hill and plain stations in the north-west were as follows:—

STATION.	Lowest minimum temperature recorded in March 1905.	Date on which recorded.	Lowest minimum temperature recorded in March previous to 1905.	Year in which recorded.
	°		°	
Peshawar	33·4	1st	37·9	1891, 1892, 1898 and 1902.
Rawalpindi	34·0	1st	37·9	1878 and 1808.
Montgomery	38·0	1st	39·5	1898
Jacobabad	39·1	1st	39·0	1903
Meerut	39·7	1st	41·1	1898
Sirsa	40·0	1st	37·7	1898
Khushab	40·4	1st	40·1	1892
Multan	40·5	1st	41·0	1878
Roorkee	41·0	2nd	40·0	1898
Sambhar	41·0	1st	38·0	1898
Ambala	41·8	1st	43·6	1903
Ludhiana	42·1	1st	40·6	1878 and 1898.
Lahore	42·1	2nd	41·6	1891
Mainpuri	43·3	2nd	43·1	1898
Sialkot	43·3	1st	40·1	1897
Ajmer	43·8	1st	35·9	1898
Delhi	45·9	1st	42·9	1898
Leh	4·9	2nd	—3·1	1903
Kabul	8·9	2nd	19·8	1897
Quetta	14·8	1st	15·8	1898
Chaman	20·1	30th	13·1	1898
Murree	22·0	1st	20·0	1898
Chakrata	27·9	9th	20·7	1874
Cherat	28·0	1st	25·5	1898
Srinagar	29·1	5th	22·1	1895
Simla	29·2	1st and 9th	23·4	1898
Gilgit	31·1	2nd	34·3	1893
Ranikhet	32·5	9th	31·5	1874 and 1891.

It will be noticed that though the minimum temperature was almost uninterruptedly lower than usual during the month, and the departures from the normal were exceptionally large, the absolute lowest readings of the mean recorded were not remarkable except at Peshawar, Rawalpindi and Kabul.

The mean temperature of the month exceeded the normal over Southern Madras, Mysore, Ceylon and the Tenasserim coast. The excess was more than 2° at the following places:—

STATION.	MEAN TEMPERATURE. Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	°	°	°
Cuddalore	83·7	80·7	+3·0
Pamban	84·8	82·4	+2·4
Negapatam	84·3	82·1	+2·2
Salem	86·9	84·7	+2·2

In all other parts of the country the mean temperature was lower than usual and the departure from normal was almost as large as in the preceding month of February. The greatest deficiency was reported from the north-west and exceeded 7°·0 at the following places:—

STATION.	MEAN TEMPERATURE. Actual, March 1905.	Normal March.	Departure from normal, March 1905.
	°	°	°
Delhi	67 o	74·9	—7·9
Bikaner	69·3	77·0	—7·7
Ludhiana	63·4	71·0	—7·6
Peshawar	56·8	64·0	—7·2
Rawalpindi	56·4	63·7	—7·3
Agra	69·9	77·0	—7·1
Ambala	63·4	70·5	—7·1

The mean temperature of the month was below the normal at all the hill stations except Wellington. The deficiency was least at Darjeeling (—1°·8) and was greatest at Murree (—11°·6).

The following table gives comparative temperature data of the month for the 57 meteorological divisions of the empire:—

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	DEPARTURE FROM NORMAL OR MONTH OF Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
BURMA	Tenasserim	90·9	75·0	83·0	15·9	22·6	—0·7	+0·7	— 1·4
	Lower Burma (Deltaic)	90·8	73·4	82·1	17·4	23·6	—1·4	+1·2	— 2·6
	Central do.	96·6	67·8	82·3	28·8	39·6	—2·2	+0·3	— 2·5
	Upper do.	88·9	65·2	77·1	23·8	37·0	—5·4	+0·2	— 5·6
	Arakan	85·6	69·2	77·4	16·4	29·7	—3·5	+0·3	— 3·8

Province.	Division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month	Departure from normal month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Bengal and Assam.	Eastern Bengal	83·7	65·4	74·6	18·3	33·7	—4·7	—2·0	— 2·7
	Assam (Surma)	80·6	62·5	71·6	18·1	33·6	—5·4	—0·7	— 4·7
	Do. (Hills)	66·0	51·0	58·5	15·1	28·7	...	...	...
	Do. (Brahmaputra)	78·6	59·3	68·9	19·3	34·6	—4·3	—2·1	— 2·2
	Deltaic Bengal	85·6	67·7	76·7	17·9	32·8	—5·0	—2·6	— 2·4
	Central do.	85·7	64·5	75·1	21·2	40·2	—6·5	—1·3	— 5·2
	North do.	81·8	59·5	70·7	23·3	42·5	—4·5	—1·2	— 3·3
	Bengal Hills	50·2	33·2	41·7	17·0	33·9	—1·7	—1·8	+ 0·1
	Orissa	88·0	72·5	80·3	15·5	28·6	—3·4	+0·1	— 3·5
	Chota Nagpur	85·9	62·5	74·2	23·4	40·3	—5·6	—1·9	— 3·7
	South Bihar	85·2	62·8	74·0	22·3	41·0	—7·0	—2·6	— 4·4
	North do.	83·9	59·3	71·6	24·6	46·1	—5·0	—2·3	— 2·7
United Provinces of Agra and Oudh.	United Provinces (East)	84·9	59·2	72·1	25·7	48·5	—8·0	—2.8	— 5·2
	South Oudh	83·9	57·5	70·7	26·4	48·6	—7·6	—2·8	— 4.8
	North do.	80·7	56·3	68·5	24·4	41·1	—8·3	—2·5	— 5·8
	United Provinces (Central)	83·9	58·9	71·4	25·1	48·2	—7·3	—2·9	— 4·4
	Do. do. (West)	79·3	56·3	67·8	23·0	49·5	—9·6	—4·0	— 5·6
	Do. do. (East Submontane)	82·4	58·6	70·5	23·8	41·1	—8·1	—3·9	— 4·2
	Do. do. (West Submontane)	75·0	52·3	63·7	22·7	44·2	—9·2	—4·4	— 4·8
	Do. do. (Hills)	53·1	38·5	45·8	14·7	34·0	—9·4	—7·3	— 2·1
Punjab	Punjab (South-East)	76·7	57·2	67·0	19·5	44·3	—10·7	—5·0	— 5·7
	Do. (South)	75·6	53·9	64·8	21·8	48·3	—10·9	—3·1	— 7·8
	Do. (Central)	74·0	53·1	63·6	20·9	46·3	—11·1	—1·1	—10·0
	Do. (Submontane)	71·7	51·3	61·6	20·4	44·7	—9·9	—3·9	— 6·0
	Do. (Hills)	44·7	26·9	35·8	17·8	39·5	—7·9	—5·6	— 2·3
	Do. (West)	76·3	53·6	65·0	22·7	51·4	—7·9	—3·4	— 4·5
N.-W. F. Province	North-west Frontier Province	70·3	49·0	59·6	21·3	46·8	—9·6	—4·8	— 4·8
Bombay and Malabar Coast District Madras).	Malabar	89·0	75·6	82·3	13·4	19·0	—0·6	—0·9	+ 0·3
	Madras (South Central)	97·9	72·4	85·2	25·5	36·2	+0·5	+2·1	— 1·6
	Coorg	84·8	60·2	72·6	24·6	31·9	+0·2	—1·6	+ 1·8
	Mysore	92·8	65·7	79·3	27·1	36·6	+0·4	—0·4	+ 0·8
	Konkan	83·8	71·0	77·4	12·8	21·8	—3·1	—3·4	+ 0·3
	Bombay Deccan	94·8	64·3	79·6	30·5	42·5	—2·3	—2·7	+ 0·4
	Hyderabad (North)	94·2	68·0	81·1	26·2	40·0	...	...	...
	Khandesh	93·2	61·9	77·6	31·4	48·6	—3·6	—1·5	— 2·1
Central Provinces and Berar.	Berar	95·3	66·3	80·9	29·0	44·6	—3·4	—1·3	— 2·1
	Central Provinces (West)	93·5	64·6	79·1	28·9	45·3	—3·7	—1·2	— 2·5
	Do. do. (Central)	90·6	62·4	76·5	28·2	44·2	—3·8	—1·6	— 2·2
	Do. do. (East)	90·4	65·8	78·1	24·7	37·3	—4·6	—1·5	— 3·1
Bombay (North)	Gujarat (East)	91·2	63·9	77·5	27·3	51·6	—5·4	—2·0	— 3·4
	Kathiawar and Cutch	84·9	64·1	74·5	20·8	44·0	—7·1	—1·2	— 5·9
	Sind	83·4	61·2	72·3	22·2	49·1	—6·7	—2·1	— 4·6
	Baluchistan Hills	55·5	35·7	45·6	19·8	54·2	—9·9	—3·3	— 6·6
Rajputana and Central India.	Central India (East)	85·3	59·3	72·3	26·0	49·6	—6·6	—1·7	— 4·9
	Rajputana (East), Central India (West)	82·6	58·1	70·4	24·5	50·6	—7·5	—2·5	— 5·0
	Do. (West)	83·7	58·9	71·3	24·8	52·1	—8·5	—3·5	— 5·0
Madras	East Coast (North)	87·3	74·8	81·1	12·4	20·3	—1·5	+1·3	— 2·8
	Hyderabad (South)	97·3	71·6	84·5	25·7	34·3	—1·2	—0·5	— 0·7
	Madras (Central)	100·3	73·9	87·3	26·8	39·4	—0·3	+1·0	— 1·3
	East Coast (Central)	93·2	75·2	84·2	18·1	32·1	—0·6	+2·8	— 3·4
	Do. (South)	93·4	75·2	84·3	18·1	31·5	+1·9	+2·5	— 0·6
	Madras (South)	96·6	75·2	85·8	21·4	31·6	+2·2	+1·9	+ 0·3

The hottest area, outlined by the isotherm of 87°, lay er Central Madras, while the coolest area on the plains as the North-west Frontier Province with a mean mperature of 59°.6. Relatively to the normal the defi- ency of the day temperature was greater in most districts an that of the night temperature, so that the daily range temperature was, over the greater part of the country, ss than usual.

The following gives the mean temperature departures the month for the extra-Indian stations :—

Station.	Mean temperature. Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	°	°	°
incomalee	83·4	82·0	+1·4
lombo	83·0	82·2	+0·8
ıshgar	42·9	46·2	−3·3
ıbul	37·7	46·4	−8 7
ıahan	44·2	48·7	−4·5
ıshire	62·8	65·6	−2·8
sk	69·8	72·4	−2·6
uscat	71·5	74·3	−2·8
ıghdad	57·0	59·0	−2·0
den	79·5	79·8	−0·3
rim	81·2	80·6	+0·6
ınzibar	81·3	81·5	−0·2
ychelles	82·1	79·9	+2·2
auritius	77·2	77·3	−0·1

The above shows that the low temperature conditions oticed over India extended westward over Afghanistan, 'ersia, Asiatic Turkey and north Arabia.

The chief abnormal features of the temperature con- itions of the month were as follows :—

(1) Both the day and night temperatures and consequently also the mean temperature were lower than usual over northern and central India, the west of the Peninsula and Upper Burma.

(2) The mean maximum temperature was below, the mean minimum temperature above and the mean temperature about normal over Lower Burma and Tenasserim.

(3) The mean day and night temperatures and consequently also the mean temperature exceeded the average over Southern Madras and Mysore.

(4) Both day and night temperatures were in defect at the hill stations—least so at Darjeeling and most so at Murree.

(5). The deficiency of temperature over India extend- ed over Afghanistan, Persia, northern Arabia and Asiatic Turkey, but the mean temperature was in excess over Ceylon and normal over southern Arabia and the South-east Trades region.

The following table gives comparative temperature data for the eleven meteorological provinces of India :—

Meteorological Province.	Departure from normal of: Mean maximum temperature, March 1905.	Mean minimum temperature, March 1905.	Mean temperature, March 1905.
	°	°	°
Burma Coast and Bay Island	−1·4	+0·7	−0·3
Burma Inland	−4·9	+0·3	−2·3
Assam	−4·7	−1·6	−3·2
Bengal and Orissa	−4·9	−1·4	−3·2
Gangetic Plain and Chota Nagpur	−6·9	−2·7	−4·8
Upper Sub-Himalayas	−9·9	−3·8	−6·9
Indus Valley and North-West Rajputana	−8·0	−3·4	−5 7
East Rajputana, Central India and Gujarat.	−6·9	−2·1	−4·6
Deccan	−3·2	−1·5	−2·4
West Coast	−1·8	−2·1	−2·0
South India	+0·6	+1·3	+1·0

The following gives a brief summary of the more important changes of temperature during the month :—

Between the 1st and the 9th the weather was unsettled with scattered showers over Kashmir, and northern and Central India and was generally fine in the south. Temperature was unsteady. It was generally very low, relatively to the normal, over north-west India ; low over the remainder of northern India ; and generally high over the Peninsula and Burma. On the 1st both the day and night temperatures were exceedingly low in the north-west and the former was more than 18° below the average at the following stations :—

Station.	Maximum Temperature. Actual, 1st March 1905.	Normal, 1st March.	Departure from normal, 1st March 1905.
	°	°	°
Ambala	52·1	76·6	−24·5
Peshawar	48·2	71·5	−23·3
Multan	60·8	79·6	−18·8
D. I. Khan	59·3	77·8	−18·5
Ludhiana	59·3	77·7	−18·4
Hyderabad (Sind)	69·5	87·6	−18·1

On the 5th and 6th the sky became very cloudy across the head of the Peninsula. The night temperature consequently rose fast and on these two nights exceeded the

normal at a large number of stations and the mean temperature, though low generally, was locally excessive over this area. The following gives data :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF	
	5th March.	6th March.
	°	°
Gujarat	−3·4	+0·4
West Satpuras	+1·0	+2·6
East Satpuras	−2·2	+1·1

On the 9th rain ceased and the weather improved in the north-west though showers continued over the Gangetic Plain and in the north-east. In consequence temperature rose over Sind, Gujarat and the Peninsula, while it remained low over northern and north-eastern India, and these low temperatures finally extended to Burma. These conditions lasted till the 15th and the following gives data for all divisions for the 13th as illustrative of the conditions prevailing during this period :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 13th March.	Mean minimum temperature, 13th March.	Mean temperature, 13th March.
	°	°	°
Burma	−2·2	+3·0	+0·4
Assam	−9·0	−0·3	−4·7
Bengal	−11·3	−3·0	−7·2
Orissa	−6·4	+1·6	−2·4
Bihar	−9·1	−5·0	−7·1
Chota Nagpur	−8·2	−3·5	−5·9
United Provinces of Agra and Oudh	−8·5	−6·2	−7·4
Punjab	−6·4	−1·8	−4·1
North-west Frontier Province	−5·1	−0·3	−2·7
Sind	+1·5	+6·2	+3·9
Rajputana	−5·7	−1·5	−3·6
Gujarat	−0·5	+3·3	+1·4
Central India	−5·5	−2·0	−3·8
Central Provinces	−1·8	+1·1	−0·4
Berar	+0·5	+2·3	+1·4
West Coast	−1·6	+0·7	−0·5
Bombay Deccan	+2·3	+3·2	+2·8
Mysore	+1·9	+1·8	+1·9
Madras Coast	+0·8	+2·5	+1·7
Madras Deccan	+2·9	+4·9	+3·9
South India	+2·2	+3·5	+2·9

On the 16th and 17th, temperature was generally high except over northern India, but showers occurred on both days and by the 18th temperature had fallen again and was generally low except in Madras. These scattered showers produced large local temperature effects. Thus at Bhamo on the 19th and 20th and at Jacobabad on the 20th the following large temperature departures from the normal were recorded :—

DATE.	STATION.	DEPARTURE FROM NORMAL OF		
		Maximum temperature of date.	Minimum temperature. of date.	Mean temperature of date.
		°	°	°
19th March	Bhamo	−25·6	−3·2	−14·4
20th "	Bhamo	−19·4	−3·0	−11·2
	Jacobabad	−13·7	−8·5	−11·1

From the 21st to the close of the month the weather remained showery and unsettled over Kashmir, northern India and part of the East Coast, and practically throughout the whole of that period the mean temperature was lower than usual except in Madras. The following statement gives temperature departure data for all districts for the 22nd and 31st as illustrative of the general conditions prevailing during this period :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF	
	22nd March, 1905.	31st March, 1905.
	°	°
Burma	−4·5	−1·0
Assam	−3·7	−1·3
Bengal	−5·9	−1·1
Orissa	−2·7	−2·2
Bihar	−1·8	−2·4
Chota Nagpur	−3·4	−4·4
United Provinces of Agra and Oudh	−8·3	−10·3
Punjab	−9·2	−14·3
North-west Frontier Province	−8·9	−14·7
Sind	−6·1	−13·9
Baluchistan	−7·0	−23·5
Rajputana	−8·3	−17·3
Gujarat	−5·6	−15·6
Central India	−6·3	−14·7
Central Provinces	−5·0	−12·3
Berar	−7·8	−15·3
West Coast	−3·7	−4·5
Bombay Deccan	−7·3	−12·9
Mysore	+0·4	−4·0
Madras Coast	+2·0	+2·2
Madras Deccan	−2·5	−6·0
South India	+3·4	+2·4

Between the 25th and the 30th there occurred an exceedingly heavy fall of snow over the Kashmir Himalayas and this was accompanied and followed by a large depression of temperature over north-west India. The following gives daily data for Baluchistan and the different divisions of north-west India from the 27th to the end of the month :—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	27th March.	28th March.	29th March.	30th March.	31st March.
	°	°	°	°	°
United Provinces of Agra and Oudh.	—1·9	—1·0	—2·8	—3·9	—10·3
Punjab	—2·9	—3·2	—3·1	—11·9	—14·3
North-west Frontier Province	—8·0	—7·9	—8·8	—17·6	—14·7
Sind	—3·0	—4·6	—13·5	—16·3	—13·9
Baluchistan	—15·1	—11·3	—28·8	—32·3	—23·5
Rajputana	—1·3	—3·2	—5·1	—12·7	—17·3
Gujarat	—2·7	—5·1	—6·6	—14·1	—15·6
Central India	—0·6	—1·5	—3·9	—8·8	—14·7

The depression of temperature occasioned by this snowfall, though strongly marked in the case of the minimum temperature, was most remarkable in the case of the maximum temperature which at the following places on the following dates was more than 20° below the average :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
30th March	D. I. Khan	59·8	88·6	—28·8
	Montgomery	68·3	93·6	—25·3
	Bikaner	72·1	96·0	—23·9
	Hyderabad (Sind)	75·0	98·9	—23·9
	Khushab	65·3	88·4	—23·1
	Peshawar	58·3	81·1	—22·8
	Rawalpindi	60·9	82·9	—22·0
	Multan	72·3	93·2	—20·9
	Jacobabad	76·9	97·6	—20·7
31st ,,	Sialkot	66·5	89·2	—22·7
	Rawalpindi	60·9	83·1	—22·2
	Ludhiana	69·6	91·6	—22·0
	Jaipur	76·2	97·5	—21·3
	Montgomery	73·8	94·6	—20·8
	Peshawar	60·8	81·3	—20·5
	Multan	73·3	93·6	—20·3
	Bikaner	76·1	96·4	—20·3
	Neemuch	77·0	97·2	—20·2

Winds.

The winds, on the mean of the month, were practically normal in direction at the Bay Islands and at the stations on the Burma coast. The mean steadiness was generally low except at Port Blair while the mean velocity exceeded the average at Port Blair and Diamond Island, and was below the normal at Rangoon and Akyab.

The wind was, except at Calcutta, more southerly than usual around the north of the Bay. This is shown below :—

Station.	Mean wind direction.		
	Actual, March 1905.	Normal, March.	Southerly deflection.
	°	°	
Chittagong	S 12 W	S 36 W	+24
Calcutta	S 64 W	S 60 W	—4
Saugor Island	S 13 W	S 25 W	+12
False Point	S 2 W	S 54 W	+52

At the above stations the mean velocity was about the normal while the mean steadiness varied irregularly from the average.

In the Gangetic Plain the wind was, on the mean of the month, more northerly, lighter and less steady than the average. The following gives data for Allahabad :—

Station.	Mean steadiness.			Mean wind direction.			Mean wind velocity in miles per diem.		
	Actual percentage, March 1905.	Normal percentage, March.	Departure from normal, March 1905.	Actual, March 1905.	Normal, March.	Northerly deflection.	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
				°	°				
Allahabad	34	41	—7	N 47 W	N 63 W	+16	93	122	—29

In the upper Sub-Himalayas the winds were, on the mean of the month, generally lighter and more steady than the normal, and at the Punjab stations the mean direction

was more westerly than the average. The following gives data for these stations :—

Station.	Mean steadiness. Actual percentage, March 1905.	Mean steadiness. Normal percentage, March.	Mean steadiness. Departure from normal, March 1905.	Mean wind direction. Actual, March 1905.	Mean wind direction. Normal, March.	Mean wind velocity in miles per diem. Actual, March 1905.	Mean wind velocity in miles per diem. Normal, March.	Mean wind velocity in miles per diem. Departure from normal, March 1905.
				°	°			
Dehra Dun .	42	28	+14	S 45 W	N 81 W	38	50	—12
Roorkee .	34	24	+10	N 61 W	N 63 W	80	72	+ 8
Meerut .	40	42	— 2	N 67 W	N 63 W	30	67	—37
Lahore .	31	31	0	N 62 W	N 12 W	77	70	+ 7
Ludhiana .	40	35	+5	N 57 W	N 46 W	34	53	—19

At both Peshawar and Kurrachee the mean wind direction for the month was approximately normal, but over the centre of the Indus Valley, at Jacobabad, the wind was north-westerly instead of easterly and though very unsteady was stronger than usual. The following gives data for the Indus Valley stations :—

Station.	Mean steadiness. Actual percentage, March 1905.	Mean steadiness. Normal percentage, March.	Mean steadiness. Departure from normal, March 1905.	Mean wind direction. Actual, March 1905.	Mean wind direction. Normal, March.	Mean wind velocity in miles per diem. Actual, March 1905.	Mean wind velocity in miles per diem. Normal, March.	Mean wind velocity in miles per diem. Departure from normal, March 1905.
				°	°			
Peshawar . .	21	16	+ 5	N 3 E	N 12 E	35	86	—51
Jacobabad . .	10	14	— 4	N 40 W	E	130	94	+36
Kurrachee . .	57	60	— 3	S 77 W	S 78 W	285	274	+11

At Jaipur the wind was lighter and more unsteady than usual and blew from south-west instead of from the normal north-west direction, while at Deesa the wind was more westerly, stronger and steadier than the average. This is shown below :—

Station.	Mean steadiness. Actual percentage, March 1905.	Mean steadiness. Normal percentage, March.	Mean steadiness. Departure from normal, March 1905.	Mean wind direction. Actual, March 1905.	Mean wind direction. Normal, March.	Mean wind velocity in miles per diem. Actual, March 1905.	Mean wind velocity in miles per diem. Normal, March.	Mean wind velocity in miles per diem. Departure from normal, March 1905.
				°	°			
Jaipur . .	19	30	—11	S 39 W	N 46 W	95	108	—13
Deesa . .	58	34	+24	N 83 W	N 64 W	225	206	+ 19

The following gives comparative data of the mean air movement of the month over northern India, Burma and the Bay Islands :—

Province or division.	Mean steadiness. Actual percentage, March 1905.	Mean steadiness. Normal percentage, March.	Mean steadiness. Departure from normal, March 1905.	Mean wind velocity in miles per diem. Actual, March 1905.	Mean wind velocity in miles per diem. Normal March.	Mean wind velocity in miles per diem. Departure from normal, March 1905.
Bay Islands . .	77	66	+11	133	101	+22
Burma . .	35	54	—19	127	140	—13
Bengal . .	32	42	—10	181	188	—7
Chota Nagpur .	42	53	—11	171	194	—23
Orissa . . .	53	34	+24	245	259	—14
United Provinces of Agra and Oudh .	38	34	+4	60	78	—18
Punjab . .	36	33	+3	56	62	—6
North-west Frontier Province . .	21	16	+5	35	86	—51
Rajputana . .	39	32	+7	160	157	+3
Sind . . .	34	37	—3	208	184	+24

The preceding data show that the mean velocity was normal or below the normal except over the Bay Islands and Sind while the mean steadiness varied irregularly from the average.

The wind was considerably more westerly than usual at the Deccan stations and, at many places both the steadiness and velocity exceeded the average.

The mean wind was north-westerly along the West Coast. At Bombay the steadiness exceeded, and the velocity fell short of the normal, while at Karwar the velocity was in excess and the steadiness below the normal. This is shown below :—

Station.	Mean steadiness. Actual percentage, March 1905.	Mean steadiness. Normal percentage, March.	Mean steadiness. Departure, from normal, March 1905.	Mean wind velocity in miles per diem. Actual, March 1905.	Mean wind velocity in miles per diem. Normal, March.	Mean wind velocity in miles per diem. Departure from normal, March 1905.
Bombay. . .	81	46	+35	246	262	—16
Karwar . .	80	81	—1	162	110	+52

In South India the mean wind directions varied irregularly from the normal, but on the whole there was increased southing at a large number of stations. The following gives instances :—

Station.	Mean wind direction. Actual, March 1905.	Normal, March.	Southerly deflection.
	°	°	
alem	S 16 E	S 69 E	+53
angalore	S 26 E	S 36 E	+10
assan	S 25 W	S 81 E	...
ysore	S 24 E	N 88 E	...
adras	S 25 E	S 44 E	+19
'altair	S 8 W	S 19 W	+11

The steadiness of the wind was, on the whole, less than ual while the mean velocity varied irregularly from the erage.

The following gives data of the mean air movement the month in the different parts of the Peninsula :—

Province or division.	Mean steadiness. Actual percentage, March 1905.	Normal percentage, March.	Departure from normal, March 1905.	Mean wind velocity in miles per diem. Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
tral Provinces	45	26	+19	139	119	+20
ir	63	43	+20	184	147	+37
bay Deccan	35	11	+24	239	231	+ 8
ras Deccan	32	20	+12	125	110	+15
t Coast	81	64	+17	204	186	+18
ore	24	37	—13	129	134	— 5
ras Coast	78	71	+ 7	197	149	+48
h India	39	39	0	144	127	+17

The above shows generally increased steadiness and city.

The winds were very irregular both as regards direc- velocity and steadiness at the Himalayan hill stations. s is shown below :—

Hill station.	Mean steadiness. Actual percentage, March 1905.	Normal percentage, March.	Departure from normal, March 1905.	Mean wind direction. Actual, March 1905.	Normal, March.	Mean wind velocity in miles per diem. Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
				°	°			
Leh	31	23	+ 8	S 25 W	S 45 W	56	48	+ 8
Srinagar	34	16	+18	N 62 W	N 24 W	95	115	—20
Simla	34	4	+30	S 25 E	S 33 W	156	137	+19
Chakrata	3	13	—10	N 60 E	S 39 W	180	170	+10
Ranikhet	24	28	— 4	N 70 W	S 60 W	76	84	— 8
Katmandu	32	47	—15	N 69 W	N 82 W	29	32	— 3
Darjeeling	80	42	+38	S 67 W	S 78 W	241	180	+61

At the central hill stations, as at the Deccan stations, the wind was more westerly, stronger and steadier than the average, while in Southern India the winds at the level of the hill stations were fairly strong and steady from between south-east and east-south-east.

In the Gulf of Aden the wind was unusually southerly. The following gives data for Aden and Perim :—

Station.	Mean wind direction. Actual, March 1905.	Normal, March.
	°	°
Aden	S 74 E	N 87 E
Perim	S 11 W	N 89 E

In the South-east Trades region the winds were somewhat irregular. Both at Zanzibar and Mauritius the mean direction was more southerly than usual, while at the Seychelles the mean direction was N 4° E instead of the normal N 21° W. The velocity was low at Mauritius and above the average at the two remaining stations. The following gives data :—

Station.	Mean steadiness. Actual percentage, March 1905.	Normal percentage, March.	Departure from normal, March 1905.	Mean wind direction. Actual, March 1905.	Normal, March.	Mean wind velocity in miles per diem. Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
Zanzibar	21	13	+8	S 26 E	S 44 E	153	130	+23
Seychelles	29	38	— 9	N 4 E	N 21 W	139	127	+12
Mauritius	...	...	...	S 70 E	S 78 E	211	250	—3

The following summarises the principal abnormal features of the wind circulation:—

(1) Over the east of the Bay conditions were fairly normal, but in the north the mean wind directions were more southerly than usual.

(2) In the Gangetic Plain the wind was slightly more northerly than the average, but over upper India, where pressure was very uniform, the winds were very irregular.

(3) Over the Deccan and the northern half of tl Peninsula the wind was more westerly a stronger than usual, while in the extreme sou of the Peninsula the wind was abnormal southerly.

(4) In the South-east Trades region the only featur of importance were the increased southing the wind's direction at Zanzibar and Mauriti and the lightness of the wind at the latter statio

Humidity and Cloud.

The mean absolute humidity of the month was in defect of the normal over the Punjab, the North-west Frontier Province, lower Sind, the west of the Peninsula, part of the Madras Coast, the greater part of Bengal and Assam, Tenasserim and Lower Burma, and was in excess elsewhere. There had thus been a considerable change in the conditions since the previous month when the mean vapour tension was considerably lower than usual except in South Madras and Lower Burma. The departures of the mean absolute humidity from the normal were considerable to large over parts of western India and over the north-east of the Peninsula and amounted to over ·050″ at the stations for which comparative data are given below:—

STATION.	Positive departures.	STATION.	Negative departures.
	″		″
Masulipatam	+·121?	Ratnagiri	—·120
Sambalpur	+·112	Karwar	—·117
Chaibassa	+·112	Mormugao	—·113
Raipur	+·097	Bombay	—·090
Yamethin	+·089	Amraoti	—·087
Allahabad	+·088	Goa	—·085
Dehra Dun	+·076	Kurrachee	—·074
Kurnool	+·071	Hyderabad	—·068
Deesa	+·058	Mangalore	—·062
Burdwan	+·056	Sholapur	—·056
Bareilly	+·055	Raichur	—·055
Madura	+·055	Peshawar	—·055
Gopalpur	+·052		

The mean temperature was considerably below the normal in all places except the south of the Peninsula and Tenasserim and the distribution of the departures of the mean relative humidity from the normal differed considerably from that of the departures of mean absolute humidity. The only areas within which the mean relative humidity was lower than usual were the Kurrachee district, the west of the Peninsula, the Madras Coast, the south of the Central Provinces and part of Lower Burma, and within these regions the only places at whic the deficiency exceeded 5 were as follows:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, March, 1905.	Normal, March.	Departure from normal, March, 1905.	Actual, March, 1905.	Normal, March.	Departu from normal March. 1905.
	″	″	″	%	%	
Tinnevelly	·713	·765	—·052	62	73	—11
Amraoti	·281	·368	—·087	32	39	—7
Cuddalore	·863	·865?	—·002 ?	79	85	—6
Mangalore	·746	·808	—·062	72	78	—6
Karwar	·609	·726	—·117	76	82	—6
Mormugao	·688	·801	—·113	73	79	—6
Kurrachee	·506	·580	—·074	68	74	—6

In all other parts of the Indian area the mean relativ humidity of the month was in excess of the normal anc over northern and part of north-eastern India, wher both the absolute humidity was in excess and the mear temperature in very considerable defect, the positive departures from the normal of humidity were considerable to large. At the following places they amounted to 12 o more:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, March, 1905.	Normal, March.	Departure from normal, March, 1905.	Actual, March, 1905.	Normal, March.	Departur from normal, March, 1905.
	″	″	″	%	%	
Jhansi	·424	?	?	62	38	+24
Bareilly	·428	·373	+·055	79	58	+21
Chaibassa	·573	·461	+·112	77	57	+20

'ATION.	Absolute Humidity.			Relative Humidity.		
	Actual, March, 1905.	Normal, March.	Departure from normal, March, 1905.	Actual, March, 1905.	Normal, March	Departure from normal, March, 1905.
	"	"	"	%	%	
id . .	·457	·369	+·088	66	47	+19
. .	·484	·435	+·049	80	62	+18
. . .	·383	·387	—·004	78	63	+15
. . .	·528	·480	+·045	72	57	+15
n . .	·609	·553	+·056	79	64	+15
. . .	·466	·369	+·097	56	42	+14
ri . .	·378	·352	+·026	65	51	+14
. . .	·348	·323	+·025	63	49	+14
. . .	·438	·397	+·041	64	50	+14
pur . .	·594	·482	+·112	67	55	+12
ore . .	·366	·355	+·011	58	46	+12
. . .	356	·342	+·014	60	48	+12
. . .	·370	·312	+·058	49	37	+12
. . .	·360	·354	+·006	69	57	+12
hin . .	·625	·536	+·089	71	59	+12

he mean absolute humidity was in defect of the al, on the mean of the month, at most of the northern hill stations and in Baluchistan, but the mean tem-ture was very low, more particularly at the stations on outer ranges of the north-west Himalayas and the relative humidity at the majority of stations was in ss of the normal. The following gives data:—

Hill station.	Absolute Humidity.			Relative Humidity.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	"	"	"	%	%	
. . . .	·165	·146	+·019	64	44	+20
ata . . .	·171	·176	—·005	65	51	+14
chet . . .	·210	·224	—·014	66	55	+11
ee	·162	·177	—·015	65	54	+11
it	·178	·217	—·039	63	56	+ 7
ta	·189	·211	—·022	72	62	+10
ian . . .	·213	·259	—·046	64	59	+ 5
. . . .	·062	·077	—·015	50	50	0
gar . . .	·199	·237	—·038	89	89	0
t	·129	·179	—·050	42	51	— 9
eeling . .	·194	·251	—·057	64	75	—11

At Lashio the mean absolute humidity was in excess, mean temperature in defect and the mean relative iidity in excess of the normal. At Pachmarhi and Mount Abu the mean absolute humidity was in defect of the average, but the mean temperature was lower than usual and the mean relative humidity in excess. The following gives data for these stations:—

Hill station.	Absolute Humidity.			Relative Humidity.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	"	"	"	%	%	
Lashio	·442	·420	+·022	79	72	+7
Pachmarhi . . .	·262	·276	—·014	39	35	+4
Mount Abu . . .	·229	·232	—·003	43	35	+8

At Wellington the air was considerably damper than usual so that, though the mean temperature slightly exceeded the normal, the mean relative humidity was higher than usual. This is shown below:—

Station.	Absolute Humidity.			Relative Humidity.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.	Actual, March 1905.	Normal, March.	Departure from normal, March, 1905.
	"	"	"	%	%	
Wellington . . .	·409	·341	+·068	69	58	+11

The following table shows the stations at which the mean relative humidity exceeded 85% and was less than 40% and defines the areas of greatest and least relative humidity on the mean of the month:—

Station.	Mean relative humidity exceeding 85%.	Station.	Mean relative humidity less than 40 %.
	%		%
Sibsagar . . .	94	Malegaon . . .	39
Sirajganj . . .	92	Jodhpur . . .	38
Dibrugarh . . .	90	Akola . . .	38
Bhamo . . .	89	Aurangabad . .	33
Barisal	88	Amraoti . . .	32
Narayanganj . . .	88	Sholapur . . .	32
Masulipatam . . .	88		
Puri	87		
Saugor Island . . .	87		
Comilla . . .	87		
Silchar	87		
Tavoy	86		
Akyab	86		
Noakhali . . .	86		
Faridpur . . .	86		

At Aden both the mean absolute and mean relative humidities were in excess of the normal while at Perim both were in defect.

The following gives data:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
	"	"	"	%	%	
Aden	·847	·723	+·124	81	73	+ 8
Perim	·676	·783	—·107	64	77	—13

In the South-east Trades region the mean absolute humidity was in excess of the normal, but the retative humidity varied irregularly from the average. The following gives data :—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, March 1905.	Normal, March.	Departure from normal, March 1905.	Actual, March, 1905.	Normal, March.	Departure, from normal, March 1905.
	"	"	"	%	%	
Seychelles . . .	·881	·861	+·020	79	83	—4
Mauritius . . .	·793	·747	+·046	85	80	+5

The following summarises the chief abnormal features of the humidity conditions on the mean of the month :—

(1) The mean absolute humidity was in defect of the normal over the Punjab, the North-west Frontier Province, lower Sind, the west of the Peninsula, the Madras Coast, the greater part of Bengal, Assam, Lower Burma and Tenasserim and was in excess elsewhere.

(2) The departures from the normal were not generally large except over the west and over the north-east of the Peninsula where they were opposite in character.

(3) The distribution of the departures of the mean relative humidity, differed considerably from the above.

(4) The mean relative humidity was below the normal at Kurrachee, over the west of the Peninsula, over the Madras Coast, over part of Lower Burma and over the south of the Central Provinces.

(5) The mean relative humidity was in excess over practically the whole of northern India and over Upper Burma.

(6) In many places the excess was considerable to large.

The following table gives mean comparative data of the nine meteorological provinces :—

METEOROLOGICAL PROVINCE OR DIVISION.	MEAN ABSOLUTE HUMIDITY.		MEAN RELATIVE HUMIDITY.	
	Average actual, March, 1905.	Departure from normal, March, 1905.	Average actual, March, 1905.	Departure from normal, March, 1905.
	"	"	%	
Burma Coast and Bay Islands .	·785	—·006	74	— 2
Bengal and Orissa . . .	·725	—·020	79	+ 3
Gangetic Plain and Chota Nagpur	·397	+·075	54	+16
Upper Sub-Himalayas . .	·324	—·014	59	+ 9
Indus Valley and North-West Rajputana	·375	—·054	57	+ 1
East Rajputana, Central India and Gujarat.	·289	—·003	39	+ 6
Deccan	·366	+·019	39	+ 4
West Coast	·647	—·112	72	— 4
South India	·573	+·032	57	+ 3

The sky was generally more cloudy than usual, on the mean of the month. There was, however, less cloud than the average at some stations in the western desert, along the West Coast of the Peninsula, in parts of Madras and the Deccan and on the south Burma coast. In all the above areas the deficiency was small, the largest departure from the normal having been —1·2 at Bassein and Gopalpur.

Elsewhere the mean cloud amount was in excess, and this excess was particularly strongly marked over Upper Burma, Bengal and parts of north-west and central India, the departures amounting to over + 2·5 at the stations for which comparative data are given below :—

PROVINCE OR DIVISION.	STATION.	MEAN CLOUD AMOUNT.		
		Actual, March 1905.	Normal, March.	Departure from normal, March 1905.
BURMA	Mandalay	5·9	1·3	+4·6
	Yamethin	4·8	0·7	+4·1
	Bhamo	5·1	2·2	+2·9
BENGAL	Mymensingh	7·7	3·6	+4·1
	Hazaribagh	5·7	2·3	+3·4
	Calcutta	5·6	2·9	+2·7
	Dinajpur	4·8	1·9	+2·6
	Barisal	6·5	3·9	+2·6
CENTRAL INDIA	Sutna	5·9	1·3	+4·6
	Nowgong	5·1	1·5	+3·6
	Indore	4·8	1·3	+3·5
NORTH-WEST INDIA.	Dehra Dun	6·4	2·6	+3·8
	Ambala	5·6	2·0	+3·6
	Ajmer	5·2	2·1	+3·1
	Jaipur	5·7	2·6	+3·1

With the exception of Wellington the mean cloud ıount of the month was in excess at all the hill stations Burma, India, Afghanistan and Baluchistan. The cess was 1·5 or more at the following places :—

Hill station.	Mean cloud amount. Actual, March 1905.	Normal, March,	Departure from normal, March 1905.
ıunt Abu	4·6	2.0	+2·6
nikhet	4·8	2·8	+2·0
ıla	5·8	3·8	+2·0
akrata	4·6	2·8	+1·8
ı	7·9	6·1	+1·8
ıagar	7·7	5·9	+1·8
etta	4·6	3·0	+1·6

The mean cloud amount was 6·0 or more, and 1·0 or less, the following stations, which stations hence outline e areas of greatest and least cloud amount on the mean the month :—

Station.	Mean cloud amount exceeding 5·9.	Station.	Mean cloud amount equalling 1·0 or less.
ımensingh	7·7	Karwar	1·0
sagar	7·4	Kurnool	1·0
ırugarh	7·4	Hyderabad (Deccan)	0·9
itkyina	6·5	Chitaldroog	0·9
ısal	6·5	Bassein	0·8
lse Point	6·5	Bijapur	0·2
rayanganj	6·4	Gulbarga	0·1
hra Dun	6·4		
char	6·1		
ugor Island	6·1		

The mean cloud amount was less than usual in the ılf of Aden. The following gives data for Aden and ·im :—

Station.	Mean cloud amount. Actual, March, 1905.	Normal, March.	Departure from normal, March, 1905.
len	1·8	3·2	—1·4
·im	1·8	2·0	—0·2

The cloud amount varied irregularly from the normal over the South-east Trades region. This is shown below :—

Station.	Mean cloud amount. Actual, March 1905.	Normal, March.	Departure from normal, March, 1905.
Seychelles	5·8	6·7	—0·9
Mauritius	8·2	6·5	+1·7

The following summarises the principal abnormal features of the cloud distribution of the month :—

(1) The sky was clearer than usual at a few stations in north-west India, in the west and centre of the Peninsula and on the south Burma coast.

(2) The amount of the deficiency was generally small and exceeded 1·0 only at Bassein and Gopalpur (each—1·2).

(3) The sky was more cloudy than the average in practically all other places, but especially so over Upper Burma, Bengal, and parts of central and north-west India, where the excess varied between 2·0 and 4·6.

(4) At practically all the hill stations the sky was more cloudy than the normal.

The following gives mean comparative data of the nine meteorological provinces :—

Meteorological Province or Division.	Mean cloud amount. Average actual, March, 1905.	Departure from normal, March, 1905.
Burma Coast and Bay Islands	2·8	+0·5
Bengal and Orissa	5·4	+2·3
Gangetic Plain and Chota Nagpur	5·3	+2·9
Upper Sub-Himalayas	4·4	+1·2
Indus Valley and North-West Rajputana	3·9	+0·4
East Rajputana, Central India and Gujarat	4·6	+2·0
Deccan	2·4	+0·5
West Coast	1·8	+0·4
South India	3·3	+0·8

Rainfall.

The normal rainfall of the month of March is generally small and unimportant except in the north-east and on the hills. During the month under review this small normal rainfall was largely exceeded over a large part of the country—more particularly in north-east India and Arakan.

The chart (Pl. VII) giving the actual rainfall of the month, as measured at the meteorological observatories, shows that the month was actually or practically rainless over lower Sind, Gujarat, Western Rajputana, Bombay and the west of the Central Provinces and of the Deccan, as well as within small areas over the South Madras Coast and the Lower Burma coast. In all other parts of the country rain was received and was heaviest at Chittagong (16·66″) and Silchar (11·80″).

The chief periods of rainfall were :—

(1) The 1st to the 4th when showers occurred over northern India.

(2) The 8th to the 14th when rain commenced in the north-west and thence extended eastward to north-east India and Upper Burma.

(3) The 15th to 18th when showers occurred in the north-west.

(4) The 20th when showers were reported from Burma and Orissa, and

(5) The 21st to the 31st when daily showers fell in the north-west or north-east.

The snowfall and rainfall were heavier than usual in the north-west frontier districts and towards the close of the month there occurred an extremely heavy fall of snow over Kashmir.

The following table gives comparative rainfall data for the 57 meteorological divisions of the empire :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, March, 1905.	Average normal March.	Average actual, March, 1905.	Average normal, March.	Departure from normal, March, 1905.
				Inches.	Inches.	Inches.
Burma	Tenasserim	0·6	1·4	0·40	0·83	—0·43
	Lower Burma (Deltaic)	0·1	0·3	0·05	0·17	—0·12
	Central do.	0·4	0·1	0·14	0·02	+0·12
	Upper do.	4·4	0·9	2·01	0·28	+1·73
	Arakan	3·5	0·4	3·12	0·28	+2·84
Bengal and Assam	Eastern Bengal	8·8	3·1	8·08	2·36	+5·72
	Assam (Surma)	13·0	8·9	10·33	7·49	+2·84
	Do. (Hills)	10·5	6·0	7·94	4·15	+3·79
	Do. (Brahmaputra)	8·5	6·5	4·53	3·58	+0·95
	Deltaic Bengal	6·7	2·3	4·00	1·42	+2·58
	Central do.	4·5	1·4	3·20	0·77	+2·43
	North do.	5·0	1·9	2·10	1·26	+0·84
	Bengal Hills	4·6	3·8	1·79	1·84	—0·05
	Orissa	5·7	1·8	3·00	1·08	+2·92
	Chota Nagpur	4·0	1·5	2·00	0·76	+1·24
	Bihar (South)	3·4	0·8	1·54	0·35	+1·19
	Do. (North)	3·3	0·8	1·11	0·38	+0·73
United Provinces of Agra and Oudh.	United Provinces (East)	2·6	0·6	0·94	0·26	+0·68
	Oudh (South)	2·7	0·6	0·74	0·27	+0·47
	Do. (North)	2·6	0·8	0·82	0·40	+0·42
	United Provinces (Central)	1·4	0·6	0·40	0·26	+0·14
	Do. (West)	1·5	0·9	0·43	0·35	+0·08
	Do. (Submontane, East)	2·6	0·7	0·77	0·30	+0·47
	Do. (Do., West)	2·7	1·5	1·18	0·70	+0·48
	Do. (Hills)	5·9	2·6	3·00	1·43	+1·57
Punjab	Punjab (South-East)	1·4	0·9	0·54	0·36	+0·18
	Do. (South)	1·3	0·9	0·48	0·41	+0·07
	Do. (Central)	2·8	1·8	1·02	0·82	+0·20
	Do. (Submontane)	3·6	2·1	1·90	1·10	+0·80
	Do. (Hills)	10·9	4·3	6·07	2·76	+3·31
	Do. (West)	1·8	1·3	0·62	0·50	+0·12
North-west Frontier Province.	North-west Frontier Province	6·9	3·8	3·97	2·00	+1·97

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, March, 1905.	Average normal March.	Average actual, March, 1905.	Average normal, March,	Departure from normal, March, 1905.
				Inches.	Inches.	Inches.
Bombay and Malabar Coast Districts (Madras).	Malabar	0·1	1·0	0·05	0·46	−0·41
	Travancore	1·0	...	0·48	...	...
	Madras (South Central)	1·7	0·9	1·31	0·53	+0·78
	Coorg	1·1	...	0·55	...	...
	Mysore	1·1	0·7	0·62	0·32	+0·30
	Konkan	0	0·1	0	0·06	−0·06
	Bombay Deccan	0·1	0·5	0·02	0·25	−0·23
	Hyderabad North	0·4	0·8	0·23	0·34	−0·11
	Khandesh	0	0·2	0	0·07	−0·07
Central Provinces and Berar.	Berar	0·2	0·7	0·10	0·32	−0·22
	Central Provinces (West)	0·7	0·7	0·20	0·34	−0·14
	Do. do. (Central)	1·5	1·0	0·59	0·50	+0·09
	Do. do. (East)	1·9	1·4	0·84	0·64	+0·20
Bombay (North)	Gujarat (East)	0	0	0·02	0·01	+0·01
	Kathiawar and Cutch	0·1	0·1	0·03	0·02	+0·01
	Sind	0·1	0·4	0·03	0·16	−0·13
	Baluchistan Hills	4·6	3·2	1·72	1·16	+0·56
Rajputana and Central India.	Central India (East)	0·8	0·4	0·34	0·16	+0·18
	Rajputana (East), Central India (West)	0·6	0·5	0·14	0·19	−0·05
	Rajputana (West)	0·1	0·2	0·04	0·07	−0·03
Madras	East Coast (North)	4·0	1·2	2·47	0·58	+1·89
	Hyderabad South	1·3	0·8	0·29	0·49	−0·20
	Madras (Central)	1·1	0·5	0·50	0·19	+0·31
	East Coast (Central)	0·8	0·1	0·43	0·18	+0·25
	East Coast (South)	1·2	0·4	0·59	0·30	+0·29
	Madras (South)	0·4	1·4	0·17	0·99	−0·82

The preceding data show that the average actual rainfall was less than 0·10″ in the following nine divisions, *viz.*, Lower Burma (Deltaic), Malabar, Konkan, Bombay Deccan, Khandesh, Gujarat East, Kathiawar and Cutch, Sind and West Rajputana.

From these areas of light rainfall the amount increased and the average actual rainfall equalled 10·33″ in the Surma Valley of Assam, 8·08″ in East Bengal, and 7·94″ in the Assam Hills. The normal rainfall of the month is generally small so that comparatively small departures from average produce large percentage variations. The following gives data for those divisions where the percentage departures exceeded +200:—

Division.	Rainfall.			
	Average actual, March 1905.	Average normal, March.	Departure from normal, March 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Central Burma	0·14	0·02	+0·12	+600
Upper Burma	2·01	0·28	+1·73	+618
Arakan	3·12	0·28	+2·84	+1014
Eastern Bengal	8·08	2·36	+5·72	+242
Central Bengal	3·20	0·77	+2·43	+316
South Bihar	1·56	0·36	+1·20	+333
United Provinces East	0·94	0·26	+0·68	+262
East Coast North	2·47	0·58	+1·89	+326

The mean departure of the rainfall of the whole country (excluding the hill districts) derived from the fifth figure column of the above table was +0·64″.

The following gives the rainfall of the month for the extra—Indian stations:—

Division.	Rainfall.			
	Average actual, March 1905.	Average normal, March.	Departure from normal, March, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee	0·03	1·45	−1·42	− 98
Colombo	1·27	4·45	−3·18	− 71
Minicoy	0	0·98	−0·98	−100
Kashgar	3·38	0·20	+3·18	+1590
Kabul	3·42	4·90	−1·48	− 30
Meshed	1·00	2·43	−0·83	− 34
Teheran	1·31	2·80	−1·49	− 53
Ispahan	1·67	0·99	+0·68	+ 69
Bushire	1·52	1·00	+0·52	+ 52
Jask	1·53	1·15	+0·38	+ 33
Muscat	2·21	1·05	+1·16	+110
Baghdad	2·01	1·60	+0·41	+ 26
Aden	0·21	0·87	−0·66	− 76
Perim	1·12	0·27	+0·85	+315
Seychelles	3·47	13·01	−9·54	− 73
Zanzibar	4·94	6·50	−1·56	− 24
Mauritius	15·03	9·87	+5·16	+ 52

The departures from the normal were irregular. The rainfall was in excess over Asiatic Turkey, Persia except the north, Kashgaria and northern Arabia, but was in defect in Afghanistan. It was also in defect at Minicoy and in Ceylon while it was in excess at Perim and Mauritius and in defect at Aden, Zanzibar and the Seychelles.

The following summarises the principal abnormal features of the rainfall distribution of the month:—

(1) The rainfall was in excess over Asiatic Turkey and from that region eastward through Persia and northern India as far as Upper Burma.

(2) It was also in large excess in Kashgaria.

(3) Rain was also in excess of the normal over the east and centre of the Central Provinces and the east of the Peninsula.

(4) On the other hand, the month was practically rainless and the rainfall generally below the normal over Gujarat, the west of the Peninsula and as far south as Ceylon.

(5) The rainfall was less than usual over the west of the Central Provinces and the west of the Deccan.

(6) A heavy fall of snow occurred over Kashmir, etc., between the 26th and the end of the month.

(7) In the South-east Trades region the rainfall departures from normal were irregular.

The following table gives comparative rainfall data of the eleven meteorogical provinces:—

Meteorological province.	Rainfall.			
	Mean actual for March, 1905.	Mean normal, for March.	Departure from normal March, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands	0·75	0·69	+0·15*	+ 22
Burma Inland	1·25	0·22	+1·24*	+564
Assam	5·49	4.41	+1·08	+ 24
Bengal and Orrissa	4·12	1·48	+2·64	+178
Gangetic Plain and Chota-Nagpur.	1·41	0·51	+0·89	+175
Upper Sub-Himalayas	1·11	0·79	+0·32*	+ 41
Indus Valley and North-West Rajputana.	0·68	0·51	+0·17	+ 33
East Rajputana, Central India and Gujarat.	0·15	0·12	+0·03	+ 25
Deccan	0·31	0·43	−0·14*	— 33
West Coast	0·09	0·51	−0·42	— 82
South India	0·85	0·46	+0·39	+ 85

* A reference to Table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

Moderate showers occurred in the Tavoy district between the 5th and the 8th, but with this exception Tenasserim and Lower Burma were generally rainless. Parts of Central Burma received showers between the 20th and 23rd, while Upper Burma and Arakan experienced a long showery period extending from the 12th to the 24th and in consequence the month's rainfall in these two divisions largely exceeded the normal. Falls of over 1·50″ in 24 hours were recorded at the following stations on the following dates during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Akyab	Rathedaung	10th March	2·45
Arakan Hill tracts	Paletwa	12th ,,	4·35
Pakokku	Gangaw	13th ,,	1·62
Chin Hills	Haka	18th ,,	1·63
Upper Chindwin	Paungbyin	,, ,,	1·58
Arakan Hill tracts	Paletwa	19th ,,	3·30
Chin Hills	Fort White	,, ,,	1·81
	Haka	20th ,,	2·37
Myingyan	Natogyi	,, ,,	1·90
Chin Hills	Tiddim	,, ,,	1·83
	Fort White	,, ,,	1·75
Kyaukpyu	Myebon	21st ,,	1·75
Lower Chindwin	Pale	,, ,,	1·62

In Assam the weather was very showery, both on the hills and plains. There were five periods of rainfall, *viz.*, between the 1st and the 3rd, the 8th and the 14th, the 16th and the 19th, the 21st and the 23rd and the 27th and the 31st. The month's rainfall was heavier than usual in all three divisions—more particularly on the Hills—and amounts exceeding 3″ in 24 hours were recorded at the following stations on the following dates during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Lushai Hills	Tenzol	12th March	3·38
Cachar	Monierkhal	17th ,,	4·13
	Dewan	,, ,,	3·58
	Hailakandi	18th ,,	4·57
	Dewan	,, ,,	4·04
Sylhet	Karimganj	,, ,,	3·80
Cachar	Badarpur	,, ,,	3·72
Sylhet	Sunamganj	,, ,,	3·60
Cachar	Silchar	,, ,,	3·28
	Bikrampur	,, ,,	3·15
Sylhet	Sylhet	,, ,,	3·02
Lushai Hill	Tenzol	19th ,,	3·01
	Ditto	20th ,,	3·65
Cachar	Bikrampur	30th ,,	3·17

On the Bengal Hills the month's rainfall was normal, in all the plains divisions the fall was excessive, and Central Bengal and South Bihar largely excessive. ere were four rainfall periods during the month, *viz.*, the 1st and 2nd, between the 7th and 13th, between 18th and 23rd, and between the 27th and 31st. During t of these periods the rainfall extended more or less ughout the Presidency; but in Bihar the only import- fall was that between the 7th and the 12th, the showers other times having been light and scattered. The viest rainfall occurred during the second (7th to 13th) third (18th to 23rd) rainfall periods, when the following unts exceeding 3″ in 24 hours were registered:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
SHIDABAD	Azimganj	9th March	3·76
ENSINGH	Sherpur Town	" "	3·50
SHIDABAD	Lalbagh	" "	3·40
TAGONG	Kodala	11th "	5·31
TAGONG	Fenoa	" "	3·16
TAGONG	Kutubdia	12th "	5·75
HILL TRACTS	Rangamati	" "	4·76
TTAGONG	Satkania	" "	4·75
TTAGONG	Chittagong	" "	4·15
TTAGONG	Kodala	" "	3·29
KHALI	Harishpur	" "	3·15
TTAGONG HILL ACTS.	Barkol	" "	3·12
LNA	Morelganj	" "	3·02
TTAGONG HILL ACTS.	Bandarban	13th "	6·00
TTAGONG	Cox's Bazar	" "	3·01
TTAGONG	Kutubdia	20th "	5·09
IDPUR	Madaripur	" "	3·15
TTAGONG	Kutubdia	21st "	5·30
KHALI	Harishpur	" "	5·20
TTAGONG HILL ACTS.	Bandarban	" "	4·88
DWAN	Burdwan	" "	3·95
KHALI	Noakhali	" "	3·67
KERGUNGE	Gaurnadi	" "	3·65
TTAGONG	Chittagong	" "	3·45
ARGANAS	Saugor Island	22nd "	3·25
PERA	Brahmanbaria	" "	3·18
TTAGONG	Kutubdia	" "	3·11

The United Provinces received rain under conditions nilar to those in Bengal, but the periods were shorter and the actual rainfall generally lighter. The rainfall periods occurred on the 1st, between the 7th and the 11th, between the 15th and 22nd, and between the 27th and 31st. The most important rainfall period was that between the 7th and the 11th as is shown by the following table which gives the dates of amounts exceeding 1·00″ in 24 hours during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
DEHRA DUN	Chakrata Observatory.	1st March	1·23
NAINI TAL	Naini Tal	7th "	1·15
ALMORA	Champawat	" "	1·05
ALMORA	Berinag	8th "	1·45
DEHRA DUN	Chakrata Observatory.	9th "	2·17
SAHARANPUR	Hardwar	" "	2·10
GARHWAL	Lansdowne	" "	1·89
BIJNOR	Bijnor	" "	1·84
GARHWAL	Pauri	" "	1·75
GARHWAL	Kotdwara	" "	1·70
BIJNOR	Dhampur	" "	1·56
BIJNOR	Nagina	" "	1·50
GARHWAL	Srinagar	" "	1·47
DEHRA DUN	Rajpur	" "	1·42
DEHRA DUN	Chakrata Tahsil	" "	1·40
DEHRA DUN	Bhogpur	" "	1·35
NAINI TAL	Naini Tal	" "	1·32
NAINI TAL	Kathgodam	" "	1·30
SAHARANPUR	Muhammadpur	" "	1·24
ALMORA	Ranikhet Observatory.	" "	1·21
DEHRA DUN	Mussooree	" "	1·20
DEHRA DUN	Ambari	" "	1·04
SAHARANPUR	Roorkee	" "	1·02
GARHWAL	Joshimath	16th "	1·29
DEHRA DUN	Chakrata Tahsil	" "	1·19
GARHWAL	Joshimath	29th "	1·61
GARHWAL	Okhimath	30th "	1·02

In every division the normal fall of the month was largely exceeded, the average actual rainfall ranging from 0·40″ in the central division, to 1·18″ in the west sub-montane and 3·00″ in the hill divisions.

In most parts of the Punjab rain fell on the 1st, between the 7th and the 10th, between the 15th and the 21st, and between the 26th and the 30th. The most general fall

was that between the 7th and 10th, the rainfall at other times having been scattered and partial and hardly extending to the Central and South Punjab. Nevertheless the month's rainfall exceeded the normal in all divisions though in the south the excess was small. Amounts exceeding 1·00″ in 24 hours during the month were reported from the following places on the following dates—principally the 8th or 9th :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
KANGRA	Nagar	1st March	1·01
GURDASPUR	Dalhousie	" "	1·20
	Ditto	7th "	2·50
	Ditto	8th "	2·50
KANGRA	Dharmsala	" "	2·00
HOSHIARPUR	Una	" "	1·02
	Dasuya	9th "	3·37
GURDASPUR	Dalhousie	" "	2·50
	Gurdaspur	" "	2·02
	Pathankot	" "	1·91
KANGRA	Nurpur	" "	2·94
	Kangra	" "	1·82
GUJRANWALA	Wazirabad	" "	1·80
GURDASPUR	Tibri	" "	1·70
	Madhopur	" "	1·50
GUJRAT	Phalia	" "	1·38
AMBALA	Kasauli	" "	1·25
LUDHIANA	Ludhiana	" "	1·22
SIMLA	Kotgarh	" "	1·20
LAHORE	Kasur	" "	1·17
HOSHIARPUR	Garhshankar	" "	1·07
	Sadr Station	" "	1·05
AMBALA	Jagadhri	" "	1·05
KANGRA	Kulu	16th "	1·77
GURDASPUR	Dalhousie	" "	1·54
	Ditto	21st "	1·78
ATTOCK	Fatahjang	27th "	1·34
KANGRA	Nagar	" "	1·65
GURDASPUR	Dalhousie	" "	1·25
	Ditto	29th "	1·38
MIANWALI	Mianwali	" "	1·33
RAWALPINDI	Murree	" "	1·32
SIMLA	Barauli	" "	1·10
	Kilba	30th "	2·05

Over the North-west Frontier Province rain occurred on the 1st, the 8th and 9th, the 15th to 22nd, the 25th to 27th, and the 29th and 30th. The rainfall was heaviest during the two last periods, and amounts exceeding 1·50″ in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
KOHAT	Fort Lockhart	25th March	1·75
PESHAWAR	Malakand	26th "	2·73
	Nahakki	" "	2·50
	Landi Kotel	" "	2·32
	Peshawar	" "	1·68
	Para Chinar	" "	1·57
KOHAT	Hangu	" "	1·52
HAZARA	Abbottabad	27th "	2·28
	Oghi	29th "	1·94
PESHAWAR	Charsadda	" "	1·71
	Malakand	" "	1·65
	Landi Kotel	" "	1·55

The average actual fall for the month was nearly twice as heavy as usual.

In Baluchistan the weather was very showery between the 5th and 15th as well as on the 19th, 20th, 28th and 29th. The total fall of the month was heavier than usual and amounts exceeding 1·50″ in 24 hours during the month were recorded as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
BOLAN PASS	Kolepur	9th March	1·60
QUETTA PISHIN	Saronan	14th "	1·51
	Pishin	15th "	1·53

In Kashmir the weather was showery throughout a large part of the month but principally between the 6th and 8th, the 15th and 18th, and the 25th and 30th. The

rain was heaviest during the last period when the following amounts exceeding 1·50″ in 24 hours were recorded :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Jummoo	Kathua	7th March	1·63
	Jasmairgarh	8th "	1·73
	Bisolee	" "	1·65
Kashmir	Sonemarg	18th "	1·52
	Baramula	25th "	1·82
Jummoo	Ramban	" "	1·60
Kashmir	Uri	" "	1·52
	Sonemarg	26th "	6·11
Jummoo	Ramban	" "	1·51
Kashmir	Sonemarg	27th "	4·41
	Uri	" "	1·80
	Sonemarg	28th "	4·28
	Uri	" "	1·75
Jummoo	Ramban	" "	1·65
Kashmir	Karnah	" "	1·62
	Sonemarg	29th "	2·15

At Sonemarg, and in that neighbourhood, there was an extraordinarily heavy fall of snow at the close of the month, the daily amounts (measured as rainfall) having been as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kashmir	Sonemarg	26th March	6·11
	Uri	" "	1·40
	Sonemarg	27th "	4·41
	Uri	" "	1·80
	Sonemarg	28th "	4·28
	Uri	" "	1·75
	Karnah	" "	1·62
	Sonemarg	29th "	2·15

Western Rajputana was practically rainless throughout the month, but eastern Rajputana received showers between the 2nd and the 8th and on the 28th and 29th. The total fall was, however, small, as is shown by the following comparative rainfall data for the larger states :—

State.	Rainfall.			
	Average actual March, 1905.	Average normal, March.	Departure from normal, March, 1905.	Percentage departure from normal.
	Inch.	Inch.	Inch.	
Jaipur	0·15	0·26	—0·11	— 42
Alwar	0·31	0·18	+0·13	+ 72
Bharatpur	0·30	0·23	+0·07	+ 30
Dholpur	0	0·18	—0·18	—100
Karauli	0·01	0·21	—0·20	— 95
Kotah	0·07	0·15	—0·08	— 53
Ajmer-Merwara	0·03	0·16	—0·13	— 81
Udaipur	0·20	0·05	+0·15	+300
Sirohi	0·03	0·11	—0·08	— 73

Central India received showers during the first ten days of the month and in some places the small normal fall was exceeded. The following gives data for the larger states :—

State.	Rainfall.			
	Average actual, March, 1905.	Average normal, March.	Departure from normal, March, 1905.	Percentage departure from normal.
	Inches.	Inch.	Inch.	
Indore	0	0·05	—0·05	—100
Rutlam	0·03	0·02	+0·01	+ 50
Bhopal Agency	0·04	0·28	—0·24	— 86
Gwalior	0·07	0·04	+0·03	+ 75
Rewah	1·07	0·38	+0·69	+182
Bundelkhand	0·29	0·26	+0·03	+ 12

The weather was showery over the Central Provinces between the 1st and the 8th and between the 27th and 30th, but was fine at other times. The showers were very light in the west division and hardly extended into Berar. The total rainfall was in excess in the east division, normal in the central division, and in defect in the west division

and Berar. The only falls exceeding 1·50″ in 24 hours during the month were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
CHHINDWARA . .	Tamia . . .	7th March .	1·69
SAMBALPUR . . .	Bargarh . . .	„ „ .	1·54

There was practically no rain over the Bombay Presidency during the month, though occasional scattered showers were received over Gujarat, Kathiawar and Sind. The anticipated rainfall in this month and over this area is exceedingly small.

In the Nizam's Dominions light scattered showers were received between the 13th and 17th, and the total fall of the month was less than the small normal amount.

Mysore received light showers between the 14th and 18th and the 27th and 30th, and the average actual fall was twice as large as the normal. The principal rainfall period was that at the close of the month, when the following amounts exceeding 2·00″ in 24 hours were registered :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
BANGALORE . .	Hoskote . . .	27th March .	2·60
	Dodballapur . .	„ „ .	2·52
KOLAR . . .	Srinivaspur . . .	„ „ .	2·30
	Chikballapur . .	„ „ .	2·13

Rain was received in all parts of the Madras Presidency. It was light and considerably less than the normal in the south and Malabar divisions, but was more or less excessive elsewhere. In South-central Madras the weather was fine up to the 12th, after which date it became showery, though, except on the 19th, the showers were not general. Amounts exceeding 2·00″ in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
COIMBATORE . .	Erode . . .	19th March .	4·20
SALEM . . .	Tiruchengodu . .	„ „ .	2·76
	Paramathia . .	„ „ .	2·76
	Atur	„ „ .	2·50
	Sankaridrug . .	„ „ .	2·03
	Pennagaram . .	27th „ .	2·41

In Central Madras the weather was showery between the 13th and the 18th and on the 27th, and fine at other times. Amounts exceeding 2″ in 24 hours during the month were recorded as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
CUDDAPAH . .	Kadiri . . .	27th March .	2·92
	Madanapalle . .	„ „ .	2·10

Along the east coast the weather was fine for the first twelve to eighteen days and was showery thereafter—more especially between the 20th and 26th. In all three divisions, but especially in the north, the month's rainfall was abnormally heavy and the following amounts exceeding 2·50″ in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
GANJAM . . .	Surada . . .	1st March .	2·85
	Sompeta . . .	24th „ .	3·07
GODAVARI . .	Cocanada . . .	„ „ .	2·82
VIZAGAPATAM . .	Parvatipuram . .	25th „ .	3·11
KISTNA . . .	Masulipatam . .	„ „ .	2·60
GUNTUR . . .	Guntur . . .	26th „ .	3·20

Snowfall.

The following gives the snowfall returns for the month of March 1905. The month's snowfall was heavier than usual over nearly all parts of the mountain area extending from Afghanistan, through Kashmir, to the east Himalayas. At Meshed in northern Persia light snow fell on the 8th and 10th December 1904, and on the 13th January 1905. On the 20th, 26th and 27th of January there was heavy snow. In February on the 11th, 15th and 22nd and in March on the 5th and 13th, there were light falls of snow mixed with rain.

I.—AFGHAN MOUNTAIN DISTRICTS.

(1) *Killa Drosh.*—The following account of the winter snowfall from the 20th January 1905, has been received. Snow commenced on January 20th and none fell after March 31st. The hills to the south-west were covered with snow till mid-April. The slopes (height under 12,000 feet and above 10,000 feet) were free at the beginning of May. The hills to the south-east (height 14,500 feet) are still (May 2nd) covered, the snow line being about 7,000 feet. The Loari Pass (10,200 feet) has been closed twice during the winter for several days after each heavy snowfall, the accumulated snow measuring 12 feet and over, while on at least two occasions loss of life has been caused by avalanches following these heavy falls. The snow at present (2nd May) is about 2 feet deep on the Pass, and comes down on the northern side to 7,000 feet. The main pass into Kafristan remained open the whole winter up to the heavy snow at the end of January, when it remained closed till mid-April. Depth of snow unknown. The following gives details of the snowfall :—

Date of snowfall.	Place of snowfall.	Depth of snowfall in cantonment.
20th January 1905	Heavy snowfall over hills and Drosh	Unknown.
21st " "	Ditto ditto	Do.
22nd " "	Ditto ditto	Do.
26th " "	Slight snowfall over hills and Drosh	2 inches.
27th " "	Very heavy snowfall over hills and Drosh	Unknown.
29th " "	Ditto ditto	Do.
14th February 1905	Moderate snowfall over hills and Drosh	Do.
15th " "	Ditto ditto	1 foot.
16th " "	Slight snowfall over hills and Drosh	1 inch.
21st " "	Ditto ditto	1 inch.
22nd " "	Ditto ditto	1 inch.
23rd " "	Ditto ditto	1 inch.
27th " "	Ditto ditto	1 inch.
25th March 1905	Snowfall over hills and Drosh	1 foot.
26th " "	Very heavy snowfall over hills and Drosh	Unknown.
29th " "	Ditto ditto	Do.
30th " "	Ditto ditto	Do.
31st " "	Slight snowfall over hills and Drosh	1 inch.

It is stated that the snowfall has been heavier than in the previous year.

(2) *Kabul.*—Snow fell as under :—

March 7th.—Snow 4 P.M. to 5 A.M. depth 9¾ inches.
" *13th.*—Few flakes 3 P.M.
" *15th.*—Rain 8 P.M.
" *24th.*—Rain.
" *25th.*—Snow 5 P.M. to 11 P.M. depth 1½ inch.
" 26th.—Rain and snow.
" *27th*—Rain and snow.
March 29th.—Snow fell from 5 A.M. to 9 P.M. depth 11½ inches.
" *30th.*—Snow fell 6 A.M. to 5 P.M. depth 4½ inch.
" *31st.*—Snow fell from 7 A.M. to 5 P.M. but melted.

The snowfall was more than last year.

(3) *Wano*—Snow fell as follows during the month :—

8th.—Marwattai, Pirghal, Bosh, Dre Nashtur } (11,000 feet) about 6 inches.
Kundighar, Janimela } (8,000 feet) about 3 inches.
10th and 15th.—As above.
26th and 29th.—As above.

The snowfall of the month was heavier than that for the corresponding month last year.

(4) *Kurram.*—Snow fell on the Sufed-i-Koh on the 7th, 10th, 14th, 23rd, 24th, 25th, and 28th to 31st. The falls of 7th/8th, 28th/29th and 30th/31st extended as far as Ahmadzai and that of 29th/30th as far as Sadda, a distance of 22 miles from Parachinar. Such heavy falls during this month are said to be unprecedented.

All the passes were, at the end of the month, closed and there was about 9 feet of snow on the Sufed-i-Koh.

(5) *Kohat.*—During the month of March 1905, snow fell on the 1st, 6th, 7th, 29th and 30th.

Thal Kohat.—About 2 feet of snow fell on the Samana Range on the 8th March.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Murree.*—Snow fell as follows :—

	Feet.	Inches.
1st	0	9
2nd	0	0½
8th	0	4
9th	0	2
30th	0	4
TOTAL	1	7½

(2) *Leh*—Snow fell in Leh during March as follows :—

1st	Sprinkle.
4th	⅛ inch.
7th	Sprinkle.
12th	⅛ inch.
20th and 21st	Sprinkle.
22nd	do.
26th and 27th	5½ inches.
28th	2 "
30th	Sprinkle.

At Leh at present (31st March) there is about 3 inches of snow lying. How far down it extends cannot be said for certain, but there is reported to be snow (from the fall of March 26th to 28th) lying all over Lower Ladak (*i.e.*, down to at least 9,000 feet) as much as in Leh or even deeper.

The comparatively heavy fall of snow of the 26th to 28th March, though not unprecedented, was unusual at this time of year. Telegraphic communication was interrupted and the roads were blocked in many directions. To-day (31st March) for the first time for a week there has been bright sunshine and the snow is melting fairly rapidly.

(3) *Kailang Kangra.*—Snow fell as follows during the winter:—

1904.

December	15th	4 inches.
„	18th	2 „

1905.

January	4th	1 inch.
„	18th	1 „
„	21st	13 inches.
„	28th	1 „
February	15th	1 inch.
„	17th	1 „
„	28th	5 „
March	1st	1 „
„	6th	1 „
„	15th	7 „
„	20th	3 „
„	25th	1 „
„	26th	3 „
„	27th	18 „
„	28th	14 „
„	29th	4 „
„	30th	2 „

(4) *Kashmir.*—At Sonemarg the snowfall between the 26th and 29th measured as rain, was as follows:—

		"
26th	March	6·11
27th	„	4·41
28th	„	4·28
29th	„	2·15

(5) *Chamba.*—Snow fell over almost the whole of the sub-division on the 1st, 3rd, 6th, 7th, 8th, 10th, 11th, 15th, 17th, 20th, 21st, 26th, 27th, 28th, 29th, 30th and 31st March. The snowfall was heavy and the snow line in the case of Kalatop, Surkhigali and Barkhol descended to 6,000 feet, while in the case of Kilar it descended to 7,300 feet.

The accumulated snowfall was, at the end of the month, as follows:—

Kalatop	8 feet.
Chuari	5 to 6 „
Olansa and Barmaur	3 „
Langera	8 „
Bhent	6 „
Bhandal	1 „
Deur	3 inches.
Khangu	4 feet.
Alwas	4′ 7 inches.
Chatri	3′ 6 „
Kilar	5 feet.

The snowfall was unusually heavy and constant.

(6) *Kilba, Simla.*—The snowfall was as follows during the month:—

1st	March	1	inch descended to	6,000	feet.
4th	„	1½	„ ditto	7,000	„
6th	„	1	„ ditto	6,000	„
7th	„	1	„ ditto	6,000	„
8th	„	1	„ ditto	5,750	„
11th	„	2	„ ditto	7,500	„
15th	„	2	„ ditto	8,000	„
16th	„	3	„ ditto	7,500	„
17th	„	2	„ ditto	7,500	„
21st	„	1½	„ ditto	5,750	„
22nd	„	1½	„ ditto	5,750	„
26th	„	1½	„ ditto	9,000	„
27th	„	1	„ ditto	8,000	„
28th	„	1	„ ditto	9,000	„
29th	„	1	„ ditto	7,000	„
30th	„	2	„ ditto	5,750	„
31st	„	1½	„ ditto	6,000	„

All the passes were closed on account of the heavy snowfall, and the accumulated snow on the following passes measured as follows:—

Rupan	Pass	13 feet.
Bruin	„	13 „
Harang	„	6 „
Shatul	„	12 „
Buldar	„	13 „
Runang	„	9 „

The snowfall of the month was much heavier than that for the same month last year.

(7) *Kulu.*—Snow and rain fell as follows:—On the 27th and 28th February and the 1st, 4th, 7th to 9th, 11th, 12th, 15th to 17th, 19th, 21st and 22nd March. The snow descended to an elevation of 5,500 ft. in Kulu and to 5,718 ft. in Seoraj. The following gives the depth of snow on the various passes of the sub-division:—

Kulu.	feet.	Seoraj.	feet.
Rohtang	21	Sirikhand	20
Hamta	24	Chul	12
Chandar Khani	9	Hingan	12
Barsai	8	Dundku	15
Puja Dhar	8½	Tikkar	12
Luhri Achri	12	Tuhni	6
Bhuboo	10	Ramgarh	1
Minjhag	2	Raghopur	10
Bashtari	10	Jalori	10
Sairi	17	Bhimri	10
		Skiran	10
		Gargarasan	17
		Supakum	12
		Bashleo	12
		Plach	14
		Tirath	15

The snowfall was heavier than usual.

(8) *Dalhousie.* Snow fell as follows:—

		feet.	inches.
March	1st	1	0
„	7th	0	10
„	8th	0	10
„	9th	1	8
„	21st	0	10
„	29th	0	6
	TOTAL	5	8

The fall was heavier than that of the previous year.

III.—UNITED PROVINCES HIMALAYAS.

(1) *Almora.*—The following gives the snow accumulation on the following well-known passes:—

	feet.	inches.
Utta Dhura	21	0
Ralam Dhura	19	6
Millam Dhura	15	0
Pindari Peak	14	0
Kapini „	14	0
Kaunela „	14	0
Nirwe Pass	36	0
Lipu Dhura	26	0

Snow fell frequently during the month and was heavier than usual.

IV.—ASSAM HIMALAYAS.

(1) *Lakhimpur*:—The snowfall during the year 1904-5 in the hills north of north Lakhimpur sub-division is said to have been the same as in the preceding year.

(2) *Sadiya* (*Lakhimpur*).—Very heavy falls of snow were received during November, December, January and February and the total fall was the heaviest on record.

(3) *North Lakhimpur.*—The snowfall during the year 1904-05, has been the same as last year.

Crop Report.

Madras.—The standing crops were withering or were poor at the close of the month in parts throughout the Presidency except in portions of the Circars, Anantapur, Chingleput and in the hills. Harvests continued with poor to fair outturn. Fodder was procurable except in parts of the Deccan, Nellore, South Arcot, North Arcot, Salem and Madura, and the condition of the cattle was generally good.

Bombay.—The standing crops had been damaged by frost in Sukkur, and were suffering from mist and cold in parts of Ahmedabad, and Rajkot and from high winds in parts of the Upper Sind Frontier. The fodder supply was sufficient except in parts of Sukkur, Hyderabad, Thar and Parkar, Ahmedabad, Broach, Surat, Khandesh, Nasik, Dharwar and Baroda, and agricultural stock was generally sufficient and in good condition.

Bengal.—Prospects were fair but rice had suffered from hail in the Kishorgunj sub-division, Mymensingh, and excessive rain had stopped the sowing of autumn rice and jute in the low lands of Backergunj.

United Provinces.—Hailstorms had caused damage to the standing crops in Moradabad, Bareilly, Benares, Bahraich and Aligarh.

Punjab.—The condition of the standing crops was average to fair.

North-West Frontier Province.—The crops were generally flourishing but were backward.

Burma.—Harvesting of miscellaneous island crops was progressing. Floods had damaged paddy crops in the riverain area in the Pakokku township.

Central Provinces.—Rust, hail and frost had occasioned some damage in Jubbulpore, Mandla, and Balaghat, but it was not widespread. Scarcity of fodder was reported from parts of Chhindwara, Nagpur, Amraoti and Buldana.

Assam.—More rain was wanted for tea in Kamrup, while sowing operations were retarded in Sylhet by heavy rains. Prospects of tea and the outturn of sugarcane and mustard were generally fair.

Mysore.—The standing crops were in fair condition in all parts except Bangalore and Kolar. The prospects of the season were fair in the Bangalore and Shimoga districts, but indifferent in other parts.

Hyderabad.—Late rice sowings were limited, but were in fair condition. Water and fodder scarcity was felt in parts.

Rajputana.—The standing crops which were seriously damaged by frost in Ajmer-Merwara, had revived to some extent.

Central India.—The standing crops were good in Bhopawar, bad in Gwalior and in parts of Indore, indifferent to fair elsewhere. Agricultural stock and pasturage were generally good.

Kashmir Jummoo.—The condition of the standing crops was fair.

Nepal.—The standing crops were in good condition.

W. L. DALLAS.

Table I.—Abstract of Observations taken at 8 A.M. at 232 Stations in India, Burma, etc., in March, 1905.

Ta

Abstract of Observations taken at 8 A.M. at 232 Sta

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	I.—Burma Coast and Bay Islands.			+·024								90·8	−1·4	73·1	+0·7	82·0	−0·3	17·8				
1	Car Nicobar .	25	29·933		29·885	30·046	6th	29·864	24th	·182	82·3	89·1		76·7		82·9		12·4	90·7	26th	70·0	2nd
	Port Blair . .	61	29·939	+·038	29·931	30·056	4th	29·867	17th	·189	79·7	90·3	−0·7	76·8	+0·2	83·6	−0·3	13·5	92·5	26th	73·4	1st
	Mergui . .	96	29·896	+·035	29·924	30·012	3rd	29·814	25th& 31st.	·198	80·1	90·7	−0·5	72·7	+0·8	81·7	+0·3	18·0	94·4	6th	69·4	16th
	Tavoy . .	26	29·977	+·030	29·934	30·085	6th	29·895	28th	·190	75·1	92·5	−0·8	69·0P	−1·3P	80·8P	−1·1P	23·5P	98·2	30th	64·6P	22nd
	Moulmein . .	94	29·882	+·022	29·914	29·993	6th	29·784	29th	·209	79·9	93·3	−0·8	73·8	+1·1	83·6	+0·2	19·5	97·0	5th	71·3	22nd
2	Rangoon . .	57	29·921	+·018	29·917	30·040	3rd	29·827	31st	·213	75·5	94·6	−2·0	72·1	+1·0	83·4	−0·5	22·5	97·6	29th	68·8	1st, 26th & 27th
	Bassein . .	27P	29·945	+·023	29·911	30·047	4th	29·859	29th	·188	76·8	93·9	−0·5	71·9	+1·4	82·9	+0·5	22·0	98·2	5th & 6th.	68·9	1st
	Diamond Island.	41	29·941	+·017	29·917	30·051	6th	29·852	31st	·199	79·2	84·0	−1·6	76·2	+1·2	80·1	−0·2	7·8	85·9	6th, 10th & 12th.	73·2	1st
5	Akyab . .	20	29·954	+·009	29·916	30·090	3rd	29·818	31st	·272	73·6	85·6	3·5	69·2	+0·3	77·4	−1·6	16·4	93·9	8th	64·2	7th & 21st.
3	Toungoo . .	183	29·777	+·024	29·804	29·892	4th	29·672	31st	·220	76·2	96·2	−1·6	68·3	−0·2	82·3	−0·9	27·9	99·4	30th	61·1	26th & 27th.
	II.—Burma Inland.			+·028								90·1	−4·9	65·4	+0·3	77·8	−2·3	24·7				
3	Thayetmyo .	121	29·831	+·033	29·896	29·950	4th	29·706	31st	·244	77·4	97·0	−2·8	67·3	+0·8	82·2	−1·0	29·7	102·5	29th & 31st.	61·6	15th
4	Minbu . .	*165*	29·792	+·038	29·904	29·914	4th	29·643	31st	·271	75·5	94·7	−4·6	69·6	+0·3	82·2	−2·2	25·1	100·2	29th,30th & 31st.	65·1	22nd & 26th.
	Yamethin . .	657	29·270	+·014	29·888	29·406	4th	29·132	31st	·274	75·4	94·0	−5·1	69·0	+0·9	81·5	−2·1	25·0	100·3	5th	61·7	26th
	Monywa . .	*280*	29·686		29·904	29·855	4th	29·499	31st	·356	73·2	90·4		63·9		77·2		26·5	98·8	31st	58·8	1st
	Mandalay . .	250	29·681	+·020	29·886	29·849	4th	29·519	31st	·330	74·2	93·0	−4·7	67·9	0	80·5	−2·4	25·1	100·6	31st	59·7	25th
	Myitkyina . .	458	29·476		29·910	29·624	4th	29·330	30th	·294	65·3	79·7		60·6		70·2		19·1	86·7	2nd & 30th.	55·3	15th
	Bhamo . .	*381*	29·570	+·035	29·921	29·732	4th	29·371	31st	·361	65·0	81·9	−7·1	59·8	−0·3	70·8	−3·7	22·1	90·0	30th	54·2	6th
4(a)	Maymyo . .	3,545	26·502		26·449	26·635	4th	26·357	31st	·278	63·8	78·3		54·7		66·5		23·6	83·9	31st	46·6	7th
	Lashio . .	*2,751*	27·174	+·039	27·120	27·296	4th	26·971	31st	·325	62·4	81·0	−5·2	55·2	−0·5	68·2	−2·9	25·8	88·5	31st	48·0	25th
	III.—Assam.			+·004								78·9	−4·7	59·8	−1·6	69·4	−3·2	19·1				
7	Silchar . .	104	29·869	+·012	29·939	30·093	5th	29·672	31st	·421	66·9	80·6	−5·4	62·5	−0·7	71·6	−3·1	18·1	88·5	7th	54·9	6th
9	Sibsagar . .	333	29·609	−·017	29·913	29·824	4th	29·349	31st	·475	62·3	75·0	−4·1	58·5	−1·5	66·8	−2·8	16·5	82·3	4 days	52·9	24th
	Dhubri . .	115	29·816	+·016	29·892	30·037	4th	29·571	31st	·466	66·6	82·0	−4·5	60·8	−2·6	71·4	−3·6	21·2	91·7	31st	53·3	3rd
	Gauhati . .	195	29·748		29·907	29·972	4th	29·479	31st	·493	65·3	82·3		58·5		70·4		23·8	90·0	21st	48·6	4th
	Tezpur . .	252	29·679		29·900	29·899	4th	29·410	31st	·489	63·8	79·5		60·0		69·8		19·5	85·1	4 days	52·5	4th
	Dibrugarh .	353	29·587		29·916	29·801	4th	29·322	31st	·479	61·5	74·0		58·5		66·3		15·5	84·7	29th	53·4	15th
	IV.—Bengal and Orissa.			+·017								84·9	−4·9	65·7	−1·4	75·4	−3·2	19·3				
6	Chittagong .	87	29·878	+·013	29·916	30·063	4th	29·704	31st	·359	72·5	83·2	−3·5	66·7	−0·9	75·0	−2·2	16·5	88·5	6th	60·6	9th
	Noakhali . .	43	29·905		29·896	30·118	4th	29·727	31st	·391	73·0	82·5		66·9		74·7		15·6	87·7	31st	59·0	5th
	Comilla . .	36	29·919		29·903	30·141	4th	29·739	31st	·411	70·7	84·8		67·7†		77·0†		17·1	91·3	31st	59·3	22nd
	Sirajganj . .	49	29·895		29·895	30·138	4th	29·711	31st	·427	68·0	84·3		63·3		73·8		21·0	95·3	31st	55·4	6th
	Narayanganj .	26	29·933	+·032	29·908	30·173	4th	29·745	31st	·428	70·4	84·4	−5·6	66·6	−1·6	75·5	−3·6	17·8	92·1	31st	59·8	8th
	Barisal . .	13	29·944	+·027	29·902	30·164	4th	29·767	31st	·397	73·2	83·9	−5·4	64·8	−4·4	74·4	−4·9	19·1	92·3	31st	58·2	6th
	Mymensingh .	63	29·891	+·022	29·906	30·125	4th	29·708	31st	·417	68·0	82·5	−4·4	63·3	−1·1	72·9	−2·8	19·2	91·2	31st	55·1	4th & 6th.
	Faridpur .	46	29·908		29·905	30·140	4th	29·727	31st	·413	70·1	84·3		64·0		74·1		20·3	93·8	31st	55·5	6th
10	Jessore . .	33	29·907	+·016	29·888	30·141	4th	29·736	31st	·405	71·1	85·4	−7·0	66·1	−2·1	75·8	−4·6	19·3	94·0	31st	59·1	6th & 14th.
	Calcutta . .	21	29·919	+·014	29·886	30·171	4th	29·756	31st	·415	72·5	86·0	−4·8	67·4	−2·1	76·7	−3·5	18·6	95·0	31st	61·4	21st
	Saugor Island .	25	29·900	−·002	29·869	30·130	4th	29·750	31st	·380	75·7	83·9	−3·3	71·4‡	−3·6	77·7‡	−3·5	12·5	87·4	18th, 30th & 31st.	62·5	8th

N.B.—Elevations in italics indicate barometrical determinations.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the ele

† Mean of 18 days.

NOTE 1.—When a query is inserted against any reading or in the returns of any

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42

‡ Mean of 29 days.

India, Burma, etc., in March, 1905.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1904, to 31st March, 1905.	Normal rainfall for period, 1st December to 31st March, 1905.	Departure from normal of period, 1st Dec. 1904, to 31st March, 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	89	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
												81	0	·767	−·007	3·2	+0·3				0·75	0·69	+0·15					I.—Burma Coast and Bay Islands
14	3	5					N 58° E	3·7			3·7	75		·823		7·6		0			0			5·73			0	Car Nicobar‖
15	3	1				9	N 24° E	4·6	4·4	+ 5	5·1	84	+ 1	·852	−·011	4·6	+1·8	1			0·13	0·40	− 0·27	1·76	8·44	− 6·68	0·13	Port Blair.
4	1	5	1				S 84° E	2·7	2·0	+ 35	2·4	81	0	·818	−·017	2·3	−1·1	1	4·70	−3·70	0·78	3·28	− 2·50	2·82	6·30	− 3·48	0·78	Mergui.
							Calm	0·9				86	+ 1	·750	−·021	1·5	−0·9	1	1·60	−0·60	0·29	1·24	− 0·95	1·88	2·16	− 0·28	0·22	Tavoy.
	1	5	5	2	2	1	S 3° E	4·1	3·0	+ 37	4·6	77	− 3	·774	−·012	3·2	+1·3	0	0·60	−0·60	0	0·36	− 0·36	0	1·02	− 1·02	0	Moulmein.
1		1	2		8	1	S 79° W	5·1	5·0	+ 2	4·3	82	− 3	·722	−·014	2·9	+0·9	0	0·50	−0·50	0	0·20	− 0·20	0·04	0·72	− 0·68	0	Rangoon.
1	1		1	6	8	11	N 69° W	6·1	4·9	+ 24		83	− 1	·772	−·006	0·8	−1·2	0	0	0	0	0·01	− 0·01	0·12	0·57	− 0·45	0	Bassein.
2					4	17	N 36° W	11·1	7·9	+ 41		77	+ 1P	·773	+·013	2·6	−0·2	0	0	0	0	0·05	− 0·05	0·05	1·03	− 0·98	0	Diamond Island.
17		4					N 38° E	3·2	3·7	− 14	3·1	86	+ 4	·724	+·022	2·6	+0·2	6	0·60	+5·40	5·76	0·52	+ 5·24	5·87	1·40	+ 4·47	1·47	Akyab.
3		12		2		8	S 88° E	1·0	2·8	− 64	1·0	72	− 2	·660	−·017	3·7	+1·6	1	0·30	+0·70	0·56	0·11	+ 0·45	0·82	0·51	+ 0·31	0·56	Toungoo.
												72	+ 8	·565	+·041	4·4	+3·1				1·25	0·22	+1·24					II.—Burma Inland.
1	1		4	1	14	5	N 75° W	5·3	5·2	+ 2		80	+ 1	·575	+·024	2·3	+1·7	1	0·10	+0·90	0·56	0·03	+ 0·53	0·90	0·24	+ 0·66	0·47	Thayetmyo.
		11	4	1	3	8	S 14° W	5·4			6·4	63	+ 5	·564	+·037	2·5	+2·0	3	0·10	+2·90	0·85	0·04	+0·81	1·46	0·70	+ 0·76	0·46	Minbu.
		9	6	1		1	S 29° E	3·3			3·5	71	+ 12	·625	+·089	4·8	+4·1	2	0·30	+1·70	0·69	0·21	+0·48	1·35	1·16	+ 0·19	0·38	Vamethin.
		2	3	1	2	3	S 48° W	0·9			0·9	70		·579		4·0		4	0·50	+3·50	2·78	0·23	+2·55	3·32	0·39	+ 2·93	0·86	Monywa.
1		1	8	2			S	2·6			2·6	64	+ 10	·532	+·024	5·9	+4·6	5	0·40	+4·60	1·64	0·16	+1·48	2·32	0·55	+1·77	0·73	Mandalay.
6	9	3				1	N 65° E	2·9			3·0	85		·531		6·5		0			0			0·85			0	Myitkyina.
7	3	1			2	1	N 37° E	1·5			1·8	89	+ 10	·551	+·031	5·1	+2·9	6	1·90	+4·10	2·26	0·66	+ 1·60	3·79	2·19	+ 1·60	0·75	Bhamo.
	1	1	11	6	2		S 16° W	3·0				78		·460		4·3		5	0·90	+4·10	2·51	0·34	+ 2·17	3·74	1·15	+ 2·59	1·03	Maymyo.
5	1	2	2	3	1	1	N 51° E	6·0				79	+ 7	·442	+·022	5·2	+0·5	5			2·17	0·58	+ 1·59	4·02	1·92	+ 2·10	0·63	Lashio.
												85	+ 3	·519	−·012	5·7	+1·6				5·49	4·41	+1·08					III.—Assam.
							Calm	0·2	3·3	− 94	0·3	87	+ 5	·584	−·063	6·1	+1·2	16	10·80	+5·20	11·80	8·61	+ 3·19	12·82	12·10	+ 0·72	3·28	Silchar.
12		2					N 55° E	2·6	2·8	− 7	2·4	94	+ 1	·541	−·015	7·4	+1·2	10	9·80	+0·20	6·59	5·11	+ 1·48	8·76	8·97	− 0·21	2·07	Sibsagar.
3	7	7	5	6	1	1	S 39° E	4·7	6·3	− 25	5·5	77	+ 2	·507	−·017	4·9	+2·3	5	2·40	+2·60	1·86	1·88	− 0·02	2·91	2·86	+ 0·05	0·62	Dhubri.
6		1	2	3	1		N 38° E	2·6			2·9	79		·498		4·4		8	5·40	+2·60	2·83	2·82	+ 0·01	3·72	4·43	− 0·71	0·50	Gauhati.
9	8			3			N 72° E	4·8			5·1	84		·490		4·2		6	5·50	+0·50	3·76	2·68	+ 1·08	4·54	4·63	− 0·29	1·57	Tezpur.
8	8	2	2		1		N 63° E	2·5			2·4	90		·492		7·4		11	10·00	+1·00	6·08	5·34	+ 0·74	9·10	10·23	− 1·13	1·94	Dibrugarh.
												81	+ 4	·618	−·012	4·4	+1·8				4·12	1·48	+2·64					IV.—Bengal and Orissa.
9	1	8	5	3			S 75° E	4·9	5·8	− 16	5·3	84	+ 1	·680	−·011	4·3	+1·1	11	2·77	+8·23	16·66	2·74	+ 13·92	17·05	4·87	+12·18	5·25	Chittagong.
1	3	5	12	1		3	S 24° E	3·9	4·6	− 15	4·3	86		·705		4·9		10	3·26	+6·74	9·23	2·75	+ 6·48	11·32	4·57	+ 6·75	3·67	Noakhali.
2	1	5	11	3	1	1	S 9° E	4·7			4·0	87		·665		5·8		6	3·93	+2·07	5·18	2·74	+ 2·44	5·74	4·47	+ 1·27	2·55	Comilla.
	3	4	5	5	2	2	S 6° W	2·8			2·9	92		·636		4·0		6	2·20	+3·80	3·12	1·26	+ 1·86	4·41	2·75	+ 1·66	1·06	Sirajganj.
2	3	3	4	9	2	2	S 23° W	4·4	4·7	− 6	5·2	88	+ 5	·669	−·028	6·4	+2·2	11	3·18	+7·82	6·62	2·75	+ 3·87	7·74	4·57	+ 3·17	2·30	Narayanganj
4	1	6	6	4	1	1	S 34° E	2·8			3·2	88	+ 3	·730	−·024	6·5	+2·6	12	3·03	+8·97	5·03	1·96	+ 3·07	6·94	4·27	+ 2·67	0·81	Barisal.
1	8	8	1	1		4	S 70° E	3·1			2·7	83	+ 2	·577	−·033	7·7	+4·1	8	3·52	+4·48	3·93	2·03	+ 1·90	4·97	3·61	+ 1·36	0·93	Mymensingh.
		4	11	2	2	1	S 4° W	3·5			3·0	86		·642		9·5		7	3·50	+3·50	4·68	2·30	+ 2·38	7·00	4·19	+ 2·81	1·42	Faridpur.
1		4	1	3	1	1	S 5° W	2·6	3·2	− 19	2·6	85	+ 5	·652	−·049	4·7	+0·9	7	3·13	+3·87	2·33	1·93	+ 0·40	5·50	3·73	+ 1·77	0·51	Jessore.
4	3	3	4	8	2	4	S 37° W	5·0	5·5	− 9		86	+ 4	·686	−·020	5·6	+2·7	9	2·00	+7·00	3·48	1·19	+ 2·29	6·04	2·73	+ 3·31	1·07	Calcutta.
3	1	2	9	6		2	S 14° W	12·5	12·3	+ 2		87	+ 4	·771	−·040	6·1	+1·6	9	1·81	+7·19	7·67	1·33	+ 6·34	10·50	2·99	+ 7·51	3·25	Sangor Island.

a for that station are not utilized in calculating the provincial departures from normal.

ved are incomplete

n exceed 3,200 feet.

‖ Wind observations for 28 days.

Tal

Abstract of Observations taken at 8 A.M. at 232 Stati

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
10	Krishnagar	47	29·891		29·888	30·136	4th	29·738	31st	·398	69·6	85·7		65·5		75·6		20·2	96·1	30th & 31st.	58·0	14th
	Midnapore	148	29·785		29·885	30·032	4th	29·638	17th	·394	73·2	87·0†		68·1		77·6†		18·9	94·3	29th, 30th & 31st.	61·7	14th
11	Bankura	238	29·614		29·887	29·868	4th	29·464	21st	·404	71·6	88·1		66·9		77·5		21·2	99·6	31st	61·2	14th
	Raniganj	334	29·608		29·906	29·860	4th	29·457	21st	·403	68·9	85·8		64·4		75·1		21·4	96·5	30th & 31st.	57·6	3rd
	Burdwan	99	29·836	+·014	29·887	30·079	4th	29·685	17th	·394	71·2	87·0	−6·7	66·5	−1·9	76·8	−4·3	20·5	96·9	31st	59·8	3rd
	Naya Dumka	489	29·432		29·895	29·684	4th	29·276	17th	·408	71·0	85·7		63·6		74·6		22·1	97·5	30th	55·5	3rd
	Berhampore	67	29·872	+·025	29·891	30·106	4th	29·705	17th	·401	69·9	85·7	−7·0	64·6	−1·1	75·1	−4·1	21·1	96·8	30th	57·2	3rd
	Rampur Boalia.	70	29·867		29·888	30·092	4th	29·700	31st	·392	69·8	84·5		63·4		74·0		21·1	95·1	30th	54·1	3rd
	Maida	72	29·845		29·871	30·066	4th	29·660	31st	·406	69·1	84·1		63·6		73·9		20·5	96·6	30th	53·1	3rd
	Bogra	61	29·861	+·032	29·876	30·096	4th	29·682	31st	·414	67·3	84·4	−5·8	62·9	−1·0	73·7	−3·4	21·5	96·2	30th & 31st	55·2	3rd
12	Dinajpur	123	29·801	+·023	29·824	30·050	4th	29·591	31st	·459	67·7	84·0	−5·1	60·0	−1·3	72·0	−3·2	24·0	96·3	30th & 31st.	51·9	24th
	Rangpur	123	29·812		29·895	30·024	4th	29·596	31st	·428	65·9	82·7		?		?		?	94·2	31st		
	Jalpaiguri	284	29·641	+·014	29·854	29·856	4th	29·391	31st	·465	65·0	80·5	−4·3	58·6	−1·1	69·6	−2·7	21·9	91·4	31st	50·1	3rd
	Cooch Behar	156	29·769		29·887	29·985	4th	29·523	31st	·462	64·8	80·5		59·8		70·2		20·7	90·4	30th	52·2	3rd
17	Purnea	125	29·797	+·019	29·882	30·045	4th	29·611	31st	·431	65·7	84·2	−5·7	59·6	−0·8	71·9	−3·3	24·6	96·2	30th & 31st.	50·6	24th
14	Balasore	50	29·889	+·007	29·882	30·134	4th	29·730	21st	·404	74·5	88·4	−4·3	68·7	−0·9	78·6	−2·6	19·7	94·4	17th & 31st.	62·7	8th
	False Point	21	29·923	+·007	29·886	30·150	4th	29·768	21st	·382	78·5	84·9	−2·4	72·5	+0·3	78·7	−1·1	12·4	91·5	18th	63·0	5th
	Cuttack	80	29·861	+·009	29·886	30·096	4th	29·720	31st	·376	76·6	93·4	−3·6	73·1	+0·6	83·2	−1·5	20·3	99·4	16th	68·2	8th
	Puri	24	29·918		29·891	30·170	4th	29·784	17th	·386	78·7	85·2		75·6		80·4		9·6	89·2	1st	66·1	1st
	V.—Ganetic Plain and Chota Nagpur.			+·022								84·4	−6·9	60·3	−2·7	72·4	−4·8	24·1				
15	Hazaribagh	2,007	27·892	−·003	29·898	28·144	4th	27·733	21st	·411	66·9	82·1	−6·5	60·6	−3·2	71·4	−4·9	21·5	91·7	27th	53·2	3rd
	Ranchi	2,128	27·781	+·005	29·905	28·022	4th	27·625	21st	·397	67·5	83·0	−4·6	61·2	−2·1	72·1	−3·4	21·8	91·7	30th	56·0	3rd, & 8th.
	Daltonganj	*730*	29·196		29·911	29·469	4th	29·024	21st	·445	66·7	87·5		60·0		73·7		27·5	98·6	29th	51·0	3rd
	Purulia	*816*	29·094		29·931	29·357	4th	28·915	21st	·412	70·3*	87·8*		64·3*		76·0*		23·5	99·6	31st	58·3	3rd
	Chaibassa	*760*	29·154	+·010	29·885	29·419	4th	28·999	21st	·420	70·9	89·1	−5·8	66·5	−0·5	77·8	−3·2	22·6	99·9	30th	61·5	8th & 14th.
18	Gaya	375	29·558	+·019	29·910	29·838	4th	29·387	21st	·451	69·7	86·1	−7·2	63·2	−2·9	74·7	−5·1	22·9	98·0	30th	55·3	3rd
	Dehri	351	29·574		29·891	29·853	4th	29·402	21st	·451	69·9	86·1		64·6		75·4		21·5	97·3	30th	58·1	2nd
	Patna	183	29·731	+·017	29·884	30·018	4th	29·567	21st	·451	68·1	84·2	−6·7	61·7	−2·3	73·0	−4·5	22·5	96·0	30th	55·4	2nd
	Arrah	190	29·762		29·912	30·024	4th	29·598	21st	·426	68·6	85·0		63·6		74·3		21·4	97·4	30th	56·1	8th
	Buxar	230	29·684		29·889	29·959	4th	29·519	21st	·440	67·0	84·4		61·1		72·8		23·3	96·0	30th	54·9	6th
17	Bhagalpur	160	29·767		29·894	30·012	4th	29·599	21st	·413	70·6	84·8		61·9		73·4		22·9	97·7	30th	55·7	3rd
	Darbhanga	166	29·734	+·022	29·880	30·002	4th	29·583	17th & 21st	·419	66·6	83·6	−4·3	59·2	−3·7	71·4	−4·0	24·4	96·6	30th	51·8	5th
	Muzaffarpur	178	29·746		29·887	29·988	4th	29·575	21st	·413	67·5	82·7		58·5		70·6		24·2	95·2	30th	51·3	5th
	Motihari	224	29·691		29·885	29·948	4th	29·525	21st	·423	62·9	83·3		56·1		69·7		27·2	94·4	29th & 30th.	48·2	23rd
	Chapra	181	29·737		29·879	29·996	4th	29·571	21st	·425	67·5	84·9		60·6		72·8		24·3	96·9	30th	55·1	7th
16	Benares	267	29·603	+·025	29·900	29·947	4th	29·478	21st	·469	68·4	84·6	−3·2	58·3	−3·5	71·5	−5·9	26·3	95·6	28th & 30th.	49·1	2nd
	Allahabad	309	29·630	+·025	29·904	29·923	4th	29·448	21st	·475	68·4	85·2	−7·3	60·1	−2·0	72·7	−4·9	25·1	98·1	29th	47·6	2nd
23	Gorakhpur	257	29·651	+·027	29·878	29·919	4th	29·499	21st	·420	67·2	82·4	−8·1	58·6	−3·9	70·5	−6·0	23·8	93·2	29th & 30th.	52·1	5th & 14th.
19	Lucknow	368	29·555	+·026	29·898	29·861	4th	29·396	28th	·465	66·5	83·9	−7·6	57·5	−2·8	70·7	−5·2	26·4	96·3	29th	47·7	2nd
20	Bahraich	401	29·505	+·029	29·886	29·795	4th	29·368	17th	·427	64·1	80·7	−8·3	56·3	−2·5	68·5	−5·4	24·4	88·6	21st	47·5	2nd & 4th
21	Cawnpore	416	29·516	+·038	29·910	29·826	4th	29·347	28th	·479	66·1	83·5	−7·3	57·2	−3·2	70·4	−5·3	26·3	96·3	29th	49·6	2nd
	Mainpuri	516	29·416	+·040	29·915	29·711	4th	29·242	28th	·469	63·5	81·9	−7·8	56·3	−2·4	69·1	−5·1	25·6	94·8	27th	43·2	2nd

† Mean of 30 days. * Mean of 29 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any stati

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42 an

ntinued.

dia, Burma, etc., in March 1905—continued.

Wind Direction. Number of winds from. E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal. (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December 1904 to 31st March 1905.	Normal rainfall for period, 1st December to 31st March.	Departure from normal of period, 1st Dec. 1904 to 31st March 1905.	Heaviest rainfall during month.	Station.
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
	3	2	7	3	5	2	S 21° W	2·9			3·2	85		·670		5·0		8	1·97	+ 6·03	4·55	1·11	+ 3·44	9·45	2·74	+ 6·71	1·12	Krishnagar.
		2	8	3			S 68° E	3·1			2·8	76		·619		4·6		7	2·59	+ 4·41	3·51	1·67	+ 1·84	8·22	3·51	+ 4·71	1·45	Midnapore.
	2	1			3	2	N 4° E	3·3			2·9	70		·536		3·3		5	1·76	+ 3·24	1·34	1·30	+ 0·04	3·83	2·80	+ 1·03	0·34	Bankura.
			1	1		3	N 72° W	2·0				74		·523		2·8		7	1·48	+ 5·52	3·69	0·76	+ 2·93	7·59	2·32	+ 5·27	0·92	Raniganj.
	3	1	1	2	4	2	N 45° W	2·5	3·4	−26	2·5	79	+15	·609	+·056	4·8	+2·0	6	2·16	+ 3·84	6·21	1·34	+ 4·87	10·03	2·66	+ 7·37	3·95	Burdwan.
	1					1	N 13° E	1·4			1·5	62		·451		2·5		4	1·41	+ 2·59	3·49	0·81	+ 2·68	5·87	2·26	+ 3·61	2·16	Naya Dumka
	1	1	4	1	10	2	S 75° W	3·2	3·4	− 6	2·8	77	+5	·568	+·002	4·5	+1·8	4	1·73	+ 2·27	3·15	0·97	+ 2·18	5·34	2·46	+ 2·88	1·80	Berhampore.
				1	2		W	2·8			2·8	77		·564		2·5		4	1·68	+ 2·36	4·14	1·15	+ 2·99	6·14	2·40	+ 3·74	2·80	Rampur Boalia.
		4	7	8	2	3	S 27° W	5·6			5·2	72		·511		1·9		4	1·10	+ 2·90	1·98	0·82	+ 1·16	5·62	2·49	+ 3·13	1·22	Malda.
	2	1	8	4		1	S 5° W	2·4			2·0	81	+7	·543	−·019	2·6	+0·2	5	1·74	+ 3·26	2·93	1·33	+ 1·60	4·69	2·77	1·92	1·07	Bogra.
	4	1	6	6	6	1	S 22° W	3·9			3·7	71	+5	·476	0	4·5	+2·0	6	1·19	+ 4·81	2·03	0·67	+ 1·36	3·44	1·59	+ 1·85	1·22	Dinajpur.
		1		10		1	S 15° W	3·7			3·4	80		·509		3·8		4	1·68	+ 2·32	1·48	1·16	+ 0·32	2·82	2·17	+ 0·65	0·90	Rangpur.
	7	2	1		1		N 67° E	1·5			1·9	80	+5	·495	−·008	3·8	+1·9	4	2·10	+ 1·90	2·81	1·23	+ 1·58	4·23	2·22	+ 2·01	1·14	Jalpaiguri.
	9	3		3	1		E	2·5			2·5	84		·517		4·6		5	2·41	+ 2·59	2·59	1·66	+ 0·93	3·28	2·59	+ 0·69	0·92	Cooch Behar
		2		11	3	6	S 84° W	5·1	3·4	+50	4·5	73	+4	·467	−·005	1·3	−0·1	5	0·83	+ 4·17	1·51	0·44	+ 1·07	3·06	1·57	+ 1·49	0·58	Purnea.
		3	11	1	4		S 73° W	5·6			1·2	79	0	·686	−·024	5·0	+1·4	8	2·87	+ 5·13	4·07	1·82	+ 2·25	6·01	3·47	+ 2·54	1·27	Balasore.
2	2	2	6	9	5	1	S 33° W	9·6	10·9	−12	10·0	85	−1	·826	−·002	6·5	+2·3	4	1·48	+ 2·52	0·91	1·15	− 0·24	3·23	3·25	− 0·02	0·30	False Point.
1	2		4	7	1		S 21° W	4·0	3·5	+14		78	0	·727	+·013	4·5	+1·6	7	1·77	+ 5·23	2·47	1·23	+ 1·24	3·52	2·12	+ 1·40	0·68	Cuttack.
2	1		1	17	1		S 45° W	14·4			14·1	87		·860		3·3		6	1·05	+ 4·95	2·80	0·65	+ 2·15	5·31	2·55	+ 2·76	1·42	Puri.
												65	+12	·436	+·037	3·3	+1·7				1·41	0·51	+0·89				V.—Gangetic Plain and Chota Nagpur.
2	3	3	4	9	2	2	S 23° W	7·9	7·4	+ 7	7·0	51	+10	·335	+·021	5·7	+3·4	7	1·81	+ 5·19	6·47	0·80	+ 5·67	9·26	2·24	+ 7·02	1·63	Hazaribagh.
2	3		5	3	5	8	N 63° W	7·1			8·4	55	+10	·366	+·050	4·0	+2·4	3	2·58	+ 0·42	0·73	1·37	− 0·64	5·20	3·11	+ 2·09	0·79	Ranchi.
1	2	6	1	1	1	1	S 51° E	4·6			3·7	69		·443		3·0		3	1·67	+ 1·33	1·79	0·63	+ 1·16	4·77	2·21	+ 2·56	0·74	Daltonganj.
	2		1	2	11	8	N 73° W	3·0			3·8	63*		·475*		3·2		3	2·17	+ 0·83	1·34	1·01	+ 0·33	6·26	2·65	+ 3·61	0·60	Purulia.
1				5	1	1	S 68° W	2·1			1·3	77	+20	·573	+·112	3·0	+1·1	4	2·19	+ 1·81	2·16	1·05	+ 1·11	7·12	2·55	+ 4·57	0·94	Chaibassa.
2			7	5	4		S 41° W	4·9	3·3	+48	3·9	62	+ 9	·446	+·008	4·0	+1·9	3	1·03	+ 1·97	1·32	0·55	+ 0·77	4·01	1·94	+ 2·10	0·51	Gaya.
	1		9	11	4		S 33° W	4·9			4·4	64		·470		4·7		3	1·00	+ 2·00	0·82	0·53	+ 0·29	2·72	1·96	+ 0·76	0·26	Dehri.
1	3	1	4	10	9	1	S 50° W	5·2	3·4	+53	5·9	64	+11	·438	+·041	3·2	+1·4	5	0·74	+ 4·26	2·84	0·39	+ 2·45	3·31	1·65	+ 1·66	2·04	Patna.
1	1	2	2	7	3		S 32° W	3·1			3·0	62		·426		1·5		4	0·81	+ 3·19	1·76	0·47	+ 1·29	2·26	2·09	+ 0·17	0·94	Arrah.
	6	4	4	13	3		S 11° W	7·7			7·2	59		·389		3·6		4	0·87	+ 3·13	1·65	0·28	+ 1·37	2·84	1·78	+ 1·06	0·87	Buxar.
	2		2	5	7	3	S 80° W	3·9			3·6	62		·490		2·5		3	0·84	+ 2·16	1·56	0·44	+ 1·12	3·99	1·74	+ 2·25	1·15	Bhagalpur.
3	8	1		5	11	1	S 76° W	4·0	4·5	−11	3·5	70	+ 9	·464	+·025	2·9	+1·6	4	0·83	+ 3·17	1·34	0·46	+ 0·88	2·39	1·66	+ 0·73	0·65	Darbhanga.
1	3	1	1	5	5	2	S 72° W	4·1				71		·485		1·8		4	0·97	+ 3·03	1·25	0·43	+ 0·82	2·79	1·76	+ 1·03	0·54	Muzaffarpur
3	4			7	6	2	S 81° W	6·5			6·2	76		·435		2·0		3	0·77	+ 2·23	0·64	0·49	+ 0·15	2·75	1·59	+ 1·16	0·22	Motihari.
	5	1	4	7	4		S 21° W	3·4			3·0	66		·436		3·2		3	0·71	+ 2·29	0·95	0·38	+ 0·57	1·64	1·70	− 0·06	0·49	Chapra.
	1	7		8	4		S 20° W	2·7	4·8	−44	3·1	66	+ 8	·457	+·035	3·4	+1·4	2	0·80	+ 1·20	0·75	0·25	+ 0·50	2·54	1·59	+ 0·95	0·45	Benares.
	3	3	2	5	11	3	S 65° W	4·6	4·6	0	3·8	66	+19	·457	+·088	4·1	+2·1	2	0·60	+ 1·40	0·57	0·26	+ 0·31	2·40	1·73	+ 0·67	0·37	Allahabad.
4	3	1	3	4	7	2	S 74° W	2·4	3·6	−33		62	+ 5	·420	+·008	3·0	+1·4	2	0·70	+ 1·30	0·61	0·33	+ 0·28	3·30	1·72	+ 1·58	0·38	Gorakhpur.
1	2	1		4	12	1	S 90° W	2·4	4·0	−40	2·6	60	+ 7	·388	+·002	3·7	+1·6	2	0·90	+ 1·10	0·78	0·33	+ 0·45	3·36	2·11	+ 1·25	0·65	Lucknow.
	3	1		1	4	4	N 57° W	2·2			2·1	80	+18	·484	+·049	3·6	+1·6	2	1·00	+ 1·00	1·17	0·57	+ 0·60	5·16	2·84	+ 2·32	0·75	Bahraich.
1	1	1	2	1	3	2	N 75° W	3·7				58	+12	·366	+·011	2·3	+1·0	1	0·70	+ 0·30	0·16	0·26	− 0·10	3·06	1·59	+ 1·47	0·14	Cawnpore.
2	2	2	1	5	6	9	N 67° W	6·2			6·3	65	+14	·378	+·026	3·6	+1·1	2	0·50	+ 1·50	0·33	0·04	+ 0·29	4·62	2·07	+ 2·55	0·13	Mainpuri

ata for that station are not utilized in calculating the provincial departures from normal.
rived are incomplete.

Tab

Abstract of Observations taken at 8 A.M. at 232 Station

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Upper Sub-Himalayas.			+·015								74·3	−9·9	52·8	−3·8	63·6	−6·9	21·5					45·8
24	Bareilly	568	29·337	+·023	29·899	29·638	4th	29·199	28th	·439	60·8	78·1	−9·4	54·8	−4·2	66·5	−6·8	23·3	90·4	29th	43·6	2nd	46·8
	Dehra Dun	2,233	27·654	+·003	29·927	27·932	4th	27·538	17th	·394	57·0	70·9	−8·8	50·2	−4·8	60·6	−6·8	20·7	81·0	28th & 28th.	41·0	2nd	40·0
	Roorkee	899	28·999	+·021	29·915	29·296	4th	28·863	28th	·433	58·4	75·9†	−9·5†	51·9	−4·2	63·9†	−6·9	24·0	86·9	28th	41·0	2nd	45·9
22	Meerut	738	29·166	+·016	29·909	29·481	4th	29·000	28th	·481	59·4	78·0	−8·6	53·6	−4·1	65·8	−6·4	24·4	90·6	28th	39·7	1st	50·9
26	Delhi	718	29·198	+·018	29·916	29·509	4th	29·012	29th	·497	61·6	76·7	−10·7	57·2	−5·0	67·0	−7·9	19·5	90·2	27th	45·9	1st	44·3
28	Lahore	702	29·206	+·009	29·921	29·577	4th	28·912	29th	·665	57·4	74·0	−11·1	53·1	−1·1	63·6	−6·1	20·9	88·4	26th	42·1	2nd	46·3
27	Sirsa	662	29·265	+·025	29·931	29·613	4th	29·047	29th	·566	60·3	77·7	−10·9	54·1	−3·1	65·9	−7·0	23·6	92·3	26th	40·0	1st	52·3
	Patiala	*818*	29·085		29·913	29·340	4th	28·889	29th	·451	59·9	73·5		53·6		63·6		19·9	86·4	26th	42·2	4th	44·2
29	Ludhiana	812	29·094	+·019	29·917	29·438	4th	28·872	29th	·566	58·3	73·1	−11·3	53·6	−3·9	63·4	−7·6	19·5	86·1	29th	42·1	1st	44·0
	Sialkot	830	29·073	+·012	29·924	29·445	4th	28·799	29th	·646	56·9	72·6	−9·1	53·3	−2·3	63·0	−5·7	19·3	86·6	26th	43·3	1st	43·3
	Ambala	892	29·004	+·023	29·913	29·331	4th	28·830	29th	·501	58·3	74·2	−9·7	52·6	−4·5	63·4	−7·1	21·6	88·5	26th	41·8	1st	46·7
	Rawalpindi	1,674	28·222	−·005	29·967	28·593	4th	27·899	29th	·694	52·5	66·9	−9·6	45·8	−4·9	56·4	−7·3	21·1	78·9	26th	34·0	1st	44·9
	VII—Indus Valley and N.-W. Rajputana.			+·012								79·2	−8·0	56·2	−3·4	67·7	−5·7	22·9					50·1
32	Peshawar	1,110	28·834	−·011	29·991	29·219	4th	28·504	29th	·715	53·4	66·7	−9·4	46·8	−5·1	56·8	−7·3	19·9	76·6	24th	33·4	1st	43·2
	D. I. Khan	590	29·365	+·008	29·941	29·758	4th	28·942	29th	·816	57·5	74·2	−9·3	51·0	−4·5	62·6	−6·9	23·2	86·8	25th	36·5	1st	50·3
31	Khushab	612	29·320	P	29·939	29·713	4th	28·941	29th	·772	58·6	73·4	−7·2	52·7	−4·1	63·1	−5·7	20·7	89·4	26th	40·4	1st	49·0
	Montgomery	558	29·363	+·018	29·921	29·733	4th	29·033	29th	·700	60·4	76·2	−9·5	52·7	−3·2	64·5	−6·4	23·5	91·8	26th	38·0	1st	53·8
	Multan§	420	29·505	−·003	29·915	29·889	4th	29·106	29th	·783	60·6	79·4	−7·1	55·5	−2·9	67·5	−5·0	23·9	91·8	26th	40·5	1st	51·3
47	Jacobabad	186	29·756	+·016	29·913	30·117	4th	29·412	28th	·705	61·7	84·3	−6·8	56·6	−3·0	70·5	−4·9	27·7	98·5	25th & 26th.	39·1	1st	59·4
	Hyderabad	96	29·875	+·028	29·929	30·179	4th	29·673	28th	·506	67·8	85·8	−7·3	61·7	−2·5	73·8	−4·9	24·1	96·1	13th	45·0	1st	51·1
	Kurrachee	30	29·955	+·019	29·936	30·217	4th	29·746	28th	·471	69·3	80·1	−6·0	64·9	−1·2	72·5	−3·6	15·2	84·9	22nd	48·2	1st	36·7
51	Bikaner	*771*	29·148	+·016	29·921	29·495	4th	28·925	29th	·570	63·3	80·5	−8·8	58·1	−6·6	69·3	−7·7	22·4	91·2	25th & 26th.	42·1	4th	49·1
	Pachpadra	*380*	29·568	+·013	29·921	29·865	4th	29·413	26th	·452	67·9	86·5	−8·1	57·9	−0·4	72·2	−4·3	28·6	98·9	14th	41·0	1st	57·9
	Jodhpur	782	29·157		29·951	29·458	4th	28·966	29th	·492	66·0	84·1		60·6		72·4		23·5	96·1	14th	46·7	1st	49·4
	VIII.—East Rajputana, Central India and Gujarat.			+·019								85·1	−6·9	61·2	−2·1	73·2	−4·6	23·9					48·4
50	Jaipur	1,431	28·504	+·010	29·948	28·807	4th	28·352	29th	·455	65·4	81·8	−7·9	57·0	−3·8	69·4	−5·9	24·8	94·2	27th	43·0	1st	51·2
	Bharatpur	585	29·352		29·927	29·657	4th	29·191	28th	·466	62·1	80·8		55·6		68·2		25·2	95·1	27th	43·2	2nd	51·9
	Kotah	819?	29·103		29·948	29·401	4th	28·952	28th	·449	68·8	86·4		62·3		74·4		24·1	97·0	26th & 27th.	49·0	1st	48·0
	Sambhar	1,254	28·674	+·015	29·946	28·988	4th	28·510	29th	·478	62·5	81·5	−7·2	55·7	−3·1	68·6	−5·2	25·8	92·4	26th	41·0	1st	51·4
	Ajmer	1,611	28·329	+·001	29·959	28·621	4th	28·167	29th	·454	64·4	81·7	−7·4	58·8	−0·9	70·3	−4·2	22·9	91·4	26th	43·8	1st	47·6
	Udaipur	1,925	28·016		29·947	28·272	5th	27·873	29th	·399	66·4	83·4		59·0		71·2		24·4	93·5	11th	40·2	1st	53·3
46	Bhuj	395	29·585	+·031	29·947	29·799	3rd	29·441	28th	·358	69·0	86·6	−7·3	62·7	−2·7	74·7	−5·0	23·9	96·3	14th	46·9	1st	49·4
	Jamnagar	61	29·931		29·937	30·118	3rd	29·797	28th	·321	69·7	84·3		63·0		73·6		21·3	93·5	14th	46·8	1st	46·7
	Rajkot	429	29·555	+·027	29·950	29·739	3rd	29·450	28th	·289	69·4	88·4	−7·2	60·6	−1·8	74·5	−4·5	27·8	94·4	11th	42·5	30th	51·9
	Veraval	*18*	29·984	+·049	29·944	30·138	3rd	29·889	28th	·249	71·1	79·6	−6·7	65·9	+1·0	72·8	−2·9	13·7	87·1	5th	53·8	2nd	33·3
	Dwarka	37?	29·973		29·957	30·140	3rd	29·384	28th	·306	72·4	78·1		68·4		73·3		9·7	84·9	6th	55·6	2nd	29·3
	Bhavnagar Para	55	29·942	P	29·941	30·116	3rd	29·849	21st	·267	71·6	92·2	P	64·1	−2·7	78·2	P	28·1	100·6	14th	47·0	2nd	53·6
49	Nowgong	757	29·177	+·011	29·921	29·475	4th	29·007	21st	·468	67·0	85·4	−7·0	59·1	−1·7	72·3	−4·4	26·3	95·0	27th	45·5	2nd	49·5
	Indore	1,823	28·123	+·012	29·941	28·319	4th	28·016	21st	·303	69·2	87·3	−5·2	59·3	−1·1	73·3	−3·2	28·0	95·6	15th	47·1	2nd	48·5
	Neemuch	1,630	28·324	+·019	29·965	28·584	4th	28·189	29th	·395	66·2	83·9	−7·5	58·3	−3·2	71·1	−5·4	25·6	94·0	15th	40·3	1st	53·7
45	Surat	39	29·959	+·027	29·944	30·113	1st	29·881	21st	·232	72·8	90·8	−5·8	65·2	−0·8	78·0	−3·3	25·6	98·2	15th	53·1	2nd	45·1

§ Observations for 30 days. * Mean of 30 days. † Mean of 27 days.

N.B.—Elevations in italics indicate barometrical determinations

Note 1.—When a query is inserted against any reading or in the returns of any station

Note 2.—The data from which divisional means of the figure columns Nos. 40, 42 and 44

ntinued.

dia, Burma, etc., in March, 1905—continued.

Wind Direction. Number of winds from. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected	Normal. (uncorrected.)	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December 1904 to 31st March 1905.	Normal rainfall for period, 1st December to 31st March.	Departure from normal of period, 1st Dec. 1904 to 31st March 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
												72	+11	·361	+·005	4·7	+1·9				1·11	0·79	+0·32					VI.—Upper Sutlej Himalayas.
1	3	1		1	6	1	W	2·1	4·3	−51	2·0	79	+21	·428	+·055	3·9	+1·7	2	1·82	+0·18	0·69	0·76	−0·07	5·48	2·88	+ 2·60	0·28	Bareilly.
2	1			1	4	1	N 52° W	1·5*	2·3	−35		66	+ 9	·394	+·076	6·4	+3·8	4	2·60	+1·40	1·94	0·94	+1·00	11·15	6·33	+ 4·82	1·02	Dehra Dun.
3	1	4	1	1		12	N 28° W	3·6	2·9	+24		71	+ 9	·352	0	3·5	+1·1	1	1·90	−0·90	1·20	0·69	+0·51	8·35	4·30	+ 4·05	1·02	Roorkee.
	2		1	3	11	1	S 79° W	1·3	2·7	−52	1·3	64	+ 8	·333	−·014	4·0	+1·7	2	1·40	+0·60	0·23	0·63	−0·40	4·16	3·36	+ 0·80	0·12	Meerut.
	1	3	1	3	6	11	N 67° W	4·9	3·9	+26	4·3	63	+14	·348	+·025	4·6	+1·6	1	1·50	−0·50	0·27	0·50	−0·23	3·41	2·97	+ 0·44	0·18	Delhi.
2	2	3	2	3	2	5	N 72° W	3·2	3·1	+ 3		76	+11	·359	−·015	5·6	+2·2	2	1·70	+0·30	0·43	0·65	−0·22	3·41	3·25	+ 0·16	0·27	Lahore.
4	2	2	5	7	1	3	S 10° W	4·3	3·8	+13	3·7	69	+12	·360	+·006	4·2	+1·0	1	1·10	−0·10	0·67	0·32	+0·35	2·73	1·80	+ 0·93	0·67	Sirsa.
2	2	5	2	1	1	9	N 5° W	6·2			6·3	69		·356		5·5		2			1·06			6·84			0·60	Patiala.
3		4			1	3	N 52° E	1·6	1·8	−11	1·4	73	+10	·356	−·015	3·3	−0·5	2	1·70	+0·30	1·34	0·79	+0·55	6·27	4·71	+ 1·56	0·92	Ludhiana.
3	5	2			1	2	N 45° E	3·1	1·9	+63	2·6	76	+ 9	·355	−·028	3·4	+0·6	6	2·90	+3·10	1·93	1·14	+0·79	10·76	5·97	+ 4·79	0·63	Sialkot.
	1	7		1		19	N 46° W	4·0			3·6	78	+15	·383	−·004	5·6	+3·6	3	1·40	+1·60	1·29	0·37	+0·92	8·91	5·22	+ 3·69	0·64	Ambala.
2	1	1		1		2	N 16° E	4·1	2·6	+58	3·8	78	+ 6	·311	−·028	5·9	+1·8	7	4·20	+2·80	2·21	1·89	+0·32	10·49	7·61	+ 2·88	0·51	Rawalpindi.
												57	+ 4	·329	−·027	3·9	+1·0				0·68	0·51	+0·17					VII.—Indus Valley and N.-W. Rajputana.
2	1	2	1	1	1		S 51° E	1·4	3·7	−62	1·5	73	+ 1	·304	−·055	5·0	+0·2	9	3·90	+5·10	4·89	2·04	+2·85	8·59	5·19	+3·40	1·50	Peshawar.
4					2	6	N 23° W	1·1	2·1	−48	1·2	69	+ 4	·328	−·054	5·2	+2·0	3	2·50	+0·50	0·95	0·89	+0·06	3·09	2·33	+0·76	0.45	D. I. Khan.
11	3	1	2	6	3	1	N 45° E	6·8	6·5	− 4		66	+ 8	·320	−·017	4·4	+1·6	4	1·70	+2·30	1·05	1·13	−0·08	3·93	3·18	+0·75	0·55	Khushab.
5	3	5	5	2	1	4	S 70° E	7·8			7·3	57	+ 5	·290	−·037	3·9	+1·5	1	1·20	−0·20	0·25	0·35	−0·10	2·56	2·28	+0·28	0·21	Montgomery
7		4	1	3		1	N 36° E	2·3	2·1	+10	2·1	61	+ 2	·325	−·044	3·4	+1·6	0	1·20	−1·20	0·10	0·39	−0·29	1·96	1·46	+0·50	0·05	Multan.
4	8	3	1	1	1	5	N 50° E	5·3	3·9	+36	5·5	48	+ 7	·294	+·001	2·3	−0·5	0	0·70	−0·70	0·11	0·15	−0·04	1·51	0·85	+0·66	0·06	Jacobabad.
1			2	10	3	7	N 76° W	8·0	8·3	− 4	7·1	52	+ 3	·365	−·018	3·0	+0·6	0	0·30	−0·30	0	0·16	−0·16	1·60	0·67	+0·93	0	Hyderabad.
6			1	2	11	5	N 54° W	11·9	11·8	+ 1	11·8	68	− 6	·506	−·074	4·2	+1·9	0	0·50	−0·50	0	0·19	−0·19	3·31	1·29	+2·02	0	Kurrachee.
5	8	3	4	3		1	S 75° E	5·6	4·3	+30		50	+10	·298	+·009	4·4	+1·4	0	0·50	−0·50	0·09	0·19	−0·10	1·78	1·01	+0·77	0·06	Bikaner.
6	5	2	4	8	3	1	S 68° E	7·5	4·1	+83	6·5	49	P	·348	−·001	2·0	−0·4	0	0·30	−0·30	0·01	0·11	−0·10	0·26	0·69	−0·43	0·01	Pachpadra.
11	1		1	8	3		N 9° E	6·3			5·7	38		·245		4·6		0	0·20	−0·20	0	0·01	−0·01	0·54	0·50	+0·04	0	Jodhpur.
												60	+9	·418	+·013	4·0	+2·2				0·15	0·12	+0·03					VIII—East Rajputana, Central India and Gujarat.
11	2	1		2	1	2	N 29° E	3·9	5·7	−32		46	P	·285	−·042	5·7	+3·1	1	0·70	+0·30	0·22	0·34	−0·12	1·95	1·30	+0·65	0·11	Jaipur.
	2				6	1	N 68° W	2·4			2·2	73		·407		3·7		1			0·27			3·89			0·13	Bharatpur.
2	2	1		2	5	2	N 38° W	3·7			3·0	40		·275		2·7		0	0·40	−0·40	0·08	0·07	+0·01	0·68	0·76	−0·08	0·05	Kotah.
2	5	1	1	1	1	3	N 39° E	5·5	6·2	−11		55	+10	·306	+·006	4·9	+2·5	1	0·80	+0·20	0·38	0·28	+0·10	1·65	1·20	+0·45	0·28	Sambhar.
5	1	2	1	7	1	1	S 31° W	6·4	3·6	+78	5·6	57	+ 9	·350	+·013	5·2	+3·1	0	0·60	−0·60	0·05	0·16	−0·11	1·55	1·11	+0·44	0·05	Ajmer.
1		1		1	5	1	N 79° W	5·2			4·6	65		·420		3·8		1	0·30	+0·70	0·15			0·25			0·11	Udaipur.
3				3	7	10	N 60° W	12·0	8·3	+45	10·1	72	+15	·525	+·015	4·0	+2·0	0	0·10	−0·10	0	0·06	−0·06	0·16	0·29	−0·13	0	Bhuj.
2	2		1	12	13	1	S 69° W	17·0			20·6	76		·563		4·4		0			0·03			0·03			0·02	Jamnagar.
1	1			1	13	11	N 66° W	9·2	8·1	+14	9·1	66	+ 2	·498	−·016	4·1	+2·0	0	0	0	0	0	0	0	0·17	−0·17	0	Rajkot.
2	1				4	11	N 26° W	11·4	6·6	+73	11·4	70	+ 8	·544	+·032	2·4	+0·6	0	0	0	0	0	0	0	0·10	−0·10	0	Veraval **
3												80		·645		5·0		1			0·11			0·36			0·11	Dwarka.
3			1	6	11	7	N 74° W	12·8																				
3				3	6	17	N 53° W	9·6*			8·7*	53	P	·423	P	3·5	+2·2	0	0·10	−0·10	0	0·08	−0·08	0	0·29	− 0·29	0	Bhavnagar Para.
3	3	2		2	7	4	N 15° W	2·0	2·3	−13	2·0	60	+10	·394	+·034	5·1	+3·6	1	0·70	+0·30	0·24	0·22	+0·02	1·78	1·96	− 0·18	0·21	Nowgong.
3	6	2	1		5	8	N 17° W	6·6	3·7	+78	5·3	44	+ 4	·323	+·003	4·8	+3·5	0	0·10	−0·10	0	0·04	−0·04	0·09	0·55	− 0·46	0	Indore.
5	5	5	2		5	6	3	N 17° W	8·2	9·1	−10	6·9	45	+ 8	·286	−·010	4·1	+2·3	1	0·10	+0·90	0·43	0·04	+0·39	0·47	0·70	− 0·23	0·25	Neemuch.
2	3			3	4		7	N 23° W	5·6	6·5	−14	5·3	65	+ 2	·544	−·012	1·9	+0·7	1	0	+1·00	0·15	0	+0·15	0·47	0·14	+ 0·33	0·15	Surat.

ata for that station are not utilized in calculating the provincial departures from normal.

rived are incomplete.

** Wind observation of 28 days.

Table

Abstract of Observations taken at 8 A.M. at 232 Stations

Number of District.	Station	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
45	Ahmedabad .	163	29·816	+·025	29·932	30·027	4th	29·722	26th	·305	71·5	92·0	−5·0	65·4	−2·4	78·7	−3·7	26·6	102·3	14th	50·2	1st	52·1
	Deesa . .	466	29·501	+·021	29·937	29·724	4th	29·389	21st	·335	70·0	90·7	−5·4	61·1	−2·7	75·9	−4·1	29·6	99·6	14th	42·0	1st	57·6
22	Agra . .	555	29·373	+·010	29·918	29·668	4th	29·211	28th	·457	64·1	80·8	−10·3	58·9	−3·8	69·9	−7·1	21·9	95·5	27th	47·4	2nd & 4th.	48·1
21	Jhansi . .	858	29·088	+·011	29·935	29·388	4th	28·923	20th	·465	68·5	86·4	−6·7	63·1	−3·2	74·8	−5·0	23·3	98·7	27th	52·2	2nd	46·5
	IX.—Deccan.			+·006								93·4	−3·2	65·6	−1·5	79·5	−2·4	27·8					41·8
38	Belgaum. .	2,539	27·422	+·006	29·911	27·560	5th	27·341	21st	·219	72·6	92·2	−1·7	60·5	−3·7	76·4	−2·7	31·7	96·3	12th	53·3	23rd	42·9
	Sholapur .	1,590	28·362	+·012	29·918	28·519	5th	28·260	24th	·259	76·3	97·7	−2·7	67·7	−1·6	82·7	−2·2	30·0	102·2	15th	61·1	31st	41·1
	Poona . .	1,840	28·132	+·013	29·974	28·269	5th	28·061	24th	·208	65·7	93·5	−4·2	60·6	−3·3	77·1	−3·8	32·9	100·0	15th	51·5	2nd & 31st.	48·5
	Bijapur . .	*1,948*	28·018	?	29·914	28·150	5th	27·094	24th	·246	76·3	95·7	−0·7	68·5	−2·1	82·1	−1·4	27·2	100·4	15th	63·2	30th & 31st.	37·2
40	Malegaon .	1,430	28·524	+·004	29·932	28·678	5th	28·433	21st	·245	72·7	93·7	−3·6	62·1	−1·5	77·9	−2·6	31·6	99·4	14th	46·7	2nd	52·7
	Ahmednagar .	2,154	27·823	+·029	29·949	27·955	5th	27·737	21st	·218	72·6	92·9	?	61·7	−0·8	77·3	?	31·2	98·9	15th	52·5	2nd	46·4
41	Akola . .	930	29·009	+·009	29·907	29·196	4th	28·910	21st	·286	74·4	95·6	−3·6	65·1	−0·9	80·4	−2·3	30·5	101·3	15th	54·9	2nd	46·4
	Amraoti .	1,215	28·718	+·011	29·905	28·913	4th	28·610	21st	·303	75·1	95·0	−3·1	67·5	−1·7	81·3	−2·4	27·5	100·3	16th	57·5	31st	42·8
42	Khandwa (a) .	1,044	28·894	+·004	29·921	29·081	5th	28·776	21st	·305	71·7	93·3	−4·3	63·8	−1·1	78·6	−2·7	29·5	99·7	26th	52·6	1st	47·1
	Hoshangabad.	1,006	28·941	+·009	29·935	29·167	4th	28·799	21st	·368	70·5	91·8	−3·9	63·6	−1·0	77·7	−2·5	28·2	98·6	26th	54·3	31st	44·5
	Nagpur . .	1,025	28·906	+·010	29·905	29·118	4th	28·784	21st	·334	75·3	95·5	−2·8	66·4	−1·4	81·0	−2·1	29·1	102·6	16th	58·2	2nd	44·4
43	Chanda . .	*634*	29·319	?	29·907	29·502	4th	29·231	22nd	·271	76·9	97·1	−2·6	66·5	−0·5	81·8	−1·6	30·6	102·2	15th, 16th & 17th.	57·6	2nd	44·6
	Seoni . .	2,033	27·899	−·003	29·913	28·118	4th	27·756	21st	·362	71·0	90·5	−2·7	61·8	−1·7	76·2	−2·2	28·7	97·8	16th	53·5	2nd & 3rd.	44·3
	Jubbulpore .	1,327	28·590	−·005	29·911	28·844	4th	28·432	21st	·412	68·8	88·7	−4·1	59·9	−0·9	74·3	−2·5	28·8	96·5	16th	52·3	31st	44·2
	Saugor .	1,807	28·112	−·006	29·917	28·366	4th	27·949	21st	·417	68·3	86·2	−5·9	61·4	−3·1	73·8	−4·5	24·8	91·4	26th & 27th.	50·6	2nd	43·8
49	Sutna . .	1,040	28·685	+·009	29·921	29·166	4th	28·705	21st	·461	68·2	84·5	−6·8	60·3	−0·9	72·4	−3·9	24·2	95·5	28th	48·8	2nd	46·7
44	Raipur . .	970	28·945	−·005	29·883	29·183	4th	28·797	21st	·386	73·9	91·9	−4·6	67·1	−1·5	79·5	−3·1	24·8	98·7	16th	61·4	3rd	37·3
	Pendra . .	2,123?	27·884?		29·907?	28·133	4th	27·717	21st	·416	68·5	86·8		60·6		73·8		26·2	93·8	16th	51·6	2nd	42·2
	Sambalpur .	486	29·432	−·010	29·876	29·684	4th	29·271	21st	·413	75·2	92·6	−4·1	69·6	?	81·1	?	23·0	99·1	30th	66·6	7th, 14th 15th, 24th & 31st.	32·5
39	Aurangabad .	1,905	28·044		29·911	28·195	5th	27·958	21st	·237	74·5	91·9		63·9		77·9		28·0	97·9	15th	53·2	1st & 2nd.	44·7
	Indur . .	1,260	28·691		29·909	28·768	1st, 4th & 12th.	28·597	25th & 27th.	·171	79·9	98·1		69·6		83·9		28·5	101·8	16th, 27th & 30th.	60·1	24th	41·7
	Bidar . .	*2,165*	27·802		29·911	27·963	4th & 5th.	27·667	12th	·296	78·4	92·7		70·5		81·6		22·2	97·7	15th	64·0	31st	33·7
53	Gulbarga .	1,503	28·428	−·001	29·889	28·612	5th	28·317	24th	·295	77·9	98·2	−1·0	69·8	−1·0	84·0	−1·0	28·4	101·9	14th	64·3	2nd	36·6
	Raichur . .	1,326?	28·610	+·020	29·898	28·764	5th	28·524	21st	·240	79·1	97·9	−0·9	72·6	−1·4	85·3	−1·2	25·3	101·6	14th	67·6	31st	34·0
	Hyderabad (Deccan).	1,690	28·246	+·008	29·900	28·427	5th	28·145	21st	·282	76·2	96·1	−1·8	70·5	+0·9	83·3	−0·5	25·6	99·4	13th & 15th.	65·2	7th	34·2
	Hanumkonda .	871	29·061		29·886	29·262	4th	28·934	21st	·328	78·7	96·8		73·5		85·2		23·3	99·8	17th, 28th & 29th.	67·3	7th & 31st.	32·5
	X.—West Coast.			+·029								86·1	−1·8	73·0	−2·1	79·6	−2·0	13·1					20·6
37	Bombay .	37	29·957	+·026	29·934	30·087	1st	29·875	16th	·212	73·9	82·7	−3·0	70·5	−2·9	76·5	−3·0	12·2	86·5	16th	62·0	2nd	24·5
	Ratnagiri .	110	29·879	+·039	29·932	29·996	1st	29·784	16th	·212	74·7	84·1	−3·7	68·9	−3·5	76·6	−3·6	15·2	89·3	7th	62·1	2nd	27·2
	Mormugao .	*60*	29·932	+·043	29·927	30·057	5th	29·841	16th	·216	77·1	84·0	−2·9	72·3	−3·2	78·2	−3·1	11·7	86·5	4 days	69·4	2nd, 3rd & 4th.	17·1
	Goa . .	199	29·786	?	29·928	29·919	5th	29·694	21st	·225	76·9	83·2	−4·1	74·2*	?	78·7*	?	9·0	85·5	20th	70·0	22nd	15·5
	Karwar . .	44	29·949	+·034	29·927	30·082	5th	29·856	21st	·226	72·6	85·0	−2·8	68·9	−4·1	77·0	−3·5	16·1	89·3	6th	64·5	23rd	24·8
33	Cochin . .	10	29·967	+·016	29·905	30·074	3rd	29·884	21st	·190	81·4	91·3	+0·1	77·2	+0·2	84·3	+0·2	14·1	92·3	6 days	73·7	6th	18·6
	Calicut . .	27	29·956	+·021	29·912	30·066	3rd	29·854	21st	·212	80·0	89·3	−1·0	74·8	−1·3	82·1	−1·2	14·5	90·8	5 days	69·7	23rd	21·1
	Mangalore .	65	29·924	+·023	29·921	30·034	5th	29·824	21st	·210	80·0	87·0	−2·4	73·6	−2·4	80·3	−2·4	13·4	90·2	17th	69·5	24th	20·7
	Trivandrum .	198	29·775	?	29·905	29·878	5th	29·700	16th	·178	80·0	88·2	+1·1	76·7	0	82·4	+0·6	11·5	89·5	7th & 30th.	74·0	7th & 13th.	15·5

(a) Thermometers were removed to the temporary grass hut after 4 P. M. of 16th October, 1904. * Mean of 30 days.

N. B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of an

NOTE 2.—The data from which divisional means of the figure columns Nos. 4

-continued.

India, Burma, etc., in March, 1905—continued.

Wind direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904, to 31st March 1905.	Normal rainfall for period, 1st December to 31st March.	Departure from normal of period, 1st Dec. 1904, to 31st March 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
6	4				3	4	10	N 37° W	3·1			5·1	53	+10	·416	+·040	4·2	+2·2	0	0	0	0·06	0·06	0	0·06	0·30	− 0·24	0·05	Ahmedabad.
3	4	4		1	6	9	4	N 70° W	8·7	8·9	− 2		49	+12	·370	+·058	3·9	+1·8	0	0·18	−0·18	0·07	0·05	+0·02	0·09	0·33	−0·24	0·04	Deesa.
1	6		2	1	10		8	N 79° W	4·3	4·5	− 4	5·1	60	+12	·356	+·014	4·6	+2·4	2	0·80	+1·20	0·51	0·26	+ 0·25	3·78	1·37	+ 2·41	0·26	Agra.
4	3	1	4	2	4	2	4	N 52° W	4·5	3·4	+32	5·5	62	+24	·424	?	2·3	+1·0	2	0·50	+1·50	0·24	0·26	− 0·02	2·08	1·53	+ 0·55	0·12	Jhansi.
													49	+ 3	·414	+·002	2·2	+0·8				0·31	0·43	−0·14					IX.—Deccan.
2	1	1	1	1		2	4	N 33° W	7·7	11·6	−34		45	− 3	·259	−·037	1·5	+0·6	1	0·90	+0·10	0·17	0·43	− 0·26	0·17	0·62	− 0·45	0·17	Belgaum
2	3	2	5		2		17	N 27° W	8·9	7·4	+20	10·7	32†	− 3	·291†	−·056	1·4	+0·1	0	0·60	−0·60	0	0·26	− 0·26	0·20	0·79	− 0·59	0	Sholapur.
3			1	1	5	5	16	N 65° W	10·5	8·3	+27		48	+ 7	·303	P	3·2	+2·0	0	0·30	−0·30	0	0·04	− 0·04	0	0·33	− 0·33	0	Poona.
1		2	1	2		3	12	N 27° W	6·8			6·7	47	− 8P	·425	−·108P	0·2	−0·9	0	0·70	−0·70	0	0·49	− 0·49	0	0·59	− 0·59	0	Bijapur.
1						11	13	N 63° W	7·5	6·9	+17	8·6	39	−14P	·326	P	2·1	+0·4	0	0·10	−0·10	0	0·04	− 0·04	0·01	0·44	− 0·43	0	Malegaon.
4		1			1	2	20	N 42° W	7·8			9·5	54	− 2P	·444	−·067P	1·6	+0·5	0	0·30	−0·30	0	0·32	− 0·32	0	1·23	− 1·23	0	Ahmednagar.
	1	2				8	9	N 59° W	6·6	4·4	+50	5·8	38	+ 3	·328	+·020	2·8	+1·1	0	0·90	−0·90	0·03	0·43	− 0·40	0·15	1·68	− 1·53	0·03	Akola.
2	3	7	1	5	8	3	2	S 2° W	7·9	4·0	+98	7·1	32	− 7	281	−·087	2·6	+1·2	0	0·80	−0·80	0	0·32	− 0·32	0·21	1·45	− 1·24	0	Amraoti.
3	3	1	1	1		6	10	N 41° W	5·8	4·6	+28	5·6	57?	+22?	·428	P	1·9	+0·3	0	0·30	−0·30	0	0·12	− 0·12	0·06	0·86	− 0·80	0	Khandwa.
	13		2	1	12	1	2	S 45° W	5·6	2·6	+115	5·7	47	+ 1?	·358	+·020	2·4	+0·7	0	0·40	−0·40	0·04	0·18	− 0·14	0·34	1·24	− 0·90	0·04	Hoshangabad.
6	7	6		4		1	6	N 27° E	7·4	5·5	+35	5·8	44	+ 3	·389	+·010	3·1	+1·2	1	1·10	−0·10	0·16	0·48	− 0·32	1·18	1·77	− 0·59	0·11	Nagpur.
		1		1		1	2	N 72° W	0·8	3·2	−75	0·7	45	− 2	·416	−·018	2·0	+0·5	2	1·40	+0·60	1·78	1·19	+ 0·59	1·95	2·32	− 0·37	0·93	Chanda.
7	6	3	1	2	4	3	4	N 5° W	6·4	3·4	+88	5·4	44	− 3	·333	−·049	2·0	+0·1	1	1·70	−0·70	0·23	0·59	− 0·36	1·10	2·52	− 1·42	0·16	Seoni.
3	5	2	6	7	3	3	1	S 33° E	3·8	3·0	+27	3·3	52	+ 4	·366	+·009	2·5	+0·7	2	1·20	+0·80	0·26	0·43	− 0·17	1·32	2·04	− 0·72	0·15	Jubbulpore.
2	6	5	5		6	6	1	S 65° E	8·9	3·2	+178	7·9	44	+ 5	·309	+·002	2·5	+1·0	1	0·60	+0·40	0·14	0·29	− 0·15	1·20	2·04	− 0·84	0·14	Saugor.
2		5	3	1	2	6	5	N 76° W	3·1	5·5	−44	2·9	51	+11	·342	+·038	5·9	+4·6	3	1·00	+2·00	0·97	0·43	+ 0·54	4·50	2·42	+ 2·07	0·45	Sutna.
2	9	1			6	1	5	N 11° W	4·3	4·7	− 9	5·2	56	+14	·466	+·097	3·7	+1·5	2	1·80	+0·20	0·80	0·65	+ 0·15	2·22	1·45	+ 1·77	0·42	Raipur.
8	1	1		4	1	1	4	N 24° W	5·2			4·4	50		·342		2·8		2			0·75			2·72			0·30	Pendra.
	10	6	6		8	1		S 75° E	4·6	2·0	+130	4·5	67	+12	·594	+·112	2·8	+1·0	4	1·80	+2·20	1·50	1·07	+ 0·43	5·04	2·10	+ 2·94	0·57	Sambalpur.
3	1	5				9	1	N 42° W	9·7			9·6	33		·293		1·7		0	0·50	−0·50	0	0·14	− 0·14	0·31	0·98	− 0·67	0	Aurangabad
	1				3		15	N 53° W	5·0			4·2	69		·710		1·6		0	0·80	−0·80	0	0·48	− 0·48	0·30	0·99	− 0·69	0	Indur.
0	5	1	1	2	5	4	3	N 24° W	7·0			5·9	46		·445		2·2		0	1·40	−1·40	0·05	0·50	− 0·45	1·45	1·22	+ 0·23	0·05	Bidar.
6	10	2	3	2	2	2	3	N 31° E	8·6			7·5	57	P	·549	P	0·1	−0·9	1	0·80	+0·20	0·13	0·52	− 0·39	0·25	0·88	− 0·63	0·13	Gulbarga.
5	1		3	1	2	8	5	N 65° W	7·4			7·0	45	− 4	·455	−·055	1·4	0	1	0·70	+0·30	0·39	0·44	− 0·05	0·45	0·68	− 0·23	0·35	Raichur.
1	1	4	1	2		1	6	N 25° W	3·5			3·4	60	+ 3	·546	+·024	0·9	−0·3	1			0·31	0·58	− 0·27	0·41	0·96	− 0·55	0·19	Hyderabad (Deccan)
1	1	1	21	3			2	S 41° E	10·0			8·8	68		·668		1·9		2	0·70	+1·30	0·45			0·68			0·18	Hanumkonda
													72	− 4	·689	−·082	1·7	−0·3				0·09	0·51	−0·42					X.—West Coast.
1	9	2	1	1			6	N 13° E	10·0	11·5	−13		72	− 3	·612	−·090	2·9	+1·1	0	0	0	0	0·02	− 0·02	0·08	0·20	− 0·12	0	Bombay.
3	6	10	3					N 56° E	12·8	9·9	+29	12·7	65	− 4	·558	−·120	1·1	−0·3	0	0·10	−0·10	0	0·01	− 0·01	0	0·24	− 0·24	0	Ratnagiri.
1	2	4	5	2	1		1	N 37° E	11·6				73	− 6	·688	−·113	1·9	−0·3	0			0	0	0	0	0·05	− 0·05	0	Mormugao.
0	5	14	1		1			N 55° E	9·9				73	− 3	·680	−·085	1·1	−0·9	0			0	0	0	0	0·31	− 0·31	0	Goa.
3	15	5						N 39° E	6·6				76	− 6	·609	−·117	1·0	−0·5	0	0	0	0	0	0	0	0·18	− 0·18	0	Karwar.
1	15	11	1					N 64° E	8·5				73	− 4	·798	−·050	1·6	−0·5	1	2·60	−1·60	0·58	2·15	− 1·57	1·56	5·22	− 3·66	0·58	Cochin.
5	10	7					4	N 37° E	9·7			9·6	74	− 2	·762	−·050	1·7	−0·3	0	0·90	−0·90	0	0·58	− 0·58	0·06	1·89	− 1·83	0	Calicut.
7	7	7		1				N 97° E	5·7	3·4	+68		72	− 6	·746	−·062	1·6	−0·8	0	0·20	−0·20	0	0·07	− 0·07	0	0·60	−0·60	0	Mangalore.
3	6	1				2	11	N 13° W	5·8				72	− 5	·745	−·050	2·6	+0·2	1	2·60	−1·60	0·25	1·78	− 1·53	0·93	5·29	− 4·36	0·25	Trivandrum.

‖ the data for that station are not utilized in calculating the provincial departures from normal.

† Mean of 21 days.

‡ are derived are incomplete.

Tab

Abstract of Observations taken at 8 A.M. at 232 Stati

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	XI.—South India.			+·010								94·4	+0·6	73·1	+1·3	83·7	+1·0	21·3					32
57	Pamban .	37	29·938	+·022	29·901	30·083	5th	29·821	21st	·262	83·9	90·9	+2·1	78·7	+2·6	84·8	+2·4	12·2	92·8	31st	73·2	1st	1
	Tinnevelly .	168	29·808	+·024	29·906	29·970	5th	29·687	21st	·283	83·9	99·6	+3·1	76·5	+0·9	89·1	+2·0	23·1	104·5	31st	71·9	1st	3
	Madura .	447	29·528	+·010	29·912	29·684	4th	29·417	21st	·267	82·4	98·1	+1·4	75·1	+2·3	86·6	+1·9	23·0	102·5	31st	69·1	1st	3
	Periyakulam .	945	29·031		29·920	29·181	5th	28·917	21st	·264	79·4	97·7		70·6		83·5		27·1	101·1	15th	60·5	5th	4
34	Salem . .	940	29·054	0	29·940	29·220	5th	28·939	21st	·281	81·0	99·4	+0·8	74·4	+3·6	86·9	+2·2	25·0	103·2	24th	67·4	1st	3
	Coimbatore .	1,348	28·626	+·004	29·933	28·765	5th	28·513	21st	·252	76·7	96·4	+0·1	70·7	+0·9	83·6	+0·5	25·7	99·4	16th, 17th & 24th.	66·8	6th	3
35	Mercara .	3,781	26·282	+·016	26·215	26·389	5th	26·188	21st	·201	67·0	84·8	+0·2	60·2	−1·6	72·6	−0·7	24·6	88·0	10th & 12th.	56·1	27th	3
36	Chitaldroog .	2,405	27·572	+·016	29·914	27·699	5th	27·490	21st	·209	76·3	93·4	−1·0	69·4	−0·8	81·4	−1·0	24·0	96·7	11th	63·9	25th	3
	Bangalore .	3,021	26·992	+·006	29·937	27·123	5th	26·901	21st	·222	72·6	91·0	+0·3	65·8	+1·1	78·4	+0·7	25·2	94·3	22nd	57·4	5th	3
	Hassan . .	3,091	26·932	+·018	29·944	27·058	5th	26·832	21st	·226	72·3	92·5	+1·5	60·8	−1·4	76·7	+0·1	31·7	95·4	22nd	55·5	23rd	4
	Mysore . .	2,518	27·481	+·018	29·938	27·601	5th	27·388	21st	·213	74·8	94·4	+0·9	67·0	−0·2	80·7	+0·4	27·4	98·4	22nd	62·5	5th	3
56	Negapatam .	31	29·941	+·003	29·901	30·088	5th	29·835	21st	·253	82·9	90·7	+2·0	77·9	+2·4	81·3	+2·2	12·8	98·9	21st	72·0	1st	2
	Cuddalore .	12	29·963	?	29·904	30·125	4th & 5th.	29·847	21st	·278	81·6	93·0	+3·7	74·4	+2·2	83·7	+3·0	18·6	102·2?	12th	66·2	6th	3
	Trichinopoly .	255	29·720	+·001	29·910	29·887	5th	29·601	21st	·286	81·1	99·6	+1·7	75·0	+2·2	87·3	+2·0	24·6	105·2	31st	66·4	1st	3
	Madras . .	22	29·947	−·005	29·899	30·127	4th	29·804	21st	·323	81·7	90·2	+0·2	75·3	+3·1	82·8	+1·7	14·9	95·0	30th & 31st.	69·0	6th	2
	Vellore . .	707	29·252		29·906	29·432	4th	29·122	21st	·310	79·5	93·3		73·6†		83·4†		19·7	99·9	21st	65·7	5th	3
55	Nellore . .	52	29·901	+·015	29·887	30·103	5th	29·753	21st	·350	80·4	96·5	+0·3	75·2	+2·8	85·9	+1·6	21·3	102·8	30th	69·1	6th	3
	Masulipatam .	15	29·954	+·007	29·903	30·167	5th	29·811	21st	·356	82·1	89·9	−1·5	75·1	+2·8	82·5	+0·7	14·8	97·7	31st	67·2	25th	3
54	Cuddapah .	433	29·507	+·010	29·879	29·699	5th	29·400	21st	·299	84·7	102·6	+0·9	77·2	+2·2	89·9	+1·6	25·4	106·2	20th, 21st & 23rd.	67·5	7th	3
	Kurnool .	945	29·006	+·006	29·878	29·189	5th	28·912	21st	·277	80·6	100·0	−0·9	72·0	+0·5	86·0	−0·2	28·0	104·8	14th	61·0	5th	4
	Bellary . .	1,475	28·470	+·010	29·900	28·634	5th	28·389	17th & 21st,	·245	78·0	99·4	−0·9	72·4	+0·3	85·9	−0·3	27·0	104·0	15th	65·2	24th	3
52	Cocanada .	26	29·944	+·010	29·907	30·131	4th	29·807	21st	·321	80·4	90·3	−1·4	74·8	+1·3	82·7	−0·1	15·5	95·6	16th & 20th	67·5	24th	3
	Waltair (Vizag.)	*226*	29·738	+·007	29·908	29·948	4th	29·695	21st	·343	80·0	86·4		74·9		80·7		11·5	88·9	14th & 31st.	67·9	21st	3
	Gopalpur .	72	29·868	+·014	29·882	30·106	4th	29·727	21st	·379	78·7	85·1	−1·5	74·4	+1·2	79·8	−0·2	10·7	86·7	28th & 30th.	70·5	1st & 25th.	
	XII.—Hill Station.																						
48	Pishin . .	...										55·1		36·2		45·7		18·9	73·0	25th	22·2	29th	5
	Quetta . .	5,502	24·619	−·035	24·579	24·819	5th	24·306	29th	·513	41·9	54·1	−10·4	35·0	−5·0	44·6	−7·7	19·0	71·7	26th	14·8	1st	4
	Kalat . .	...									40·4	55·1	−9·5	31·1	−1·2	43·1	−5·4	24·0	68·9	25th	13·0	1st	3
	Chaman . .	4,311	25·677	−·039	25·639	25·908	4th	25·474	29th	·431	47·1	57·6	−9·7	40·3	−3·8	49·0	−6·8	17·3	73·3	25th	20·1	30th	5
30	Leh . .	11,503	19·545	−·147	19·514	19·878	5th	19·370	30th	·508	22·5	37·7	−5·4	16·7	−4·4	27·2	−5·0	21·0	49·1	26th	4·9	2nd	4
	Srinagar . .	5,204	24·858	−·072	24·829	25·202	5th	24·600	29th	·602	37·2	49·7	−5·7	31·2	−2·9	42·0	−4·3	15·5	58·0	24th	29·1	5th	5
	Sonemarg .	*8,764*	21·746		21·714	22·069	5th	21·529	29th	·540	22·3			18·5							−4·4	2nd	
	Astor (Kashmir)	*7,955*	22·446		22·416	22·849	5th	22·179	29th	·670	29·4	43·6		25·1		34·5		18·2	52·5	16th & 27th.	13·0	3rd	
	Minimarg .	*9,359*	21·237		21·205	21·586	5th	21·039	29th	·547	22·6	41·8		12·4		27·2		29·4	55·9	8th	−3·0	2nd & 3rd.	
	Skardu . .	*7,505*	22·782		22·752	23·246	5th	22·524	26th	·722	33·0	43·5		28·5		36·0		15·0	53·0	17th	16·6	3rd	
	Dras . .	*10,059*	20·684		20·652	21·089	5th	20·477	29th	·612	10·4	28·4		1·3		14·9		27·1	36·8	17th & 19th.	−23·9	5th	
	Gilgit . .	4,890	25·101		25·074	25·580	5th	24·872	29th	·708	46·1	56·6	−5·1	40·9	−4·4	48·8	−4·8	15·7	64·2	16th & 24th.	31·1	2nd	
32	Chitral . .	*5,486*	?								37·8	53·8		34·2		44·1		19·6	66·1	24th	28·0	2nd & 28th.	
	Killa Drosh .	4,700?									39·4	54·8		35·5		45·2		19·3	67·9	24th	27·1	2nd	
	Para Chinar .	6,000	24·381		24·348	24·708	4th	24·019	29th	·689	39·1	51·2		33·0		42·1		18·2	58·0	22nd & 23rd.	24·0	2nd	

* Mean of 29 days. † Mean of 30 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading, or in the returns of any st

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42 and

NOTE 3.—The barometric readings are not reduced to sea-level in the cases of hill or p

-continued.

India, Burma, etc., in March, 1905—continued.

Wind Direction. Number of winds from								Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.								Heaviest rainfall during month.	Station.
N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Wind resultant.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1904, to 31st March, 1905.	Normal rainfall for period, 1st December to 31st March.	Departure from normal of period, 1st Dec. 1904, to 31st March, 1905.		
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													71	0	·723	+·013	2·6	+0·4				0·85	0·46	+0·39					XI.—South India.
1	5	3	8	7	3			S 44° E	9·1			9·6	77		·894		2·1		0	0·90	−0·90	0	0·72	− 0·72	10·90	13·09	− 2·19	0	Pamban.
4	7	3	1			7	9	N 18° W	5·1			4·9	62	− 11	·713	− ·052	2·5	+0·2	0	2·30	−2·30	0	1·03	− 1·03	4·17	7·28	− 3·11	0	Tinnevelly.
1	12	9	2				2	N 62° E	5·0	4·1	+22	5·8	74	+ 11	·821	+ ·055	2·3	+0·1	0	1·00	−1·00	0	0·47	− 0·47	2·41	3·09	− 0·68	0	Madura.
2			2	5	1	1	1	S 14° W	2·9			3·2	62		·620		1·6		3	2·30	+0·70	1·21	1·73	− 0·52	1·97	4·89	− 2·92	0·73	Periyakulam.
		16		2	12			S 36° E	6·7	5·5	+22	5·9	67	− 4	·714	+ ·003	2·7	+1·0	1	1·20	−0·20	0·31	0·71	− 0·40	0·56	2·53	− 1·97	0·25	Salem.
	4	8			6	1		S 76° E	5·7	3·3	+73	5·2	82	+ 2	·758	+ ·028	2·1	−0·4	0	1·10	−1·10	0	0·50	− 0·50	0·14	2·25	− 2·11	0	Coimbatore.
1	9					7	14	N 31° W	5·2	3·4	+53	4·8	63	− 5	·434	− ·059	2·1	−0·8	2	2·00	0	0·41	0·81	− 0·40	0·95	1·48	− 0·53	0·29	Mercara.
1		2	3	1	6	12	6	S 83° W	6·2			5·4	53	+ 2	·478	− ·012	0·9	−0·2	0	0·50	−0·50	0·03	0·34	− 0·31	0·20	0·51	− 0·31	0·02	Chitaldroog.
		4	3	4	11	6	2	S 36° W	3·3	3·6	−8	2·9	67	+ 1	·540	− ·003	1·6	0	5	1·00	+4·00	2·23	0·48	+ 1·75	2·37	1·19	+ 1·18	1·03	Bangalore.
	1	3	4	5	5	6	2	S 24° W	3·1			2·8	64	− 3	·505	− ·043	2·9	+0·9	1	0·90	+0·10	0·19	0·38	− 0·19	0·24	0·62	− 0·38	0·19	Hassan.
		2	4	4	10	8	3	S 46° W	7·0			7·6	67	− 1	·572	− ·006	4·1	+2·5	0	1·00	−1·00	0·02	0·23	− 0·21	0·08	0·62	− 0·54	0·02	Mysore.
	6		3	10	7		1	S 3° E	12·2	3·6	+240	10·7	73	− 4	·824	− ·003	4·1	−0·1	2	0·50	+1·50	0·35	0·52	− 0·17	10·59	15·26	− 4·67	0·17	Negapatam.
	1		3	3	1			S 23° E	3·8			4·7	79	− 6	·863	− ·002?	3·4	+0·2	0	0·40	−0·40	0	0·30	− 0·30	6·80	10·00	− 3·20	0	Cuddalore.
	1			1	1	3		N 72° W	2·8	3·8	−26		71	− 2	·738	− ·009	2·1	−0·7	1	0·50	+0·50	0·18	0·41	− 0·23	1·82	4·23	− 2·41	0·18	Trichinopoly.
2		1		22	5		1	S 8° W	8·3	6·4	+30		75	− 3	·817	+ ·007	3·8	+1·3	3	0·80	+2·20	0·85	0·21	+ 0·64	6·42	6·98	− 0·56	0·45	Madras.
3	4	1			2		4	N 2° W	5·0			5·0	74		·739		2·0		2	0·30	+1·70	1·14	0·19	+ 0·95	2·60	3·69	− 1·09	0·66	Vellore.
		1	16	10	1	1	2	S 22° E	7·8				77	− 4	·805	− ·018	1·9	−0·7	1	0·30	+0·70	0·61	0·21	+ 0·40	4·65	2·37	+ 2·28	0·56	Nellore.
		2	11	11	2	1		S 20° E	8·4	6·8	+24	7·4	88	+ 5	·978	+ ·121?	5·3	+2·6	2	0·40	+1·60	4·05	0·12	+ 3·93	7·82	1·19	+ 6·63	2·60	Masulipatam.
	2	3	7	1	7	5	6	S 43° W					58	0	·693	+ ·039	1·6	+0·4	2	0·20	+1·80	0·39	0·04	+ 0·35	0·68	1·41	− 0·73	0·26	Cuddapah.
1		1	3	3	3	1	9	N 89° W	6·4				59	+ 6	·617	+ ·071	1·0	−0·2	1	0·60	+0·40	0·26	0·41	− 0·15	0·32	0·62	− 0·30	0·26	Kurnool.
3			1	2	1	8	10	N 66° W	5·9	4·6	+28	5·2	53	+ 3	·516	− ·013	1·6	+0·2	1	0·50	+0·50	1·04	0·14	+ 0·90	1·20	0·36	+ 0·84	1·03	Bellary.
1	1			2	3	1	2	S 75° W	5·3			4·5	83	+ 8	·854	+ ·103	3·4	+0·9	3	0·70	+2·30	4·20	0·47	+ 3·73	5·34	1·75	+ 3·59	2·82	Cocanada.
			1	2	20	6	1	S 51° W	13·6				76	+ 4	·770	+ ·028	4·4	+1·7	4	0·60	+3·40	1·56	0·32	+ 1·24	5·60	2·45	+ 3·15	0·78	Waltair (Vizag.).
1	1			3	17		5	S 66° W	16·1	11·8	+37	15·8	81	+ 3	·792	+ ·052	1·3	−1·2	4	1·00	+3·00	1·00	0·65	+ 0·35	3·06	2·00	+1·06	0·22	Gopalpur.
																													XII.—Hill Station.
																			7	5·00	+2·00	3·09	1·83	+ 1·26	9·91	8·05	+ 1·86	1·53	Pishin.
		2	6		1	2	1	S 52° E	2·1	4·8	−56	2·2	72	+10	·189	− ·022	4·6	+1·6	7	4·00	+3·00	2·48	1·84	+ 0·64	11·08	6·89	+ 4·19	0·70	Quetta.
		5		17		3		S 16° E					75		·194				7	2·60	+4·40	2·18	0·83	+ 1·35	7·92	3·53	+ 4·39	0·68	Kalat.
		2	6	12	2			S 16° E	7·8			8·6	64	+ 5	·213	− ·046	3·8	+0·1	5	4·70	+0·30	1·76	1·31	+ 0·45	7·18	5·28	+ 1·90	0·64	Chaman.
	8	8	1	5	2	6		S 86° E	2·4				50	0	·062	− ·015	7·9	+1·8	2	1·00	+1·00	0·89	0·22	+ 0·67	1·71	1·07	+ 0·64	0·54	Leh.
	1	2	6	3		4	5	S 17° W	4·2			3·9	89	0	·199	− ·038	7·7	+1·8	13	6·60	+6·40	4·70	3·14	+ 1·56	13·96	10·34	+ 3·62	0·74	Srinagar.
		1	1	3	2	2		S 18° W	2·5			2·3	98		·122		7·4		18			26·70			63·72			6·11	Sonemarg.
				15	3			S 7° W	6·4			5·8	68		·115		7·3		8			5·75			11·73			1·30	Astor (Kashmir).
	4	6	3	1		3		N 85° E	5·3			5·6	84		·106		6·0		18			10·93			27·94			2·70	Minimarg.
	1	1		1	8	8		S 68° W	5·1			5·2	84		·157		7·2		5	2·70	+2·30	1·31	1·20	+ 0·11	3·34	4·77	− 1·43	0·40	Skardu.
	2	1		1		1		N 72° E	1·3			1·0	99		·082		6·1		10	10·80	−0·80	4·63	4·39	+ 0·24	11·11	13·13	− 2·02	1·18	Dras.
	3	2			6	5	1	S 76° W	4·0			3·6	92	− 9	·129	− ·050	7·5	+1·3	4	1·40	+2·60	1·63	0·59	+ 1·04	1·82	1·05	+ 0·77	0·52	Gilgit.
		1		2				S 45° E	2·6			2·3	75		·170		4·3		6			4·68			7·19			2·50	Chitral.
		15		1	1			N 88° E					72		·178		5·0		4			1·07			2·23			0·60	Killa Drosh.
	1	1			1		1	N 4° E	5·4			4·9	68		·163		4·8		9	9·00		5·67	4·76	+ 0·91	13·31	8·11	+ 5·20	1·50	Para Chinar.

[a] for that station are not utilized in calculating the provincial departures from normal.

[] are incomplete.

[s], the elevations of which exceed 3,200 feet.

Tabl

Abstract of Observations taken at 8 A.M. at 232 Statio

Stations in Africa.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
32	Cherat . .	*4,256*	25·671	−·043	25·639	26·007	4th	25·391	29th	·616	44·1	52·6	−8·9	39·6	−8·3	46·1	−8·6	13·0	65·3	24th	28·0	1st	3
29	Murree . .	6,333	23·763	−·084	23·731	23·952	4th	23·504	29th	·448	40·1	46·3	−12·0	32·2	−11·1	39·3	−11·6	14·1	57·2	24th	22·0	1st	35
	Kailang . .	*10,087*	20·831		20·786	21·043	5th	20·656	29th	·387	23·7	35·1*	−6·4	19·7*	−1·9	27·4*	−4·2	15·4	41·6	15th	5·2	2nd	36
	Poo .	...										44·5‡		28·5‡		36·5‡		16·0	58·4	15th	23·0	2nd & 31st,	3
	Simla . .	7,224	23·040	−·065	23·001	23·243	4th	22·935	30th	·308	41·3	47·0	−9·4	36·6	−9·4	41·3	−9·4	10·4	58·3	26th	29·2	1st & 9th.	2
	Sarain . .	...	23·101			23·303	4th & 5th.	22·987	30th	·316	36·7	46·3		29·6		38·0		16·7	55·3	26th	20·7	2nd	3
	Chakrata . .	7,022	23·230	−·063	23·190	23·424	5th	23·141	31st	·283	41·7	51·7	−10·0	36·6	−7·7	44·2	−8·9	15·1	61·5	26th	27·9	9th	3
25	Ranikhet . .	6,069	24·064	−·043	24·023	24·265	4th	23·961	31st	·304	46·6	56·4‡	−8·9‡	42·2‡	−6·9‡	49·3‡	−7·9‡	14·2‡	65·1	26th & 27th.	32·5	9th	3
	Muktesar . .	7,600	22·774		22·732	22·969	5th	22·668	31st	·301	42·1	51·3		36·2		43·8		15·1	62·6	26th	26·9	3rd	3
13	Yatung . . .	10,480										45·5		25·9		35·7		19·6	54·1	6th	17·1	24th	3
	Darjeeling† .	7,376	22·956	−·049	22·911	23·124	4th	22·824	31st	·300	45·8	54·8	−1·7	40·5	−1·8	47·7	−1·8	14·3	65·7	31st	35·0	8th & 22nd.	3
8	Shillong . .	4,900	25·128		25·080	25·316	4th	24·991	18th	·325	56·8	64·6	.	49·9		58·8		17·7	76·1	31st	40·5	6th	3
	Cherra Poonjee .	4,309	25·706		25·657	25·892	4th	25·567	18th	·325	56·9	64·4		52·0		58·2		12·4	69·7	3rd	48·0	6th & 15th	2
50	Mount Abu . .	3,945	26·057	−·035	26·007	26·244	5th	25·916	29th	·328	57·2	69·5	−8·2	55·0	−6·5	62·3	−7·4	14·5	78·1	15th	42·6	1st & 30th.	2
42	Pachmarhi . .	3,528									67·2	81·5	−2·9	59·0	−1·4	70·3	−2·1	22·5	87·1	27th	46·8	2nd	4
34	Wellington . .	6,200	24·303	+·007	24·236	24·400	5th	24·234	21st	·166	63·2	75·5	+1·4	52·1	−0·1	63·8	+0·7	23·4	78·7	19th	43·2	8th	3
	Ootacamund . .	*7,329*	23·097		23·001	23·159	6th	23·049	21st & 22nd.	·110	59·2	68·8		48·8		58·8		20·0	71·0	17th	40·2	7th	2
57	Kodaikanal . .	7,688	22·878			22·954	5th	22·826	21st	·128	57·8	67·8		51·1		57·5		16·7	73·3	14th	45·9	6th	2
	XIII. – Extra India.																						
	Trincomalee . .	12	29·956	+·023	29·894	30·070	4th	29·883	21st	·207	79·5	90·1	+2·1	76·7	+0·7	83·4	+1·4	13·4	96·5	31st	71·0	14th.	2
	Colombo . .	40	29·936	+·010	29·902	30·045	4th	29·852	24th	·193	82·4	89·2	−0·2	76·7	+1·8	83·0	+0·8	12·5	93·5	7th	72 0	5th	2
	Meshed . .	3,104									40·3	48·7		32·1	−5·3	40·9		15·6	65·4	24th	19·0	29th	
	Teheran(b) (c) .	*4,002*	25·900			26·170	28th	25 580	23rd	·590	38·9	55·0	−2·1	?	?	?	?	?	67·5	22nd & 23rd.	?	?	
	Ispahan(b)†† .	*5,817*	24·218‡			24·390	28th	24·000	12th	·390	37·9	54·6‡	−6·5	33·7	−2·5	44·2‡	−4·5	20·9	64·5	10th	23·2	1st	
	Bushire . .	14	29·982	−·005	29·955	30·110	5th	29·759	22nd	·351	61·0	68·6	−3·7	57·0	−1·8	62·8	−2·8	11·6	77·1	22nd	49·3	1st	
	Bahrein† . .	30	30·003			30·111	1st	29·789	21st	·322	66·0	72·1		61·5		67·0		10·9	80·1	7th	54·8	2nd	
	Jask . .	13	29·968	−·020	29·939	30·142	4th	29·859	26th	·283	68·1	75·4	−3·3	64·2	−1·9	69·8	−2·6	11·2	82·3	12th	53·3	1st	
	Muscat†† . .	20	29·983	+·012	29·951	30·148	6th	29·853	12th	·295	71·4	73·6	−3·0	69·4	−2·6	71·5	−2·8	4·2	78·9	24th	62·6	1st	
	Baghdad§ . .	220	29·841	−·107	30·050	30·031	10th	29 386	22nd	645	53·4	67·5	−3·5	46·6	−0·5	57·0	−2·0	20·9	77·0	20th	39·4	4th	
	Busrah . .	...	30·072			30·212	4th	29·773	22nd	·439		71·0							78·2	22nd			
	Aden . . .	94	29·890	−·007	29·917	30·009	11th	29·795	16th	·214	80·0	81·7	−2·7	77·3	+2·1	79·5	−0·4	4·5	86·3	24th	73·9	17th	
	Perim . . .	201	29·748	+·012	29·884	29·800	6th	29·694	22nd	·106	79·7	85·6	+0·3	76·7	+0·9	81·2	+0·6	8·9	88·5	29th	73·4	17th	
	Kabul . . .	...	24·258			24·586	4th	23·996	29th	·590	31·3	49·0	−8·1	26·3	−9·3	37·7	−8·7	22·7	66·2	24th	8·9	2nd	
	Kashgar. . .	4,255	25·542			26·210	5th	25·210	26th	1·000	35·7	54·3	−1·9	31·5	−4·7	42·9	−3·3	22·8	64 2	24th	17·5	2nd	
	Minicoy . .	7	29·994		29·927	30·089	5th	29·915	21st	·174	83·0	87·3	−0·8						89·1	14th			
	Zanzibar** . .	73	29·937	+·032	29·937	29·998	10th	29·866	22nd	·132	81·0	86·4	+0·1	79·0	−0·4	82·7	−0·2	7·4	90·6	10th	74·7	24th	
	Do. Dunga	*154*	29·856		29·938	29·897	6th	29·781	22nd	·116	79·5	90·3		74·3		82·3		16·0	95·7	11th	72·4	29th	
	Penang(a) .	20	29·942		29·887	29·976	4th	29·907	31st	·069	81·0	92·0		73·9		83·0		18·1	94·0	4 days	69·0	7th	
	Singapore(a) .	10	29·968		29·899	30·075	6th	29·916	27th	·159	85·7	91·3		73·5		82·4		17·8	94·2	23rd	68·9	3rd	

§ Observations of 23 days. *Mean of 30 days. (a) 9 hours' observations. (c) 7 hours' observations.
† Observations of 28 days. ‡ Mean of 29 days. (b) Aneroid uncorrected. NOTE.—The barometric readings are not reduced to sea-level in the cases
**Barometric readings are 10 hours' observations. N.B.—Elevations in italics indicate barometrical determinations.
†† Observations of 30 days.

—concluded.

n India, Burma, etc., in March, 1905—concluded.

Wind Direction. Number of winds from									Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.								Station.
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind resultant	Mean daily velocity in miles per hour, instrument errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean corrected velocity (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 31st March 1905.	Normal rainfall for period 1st Dec. to 31st March.	Departure from normal of period, 1st Dec. 1904 to 31st March 1905.	Heaviest rainfall during month.	
	25	27	28	39	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
	11	2	2		3	1	2	7	N 20° W	10·2			9·5	63	+ 7	·178	—·039	5·3	+0·4	8			6·43	3·79	+ 2·64	15·30††	10·17	+ 5·13	1·50	Cherat.
	5			5	4			2	S 62° E	7·3	9·4	−22	7·9	65	+11	·162	—·015	5·7	+0·8	9	4·90	+4·10	5·10	4·05	+ 1·05	26·31	12·70	+13·61	1·32	Murree.
	2			1		5	13	10	N 78° W	0·4				76		·100		7·1		11			6·49	3·58	+ 2·91	10·02	10·60	− 0·58	2·14	Kallang.
			1	3	1	2	1		S 11° E									7·3		11			6·15	4·11	+ 2·04	8·76	12·29	− 3·53	2·13	Poo.
	11	1		5	12				S 48° E	6·8	2·8	+143	6·5	64	+20	·165	+ ·019	5·8	+2·0	9	4·30	+4·70	3·61	2·07	+ 1·54	12·07	9·01	+ 3·06	0·82	Simla.
		1			3	3			S 14° W	1·7			1·6	74		·161		6·7		13			7·51			33·74			1·62	Sarain.
	24	1							N 2° E	6·3	5·9	+ 7	7·6	65	+14	·171	—·005	4·6	+1·8	10	4·50	+5·50	5·78	2·30	+ 3·48	27·04	11·39	+15·65	2·17	Chakrata.
		9	5	2		4	2		N 75° E	2·7	2·6	+ 4	3·1	66	+11	·210	− ·014	4·8	+2·0	5	3·40	+1·60	2·70	1·95	+ 0·75	12·99	7·61	+ 5·38	1·21	Ranikhet.
	1	4	6	5	3		7		S 76° E	10·9			10·0	56		·151		5·7		5			1·59			16·02			0·56	Muktesar.
								2												10	6·83	+3·17	2·59	2·33	+ 0·26	7·19	4·02	+ 3·17	0·55	Yatung.
				2		8	8	2	S 67° W	11·8	6·6	+79	10·9	64	−11	·194	—·057	4·0	+0·3	3	3·35	−0·35	1·11	1·55	− 0·44	2·21	3·50	− 1·29	0·46	Darjeeling.
			1	3	22				S 38° E	6·0			6·8	63		·288		3·2		8	4·40	+3·60	2·49	1·82	+ 0·67	4·15	3·42	+ 0·73	0·73	Shillong.
	1	2	2			12	11		S 72° W	11·8			10·0	74		·347		5·9		9	9·00	0	6·81	13·83	− 7·02	7·77	16·95	− 9·18	1·63	Cherra Poonjee.
	4	3			1	11	6	3	S 88° W	9·2	6·7	+37	9·3	43	+ 8	·229	—·003	4·6	+2·6	0	0·50	−0·50	0·10	0·13	− 0·03	0·10	0·96	− 0·86	0·05	Mount Abu.
	2	1		5	3	9	2	9	S 70° W	7·5	4·6	+63	7·7	39	+ 4	·262	− ·014	2·2	+0·1	0	0·90	−0·90	0·01	0·33	− 0·32	1·57	1·92	− 0·35	0·01	Pachmarhi.
	1	2	1	1					S 61° E	1·9	2·8	−32		69	+11	·409	+ ·068	1·3	−0·2	0	3·00	−3·00	0·35	2·41	− 2·06	8·16	8·67	− 0·51	0·09	Wellington.
		5	7	8	3	3			S 63° E	4·0			3·7	58		·293		3·0		3	1·80	+1·20	0·73	1·60	− 0·27	3·24	3·38	− 0·14	0·34	Ootacamund
	3	4	6	10	5			3	S 74° E	12·4				60		·289		2·2		5	3·20	+1·80	2·34	3·59	− 1·25	7·46	11·81	− 4·35	0·83	Kodaikanal.
																														XIII—Extra India.
		2				13	1		S 48° W	1·4				86	+ 5	·865	—·013	3·2	+0·3	0			0·03	1·45	− 1·42	23·05	24·71	−1·66	0·03	Trincomalee
		5	7	15	1	1	2		S 64° E	6·5	5·0	+30		78	+ 4	·870	+ ·025	3·2	+0·3	2			1·27	4·45	− 3·18	9·98	16·73	−6·75	1·05	Colombo.
														76		·158		5·2		3			1·60	2·43	− 0·83	3·59	4·57	− 0·98	0·85	Meshed.
	9	13		2	1	2			N 23° E	‡† 7·1			‡† 6·1	69		·167		4·8		8			1·31	2·80	− 1·49	6·31	6·28	+0·03	0·29	Teheran.
		1		3			2		S 45° E	2·81			3·61	75	− 1	·177	—·061	4·2	0	7			1·67	0·99	+ 0·68	3·64	1·96	+1·68	0·38	Ispahan.
	3	7	4	8	1		1	3	N 73° E	9·6	8·9	+ 8	10·6	76	+ 6	·408	—·024	4·0	+1·1	6			1·52	1·00	+ 0·52	8·59	9·71	−1·12	0·32	Bushire.
	6	1	1	4	5	2	5	3	S 86° W	12·67			10·8¶	81		·516		1·4		2			0·38			0·93			0·17	Bahrein.
	4	4	9	1		1	1	6	N 35° E	11·9			9·9	72	− 2	·504	—·062	4·9	+2·6	4			1·53	1·15	+0·38	3·21	3·77	−0·56	0·82	Jask.
	3	1		3			2	6	N 21° W	4·1			4·3	70	+ 2	·545	—·031	4·3	+2·1	5			2·21	1·05	+1·16	5·31	3·37	+1·94	0·64	Muscat.
	2	1	1		3		1	1	S	2·2	5·5	−60	2·9	75	+ 5	·311	—·008	5·3	+3·0	7			2·01	1·60	+0·41	3·92	6·79	−2·87	0·61	Baghdad.
	4			2	17			8	S 24° W											0			0			1·88			0	Busrah.
	2	9	8	8	2	2			S 88° E	9·9	14·9	+34	8·0	86	+10	·874	+ ·148	2·9	−2·3	1			0·21	0·87	− 0·66	1·92	1·85	+0·13	0·18	Aden.
			12	10	1		6	2	S 60° E	17·1			17·3	71	− 7	·724	− ·042	4·2	−0·4	3			1·12	0·27	+0·85	2·19	0·95	+1·24	0·72	Perim.
	9	14	3						N 43° E					82		·152		3·9	+0·3	5			3·42	4·90	—1·48	3·74	7·41	−3·67	0·99	Kabul.
				1				2	S 45° W	2·2			2·0	63§		·146§		2·2		2			3·38	0·20	+3·18	3·95	0·78	+3·17	3·08	Kashgar.
	21	8						2	N 8° E	4·1			4·6	69	− 7	·782	—·053	3·2	+0·2	0			0	0·98	−0·98	5·16	8·08	−2·92	0	Minicoy.
	5	4	2	1	8	9	1	1	S 23° W	6·9			6·5	85	+ 2	·898	+ ·001	7·0	+1·5	8			4·94	6·50	−1·56	11·77	14·02	−2·25	1·62	Zanzibar.
	1	7	1		2	8	1		S 47° W	5·1			4·9	87		·882		6·9		11			6·79			12·03			2·27	Dar Dunga
	6	16	2	2	2			1	N 44° E	11·4								0·6		6			3·57			12·28			1·19	Penang.
	2	13	11	2			2	1	N 61° E	6·5								2·8		5			3·35			26·82			1·41	Singapore.

...lateau stations, the elevations of which exceed 3,100 feet.

†† Rainfall of 2 months. ‡‡ Mean of 30 days. § Mean of 16 days. ¶ Mean of 28 days.

TABLE II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Stations in India, Burma, etc., in March, 1905.

Tabl

Abstract of Observations recorded at 10 A.M. and 4 P.M

Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.									Temperature, Wet-bulb.			
		Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours	Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Port Blair . .	61	29·952	29·845	·107	29·898	+·034	29·889	90·4	76·7	13·7	92·5	73·3	19·2	85·6	88·1	82·0	−0·3	73·8	78·9	79·5	77·4
Rangoon . .	57	·929	·783	·146	·855	+·014	·849	94·6	72·3	22·3	97·4	68·6	28·8	85·8	91·2	80·8	−0·4	69·0	73·3	74·2	72·2
Diamond Island .	41	·963	·841	·122	·901	+·014	·877	84·1	76·1	8·0	86·4	73·2	13·2	82·9	83·3	80·3	−0·2	71·6	75·2	75·1	74·0
Cocos Island .	119	·883	·773	·110	·827		·878	88·2	76·3	11·9	91·6	73·5	18·1	84·2	84·5	80·7		72·4	76·2	76·0	74·9
Akyab . .	20	·972	·853	·119	·908	+·007	·871	85·8	69·2	16·6	93·7	64·4	29·3	80·0	82·5	77·7	−1·5		73·2	71·1	
Chittagong . .	87	·898	·792	·106	·836	+·015	·872	83·2	66·8	16·4	88·7	60·6	28·1	78·1	79·3	75·0	−2·2	65·1	71·5	71·6	69·4
Calcutta (Alipore)	21	·940	·814	·126	·871	+·015	·838	86·2	67·4	18·8	94·7	61·4	33·3	78·9	84·1	75·9	−3·4	64·5	71·2	71·8	69·2
Saugor Island .	25	·922	·801	·121	·854	−·005	·823	84·3	71·5*	12·8	89·4	62·3	27·1	79·3	81·3	75·9	−3·2	68·2	73·7	74·3	72·1
False Point . .	21	·940	·818	·122	·871	−·002	·834	85·4	72·6	12·8	97·5	63·0	34·5	82·9	81·7	77·0	−0·8	70·4	75·9	75·9	74·1
Hazaribagh . .	2,007	27·914	27·804	·110	27·853	−·005	·819	82·0	60·8	21·2	91·6	53·2	38·4	73·7	79·5	71·0	−4·8	54·1	59·1	60·4	57·9
Allahabad . .	309	29·649	29·522	·127	29·577	+·029	·843	85·1	60·1	25·0	97·9	47·4	50·5	76·8	83·7	71·8	−5·0	56·2	64·3	69·1	63·2
Dehra Dun . .	2,233	27·679	27·599	·080	27·631	+·003	·878	72·8	50·2	22·1	81·0	41·1	39·9	63·3	67·7	60·9	−6·1	46·8	53·9	55·0	51·9
Roorkee . .	899	29·029	28·938	·091	28·976	+·026	·868	76·2††	52·3	23·9	87·1	41·0	46·1	66·8	73·1	63·2††	−6·5	49·7	56·8	58·0	54·8
Meerut . .	738	·106	29·099	·097	29·140	+·023	·861	78·4	53·6	24·8	90·8	39·9	50·9	68·9	76·2	64·9	−6·2	50·3	57·4	59·2	55·6
Lahore . .	702	·227	·143	·084	·179	+·012	·874	74·4	53·4	21·0	88·4	42·1	46·3	65·6	72·4	63·2	−5·8	49·7	57·5	58·6	55·3
Ludhiana . .	812	·105	·033	·072	·063	+·012	·871	73·5	53·6	19·9	86·1	42·1	44·0	65·9	72·1	62·7	−7·4	50·7	57·5	58·4	55·5
Peshawar . .	1,110	28·856	28·765	·091	28·805	−·006	·943	67·3	46·8	20·5	76·6	33·3	42·3	60·3	65·8	56·4	−6·9	44·2	52·8	54·4	50·5
Jacobabad . .	186	29·777	29·659	·118	29·711	+·026	·862	84·8	56·4	28·4	98·7	38·9	59·8	74·6	82·3	69·7	−4·8	48·9	58·8†	61·8	56·5
Kurrachee . .	30	·975	·873	·102	·917	+·025	·898	80·7	65·2	15·5	86·3	48·2	38·1	75·5	77·3	71·8	−3·2	60·4	64·7	66·3	63·8
Jaipur . .	1,431	28·528	28·414	·114	28·463	+·010	·870	82·1	57·5	24·6	94·2	43·0	51·2	73·2	80·1	69·4	−5·5	49·4	57·9	59·9	55·7
Udaipur . .	1,925	·030	27·914	·116	27·966		·849	83·6	59·1	24·5	93·5	40·2	53·3	75·0	82·1	71·7		54·0	63·9	68·3	62·1
Deesa . .	466	29·514	29·384	·130	29·443	+·021	·863	91·0	61·1	29·9	99·8	41·8	58·0	78·8	88·7	76·4	−3·9	53·0	62·1	63·5	59·5
Jamnagar . .	61	·946	·836	·110	·885		·891	84·6	62·8	21·8	93·4	47·1	46·3	76·4	81·8	72·1		59·1	66·9	67·9	64·6
Belgaum . .	2,539	27·435	27·308	·127	27·369	+·011	·788	92·2	60·5	31·7	96·4	53·9	42·5	82·2	89·1	74·7	−2·8	55·3	61·2	65·2	60·6
Sholapur . .	1,590	28·366	28·209	·157	28·284	+·001	·792	97·7	67·7	30·0	102·0	61·0	41·0	80·6	86·1	81·9	−2·3	54·6	63·9‖	66·3‖	61·6
Akola . .	930	29·027	·867	·160	·942	+·011	·809	95·7	65·0	30·7	101·1	54·9	46·2	85·2	94·5	79·7	−2·2	53·7	64·6	67·2	61·8
Buldana . .	2,132	27·833	27·702	·131	27·760	−·025	·811	89·8	65·8	24·0	95·4	56·0	39·4	79·7	88·0	77·1	−4·1	53·7	64·8	68·6	62·4
Khandwa . .	1,044	28·914	28·765	·149	28·835	+·012	·829	93·3	63·8	29·5	99·7	52·6	47·1	81·9	92·2	78·4	−2·7	55·6	62·0‡	64·6**	60·7
Nagpur . .	1,025	·921	·760	·161	·836	+·010	·807	95·6	66·5	29·1	102·6	58·4	44·2	83·4	93·3	80·4	−2·0	56·8	66·4	69·5	64·2
Do. (Sanitary Commr.'s Office)	1,013	·919	·763	·156	·836		·797	95·9	67·1	28·8	102·9	59·1	43·8	84·4	94·1	80·8		56·7	64·7	67·1	62·8
Hyderabad (Deccan).	1,690	·263	·114	·149	·185	−·010	·789	96·1	70·5	25·6	99·4	66·2	34·2	85·9	94·4	82·6	−0·6	62·4	69·2	70·1	67·2
Bombay . .	37	29·973	29·856	·117	29·911	+·034	·888	82·8	70·4	12·4	86·7	62·0	24·7	77·3	78·7	75·1	−2·9	66·0	69·4	69·8	68·4
Karwar . .	44	·962	·849	·113	·905	+·035	·883	84·9	69·0	15·9	89·3	64·8	24·5	80·9	83·4	75·3	−3·5	66·3	70·5	72·7	69·8
Periyakulam .	945	29·026	28·872	·164	28·964		29·828	97·7	70·6	27·1	101·1	60·5	40·6	87·2	94·8	83·6		66·4	73·2	73·7	71·1
Salem . . .	940	·054	·880	·174	·973	−·010	·835	99·5	74·4	25·1	103·0	67·4	35·6	87·4	96·4	85·6	+2·3	69·6	74·7	77·5	73·9
Chitaldroog . .	2,405	27·580	27·436	·144	27·506	+·009	·792	93·4	69·4	24·0	96·6	63·9	32·7	83·2	91·8	80·4	−0·9	61·0	66·9	68·8	65·6
Bangalore . .	3,021	·007	26·865	·142	26·926	+·004	·805	90·9	65·9	25·0	94·2	57·4	36·8	80·5	88·8	77·4	+0·7	60·8	65·1	65·7	63·9
Hassan . .	3,091	26·944	·811	·133	·878	+·020	·805	92·8	60·8	32·0	96·4	55·5	40·9	82·4	89·0	75·8	+0·2	58·6	64·5	66·3	63·1
Mysore . . .	2,518	27·488	27·335	·153	27·412	+·005	·804	94·4	67·0	27·4	98·2	62·7	35·5	82·7	91·4	79·7	+0·3	63·5	67·0	67·5	66·0
Madras . .	22	29·963	29·827	·140	29·894	−·011	·846	90·4	75·4	15·0	96·9	68·8	28·1	87·1	85·1	82·1	+2·6		76·6	77·2	75·5
Bellary . . .	1,475	28·486	28·322	·162	28·400	−·006	·794	99·3	72·3	27·0	104·0	65·2	38·8	86·0	95·8	85·2	−0·4	59·9	69·8	73·9	67·9
Waltair . .	226	29·753	29·632	·121	29·686	+·013	·853	86·5	74·9	11·6	89·6	67·9	21·7	83·5	83·1	79·1	−0·6	72·0	75·4	75·4	74·3

†† Mean of 27 days. * Mean of 29 days. † Mean of 30 days. ‡ Mean of 25 days. ** Mean of 16 days.

54 Stations in India, Burma, etc., for March, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.
													Total number of 10 hours and 16 hours winds from																
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
																								%	%					
·903	·896	·893	+·001	87	73	67	80	+ 1	4·2	3·6	3·9	+0·8		3	41	8	6		1		3	N 53° E	N 63° E	77	66	123*	101	0·13	0·13	Port Blair.
·653	·621	·668	—·021	84	53	43	65	— 3	1·5	2·4	2·0	0	7	4	3	2	9	16		14	7	S 36° W	S 21° W	23	55	41*	108	0	0	Rangoon.
·774	·763	·773	—·015	79	68	67	75	— 3	2·3	1·5	1·9	−0·6		2		1	4	1	1	8	44	N 52° W	N 42° W	74	85	267*	223	0	0	Diamond Island
·800	·787	·805	+·012	82	68	66	76	— 1	3·0	3·1	3·1	+1·5											N 12° W		72			0	0	Cocos Island.
·736	·745				72	67			3·2	3·1	3·2	+1·0			2	12	12	1	8	2	25	N 43° W	N 51° W	8	21	73*	89	5·76	1·47	Akyab.
·693	·678	·680	—·025	91	72	69	80	+ 4	4·5	4·6	4·6	+1·2	1	5	5	4	7	17	13	4	6	S 12° W	S 36° W	39	21	120*	132	16·66	5·25	Chittagong.
·670	·624	·663	+·020	85	68	54	74	+ 7	5·3	5·3	5·3	+3·1	1	9	5	4	2	8	21	7	5	S 64° W	S 60° W	30	44	119*	118	3·48	1·07	Calcutta (Alipore)
·769	·764	·754	—·062	86*	76	72	81	+ 2	5·5	6·0	5·8	+1·9		7	4	2	7	24	6	3	9	S 13° W	S 25° W	27	60	305	314	7·67	3·25	Saugor Island.
·799	·816	·801	—·011	90	72	76	82	— 1	5·9	5·9	5·9	+2·8		1	3	10	3	24	18	3		S 2° W	S 54° W	58	34	245*	259	0·91	0·30	False Point.
·325	·294	·323	+·038	64	40	30	46	+12	5·1	5·1	5·1	+2·6	1	7	5	1	3	8	4	11	22	N 60° W	N 72° W	42	53	171*	194	6·47	1·63	Hazaribagh.
·443	·525	·470	+·112	79	50	46	61	+19	4·8	5·9	5·4	+3·2	4	4	5	6	4	4	3	10	22	N 47° W	N 63° W	34	41	93*	122	0·57	0·37	Allahabad.
·305	·279	·292	+·001	77	53	43	59	+12	6·0	6·6	6·3	+2·7	11	1	2	4	4	7	17	14	1	S 45° W	N 81° W	42	28	38¶	50	1·94	1·02	Dehra Dun.
·335	·288	·320	—·003	83	52	37	58	+10	3·8	3·8	3·8	+1·2	7		1	1	13	1	3	5	31	N 61° W	N 63° W	34	24	80	72	1·20	1·02	Roorkee.
·325	·285	·316	—·037	79	47	33	54	+ 5	3·5	3·9	3·7	+1·2	16	3	2	4	1	3		20	13	N 67° W	N 63° W	40	42	30*	67	0·23	0·12	Meerut.
·371	·315	·345	−·015	79	60	41	62	+ 3	5·6	4·9	5·3	+1·8	1	12	2	5	3	10	1	16	12	N 62° W	N 12° W	31	31	77	70	0·43	0·27	Lahore.
·372	·315	·349	−·015	83	59	41	63	+10	2·9	3·1	3·0	−1·0	3	1	8		10			20	20	N 57° W	N 46° W	40	25	34*	53	1·34	0·92	Ludhiana.
·312	·287	·299	—·045	81	60	46	64	+ 5	5·2	5·8	5·5	+0·5	22	7	7	7	3		2	7	7	N 3° E	N 12° E	21	16	35*	86	4·89	1·50	Peshawar.
·290†	·286	·292	—·024	56	36†	26	41	+ 3	2·1	2·5	2·3	−0·7	1	5	6	10	5	5	11	2	17	N 40° W	E	10	14	130*	94	0·11	0·06	Jacobabad.
·490	·517	·533	—·093	74	53	53	67	— 4	4·2	3·7	4·0	+1·4		1	7	2	1	2	19	26	4	S 77° W	S 78° W	57	60	285*	274	0	0	Kurrachee.
·302	·270	·282	—·023	55	37	27	43	+ 4	4·7	5·7	5·2	+2·1	3	3	9	4	8	7	12	12	4	S 39° W	N 46° W	19	30	95	108	0·22	0·11	Jaipur.
·473	·532	·446		71	53	48	56		3·9	3·3	3·6		14	2	2	1	2	1	9	22	9	N 88° W		50		113*		0·15	0·11	Udaipur.
·347	·258	·295	+·018	54	35	19	35	+ 2	4·0	3·9	4·0	+1·8		4	4	2	1	2	13	23	13	N 83° W	N 64° W	58	34	225	206	0·07	0·04	Deesa.
·546	·508	·539		79	58	46	66		3·7	3·2	3·5			6	4	1			18	26	2	S 86° W		59		490*		0·03	0·02	Jamnagar †.
·283	·328	·373	−·064	72	26	24	48	— 1	1·4	2·0	1·7	−0·1	5	9	4	1	4	1	15	15	4	N 89° W	N 81° W	35	16	219§	271	0·17	0·17	Belgaum.
·325‖	·278‖	·322	−·036	40	27‖	16‖	31	− 1	1·6	3·1	2·4	+0·1		7	4	3	7	3	9	10	19	N 65° W	N 46° E	34	6	258*	190	0	0	Sholapur.
·343	·306	·302	+·014	43	28	19	31	+ 2	1·7	3·0	2·4	+0·7	3	7	2	4	2		4	13	27	N 51° W	N 39° W	60	42	142*	115	0·03	0·03	Akola.
·442	·473	·390	+·134	42	42	35	40	+14	2·1	3·7	2·9	+0·9		11	1	2		3	5	13	27	N 54° W	N 26° W	66	43	226*	178	0	0	Buldana.
·290	·232	·286	+·002	58	25	24	33	+ 3	1·7	2·4	2·1	+0·3	3	13	5	2	2		2	9	26	N 34° W	N 39° W	63	40	136*	120	0	0	Khandwa.
·444	·429	·403	+·057	53	39	28	41	+ 7	2·6	4·3	3·5	+1·1		7	5	5	4	7	8	14	12	N 78° W	N 6° E	27	12	142*	118	0·16	0·11	Nagpur.
·374	·334	·345		51	32	21	36		3·6	4·5	4·1		3		12		15		15		17	S 80° W		6		69*		0·24	0·10	Do. (Sanitary Commr.'s Office)
·511	·435	·483	+·023	67	41	27	46	+ 2	0·9	2·9	1·9	+0·3	24	4	5	5	3	3	7	6	5	N 74° W	S 48° E	6	28	82*	101	0·31	0·19	Hyderabad (Deccan).
·622	·619	·635	−·102	78	66	62	73	— 2	3·3	2·3	2·8	+1·5		7	3	1		1		13	37	N 46° W	N 36° W	81	46	246	262	0	0	Bombay.
·614	·664	·658	−·121	86	58	58	71	— 6	0·6	0·7	0·7	−0·7		9	1				4	19	29	N 57° W	N 81° W	80	81	162	110	0	0	Karwar.
·680	·549	·593		79	49	34	51		1·8	4·7	3·3		4	6	6	8	12	12	7	6	1	S 32° E		27		76*		1·21	0·73	Periyakulam.
·692	·703	·698	+·045	78	53	41	60	+ 1	1·9	4·2	3·1	+0·5		1	2	23	3	6	24	3		S 16° E	S 69° E	39	39	144*	127	0·31	0·25	Salem.
·460	·421	·450	+·051	61	40	28	45	+ 7	0·7	1·6	1·2	−0·6	5	5	2	7	6	2	6	13	16	N 65° W	N 87° E	27	17	130*	154	0·03	0·02	Chitaldroog.
·448	·367	·440	—·007	75	43	27	50	0	1·1	2·6	1·9		1	5	3	11	12	11	7	6	6	S 26° E	S 36° E	24	46	137*	118	2·23	1·03	Bangalore.
·406	·385	·430	+·017	87	37	28	53	+ 2	2·4	4·2	3·3	−0·2		2	4	11	8	6	14	12	5	S 25° W	S 81° E	24	48	66*	72	0·19	0·19	Hassan.
·473	·383	·476	+·039	82	42	26	52	+ 5	4·4	5·1	4·8	+2·2		4	5	10	14	7	8	9	5	S 24° E	N 88° E	21	37	182*	192	0·02	0·02	Mysore.
·778	·829	·798	—·004		61	69	73	— 5	4·2	2·9	3·6	+1·4			1	6	27	21	6	1		S 25° E	S 44° E	77	81	197	149	0·85	0·45	Madras.
·535	·572	·498	+·070	46	23	34	42	+ 5	1·2	2·8	2·0	−0·6	5	6	3	3	5	5	7	11	17	N 71° W	S 39° E	32	20	125*	110	1·04	1·03	Bellary.
·775	·778	·791	+·045	86	67	69	78	+10	4·4	5·4	4·9	+2·8			1	3	5	34	17	1	1	S 8° W	S 19° W	79	60	148		1·56	0·78	Waltair.

§ Mean of 24 days.
,, 21 ,,
,, 30‡ ,,

† Wind variable 5.

* Corrected.

Tab

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Statio

Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of air.									Temperature, Wet-bulb.			
		Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three pre-
1	2	3	4	5	6 *	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	2
etta . . .	5,502	24·641†	24·571†	·070	24·599	—·028	24·562‡	54·6	35·1	19·5	71·6	14·9	56·7	47·8	51·7	45·2	* —7·4	33·5	40·9	42·9	3
. . .	11,503	19·557	19·472	·085	19·513	—·145	19·481	37·9	17·0	20·9	49·1	5·1	44·0	29·0	34·1	26·3	—4·6	13·7	23·8	28·3	2
nagar . .	5,204	24·883	24·806	·077	24·840	—·064	24·811	51·3	35·7	15·6	58·2	28·9	29·3	41·0	47·0	42·3	—2·8	33·0	39·1	44·0	3
ain . . .		23·122	23·063	·059	23·083			46·5	29·8	16·7	55·3	20·7	34·6	42·5	41·8	38·5			36·6	37·1	
labagh . .																					
nia (Ridge) .	7,224	23·066	23·016	·050	23·034	—·071	22·996	47·3	36·2	11·1	58·3	29·2	29·1	43·1	44·7	42·1	—9·4	33·1	37·1	39·0	3
ikrata . .	7,022	·256	·216	·040	·223	—·058	23·183	52·4	36·8	15·7	63·0	28·1	34·9	46·2	46·7	44·9	—8·4	34·2	39·8	40·9	3
nikhet . .	6,069	24·092	24·023	·069	24·051	—·040	24·010	56·6§	42·0‖	14·6	65·3	32·3	33·0	51·5	52·6	49·6§	—7·9	39·1‖	43·6§	44·4§	4
ktesar . .	7,600	22·807	22·746	·061	22·770		22·728	51·7	36·3	15·4	62·6	26·9	35·7	45·2	48·0	44·3		32·4	37·7	40·0	3
imandu . .	4,388	25·657 **	25·546 **	·111	25·599	—·012¶	25·553 **	72·2 **	44·3 ††	27·9	80·3	36·4	43·9	62·5 **	68·6 **	58·6 **	—2·2¶	42·7 ††	53·1 **	53·2 **	4
jeeling . .	7,376	22·960	22·909	·051	22·932	—·062	22·887	55·2	40·6	14·6	65·8	35·0	30·8	50·0	52·0	48·3	—1·4	36·7	44·3	46·6	4
unt Abu . .	3,945	26·080	26·005	·075	26·034	—·034	25·985	69·9	55·0	14·9	78·1	42·4	35·7	63·5	67·6	62·7	—7·2	45·9	51·0	52·1	4
hmarhi . .	3,528	Not	recorded					81·4	59·1	22·3	87·6	46·8	40·8	71·5	79·1	70·6	—2·1	49·4	55·8	58·5	5
kalda . .	3,642	·388	·284	104	·328	—·035	·273	82·4	61·5	20·9	88·2	50·4	37·8	73·5	80·8	72·2	—4·4	50·6	55·9	58·5	5
dalkanal . .	7,688	22·901	22·828	·073	22·857		22·800	67·6	51·1	16·5	73·3	45·9	27·4	63·7	61·6	57·5		45·4	54·0	55·0	5
acamund. .	*7,322*	23·114	23·044	·070	23·073		23·009	68·9	48·7	20·2	71·0	40·0	31·0	65·2	63·6	59·1		44·9	53·8	54·9	5
dabetta . .	*8,539*	22·102	22·040	·062	22·065		22·002	61·8	48·3	13·5	64·0	41·7	22·3	59·3	58·3	55·3			52·0	53·0	
n . . .	94	29·902	29·772	·130	29·825	—·023	29·851	?	77·3	?	?	74·1	?	82·1	83·9	?	?	?	78·5	73·6	
im . . .	201	·756	·642	·114	·687	0	·822	85·8	76·6	9·2	88·5	73·2	15·3	81·9	83·0	80·0	+0·7	67·4	72·9	73·3	7
licoy. . .	7	30·003	·917	·086	·964		·897	87·3			89·1			85·4	85·6				75·8	75·7	
zibar . .	73	29·935	·821	·114	·882	+·023 ¶	·881	86·5	78·7	7·8	90·6	71·0	16·6		84·8	81·3	—0·2	75·6		78·3	
rt Victoria (Seychelles).	15	·968	·869	·099	·924	+·019	·862	86·3	79·9	6·4	88·4	77·2	11·2	84·1	85·0	82·1	+3·2¶	75·2	77·8	78·1	7
uritius (Pamplemouses).	181				·729	—·048	·855				86·7	64·7	22·0			77·2	—0·1				7

N. B.—Elevations in italics indicate barometric determinations.

† Mean of 23 days. ‡ Mean of 22 days.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

concluded.

India, Burma, etc., for March, 1905—concluded.

Vapour Tension.				Humidity.					Cloud.				* Wind direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.
													Total number of 10 hours and 16 hours winds from																
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
																								%	%					
·193	·194	·188	—·020	37	59	52	67	+11	4·9	5·4	5·2	+1·1	10	5	2	2	11	8	3	14	7	S 56° W	S 78° W	19	30	53*	96	2·48	0·70	Quetta.
·092	·115	·091	—·011	59	56	57	59	+ 1	7·2	8·4	7·8	+1·3		4	8	6	1	19	11	12	1	S 25° W	S 45° W	31	23	55	48	0·90	0·54	Leh.
·221	·258	·205	—·050	86	84	79	83	+ 2	8·0	7·8	7·9	+2·2	10	5	2		7	5	4	6	23	N 62° W	N 24° W	34	16	95*	115	4·70	0·74	Srinagar.
							‡‡																							
·159	·174				60	68			7·1	7·6	7·4		24	4	7	1	1	10	11	3	1	S 29° W		16		37*		7·51	1·62	Sarain.
																														Kalabagh.
·162	·182	·166	—·008	76	59	63	67	+18	7·9	7·7	7·8	+2·8	1	16	2		13	28		1	1	S 25° E	S 33° W	34	4	156*	137	3·61	0·82	Simla (Ridge).
·185	·200	·184	—·005	79	60	64	69	+17	5·0	6·2	5·6	+1·6	11	24	1		2	23			1	N 60° E	S 39° W	3	13	180*	170	5·74	2·17	Chakrata.
·206§	·206§	·206	—·018	79‖	55§	52§	63	+11	5·0	6·5	5·8	+2·2	17	1	8	5	1		8	15	7	N 75° W	S 60° W	24	28	76*	84	2·70	1·21	Ranikhet.
·154	·170	·155		70	51	52	59		6·4	7·3	6·9		3	1		3	6	9	7	31	2	S 62° W		55		252*		1·59	0·56	Muktesar.
·299	·232	·262	—·039	88	53	34	59	— 2	3·0	4·7	3·9	+0·6	6	4	3	12		1	4	25	7	N 69° W	N 82° W	32	47	29	32	0·52	0·37	Katmandu.
**	**			††	**	**			**	**																§§				
·236	·267	·225	—·029	72	67	68	70	— 5	5·9	7·2	6·6	+1·5	1		1		1	2	24	22	3	S 67° W	S 78° W	80	42	241*	180	1·11	0·46	*Darjeeling.*
·237	·219	·218	+·007	48	41	32	40	+ 9	4·1	5·0	4·6	+2·3	1	2	4			3	23	15	14	S 86° W	N 81° W	62	38	223*	173	0·10	0·05	Mount Abu.
·270	·261	·254	+·003	49	34	26	36	+ 2	2·3	3·3	2·8	+0·5		3	2	1	5	3	17	3	28	N 79° W	N 57° W	47	32	183*	120	0·01	0·01	Pachmarhi.
·250	·237	·241	—·031	46	30	22	33	+ 1	3·5	4·6	4·1	+1·8	15	15	2		1	5	5	1	18	N 37° W	N 51° W	45	27	208*	180	0·07	0·07	Chikalda.
·326	·370	·316		66	56	68	63		3·4	6·0	4·7			6	6	10	21	18			1	S 53° E		58		295		2·34	0·33	Kodaikanal.
·301	·344	·304		75	48	59	62		2·9	5·7	4·3		2	4	5	18	18	9	4	1	1	S 61° E		55		92*		0·73	0·34	Ootacamund.
·318	·350				62	72			3·2	5·3	4·3			4	7	9	20	6	3	11	2	S 49° E		29		309		0·71	0·45	Dodabetta.
																										§				
·928	·690	?	?	?	85	59	?	?	2·3	1·2	1·8	—1·4		1	15	15	21	5	4		1	S 74° E	N 87° E	61	72	194*	379	1·97	1·65	Aden.
												¶																		
·691	·692	·676	—·107	60	63	61	64	—13	2·8	0·8	1·8	—0·2	1	1			14	23	14	2	7	S 11° W	N 89° E	60	60	413*	463	1·12	0·72	Perim.
																					5	N 6° E		90		108*		0	0	Mincoy.
·761	·763				62	64			2·8	3·3	3·1			44	12	1														
	·887			86		75				6·1				3	5	1	7	10	4	1		S 26° E	S 44° E	21	13	152*	130	4·94	1·63	Zanzibar.
												¶																		
·871	·876	·881	+·020	80	74	72	79	— 4	5·5	6·0	5·7	—1·0	9	7	6	8	9			4	19	N 4° E	N 21° W	29	38	139	127	3·47	1·85	Port Victoria (Seychelles).
		·793	+·046				85	+ 5		8·2	+1·7											S 70° E	S 78° E			211	250	15·03	2·13	Mauritius (Pamplemousses).

* Corrected.

§ Mean of 29 days.
‖ Mean of 30 days.
¶ Departures from old normals.

** Mean of 27 days.
†† Mean of 28 days.

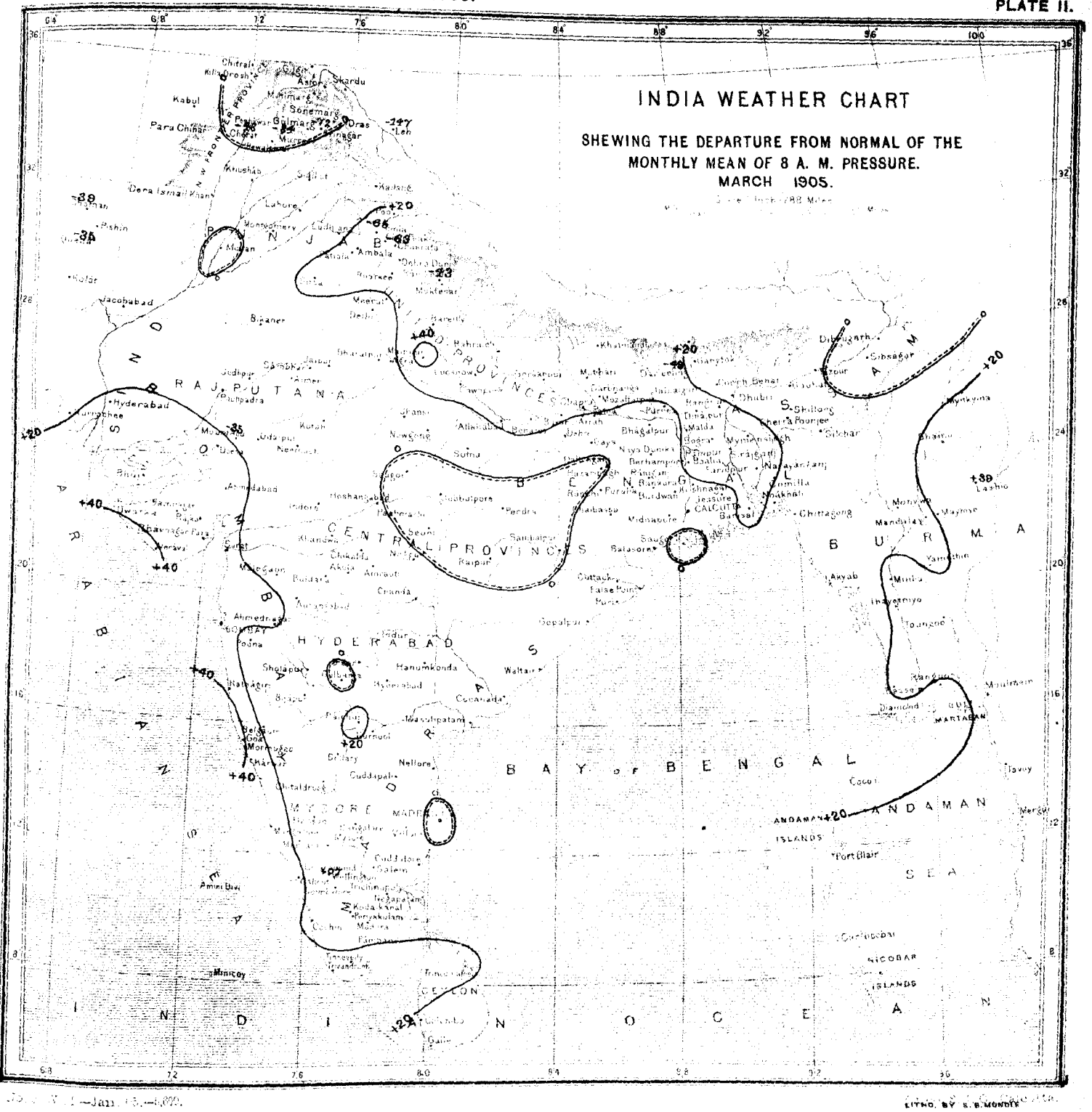
‡‡ Mean of three previous columns.
§§ Mean of 26 days.

G. I. C. P. O.—No. 142 Meteor.—31-8-05—385.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of Lambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are indicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the month is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added to the wind arrow.					
,,	,, 2 to 5	,,	,,	,,	...	two	feathers	,,	,,	,,	,,
,,	,, 5 to 10	,,	,,	,,	...	three	,,	,,	,,	,,	,,
,,	,, 10 to 20	,,	,,	,,	...	four	,,	,,	,,	,,	,,
	over 20	,,	,,	,,	...	five	,,	,,	,,	,,	,,



LITHO. BY S. E. MONDY.

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal amounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020″ or two hundredths of an inch, &c. Continuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted lines that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuous and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative departures.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

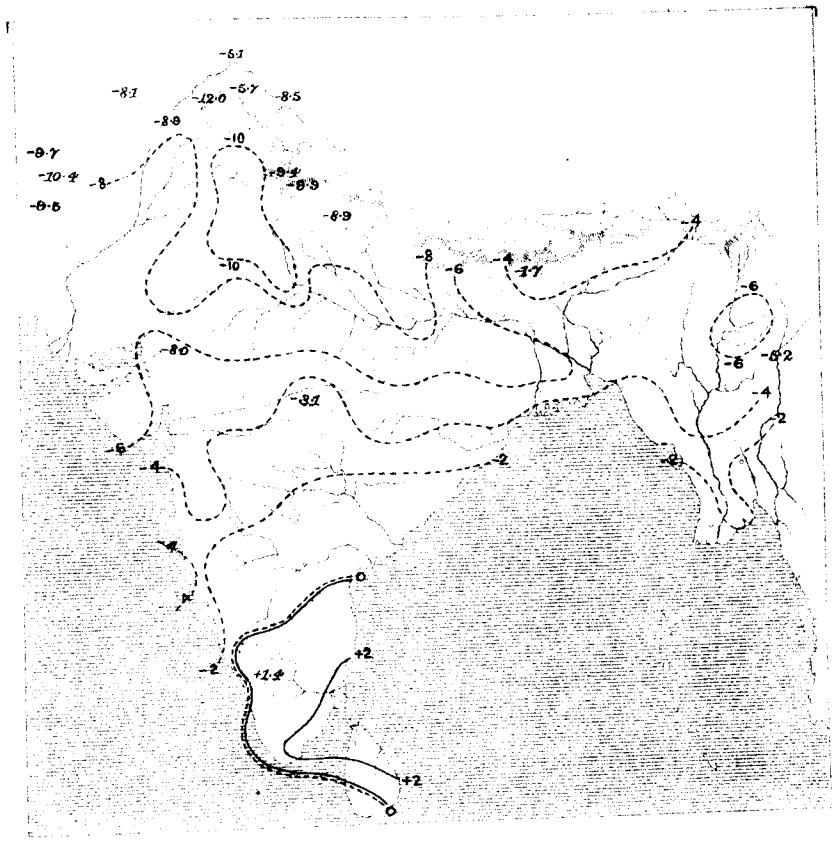
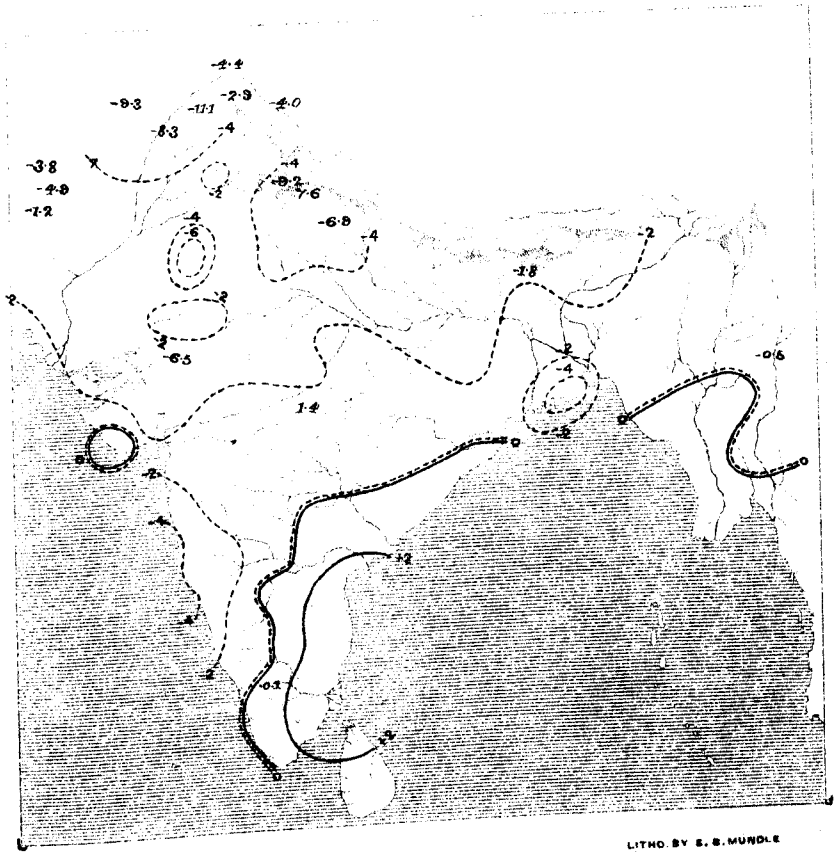


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S. S. MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

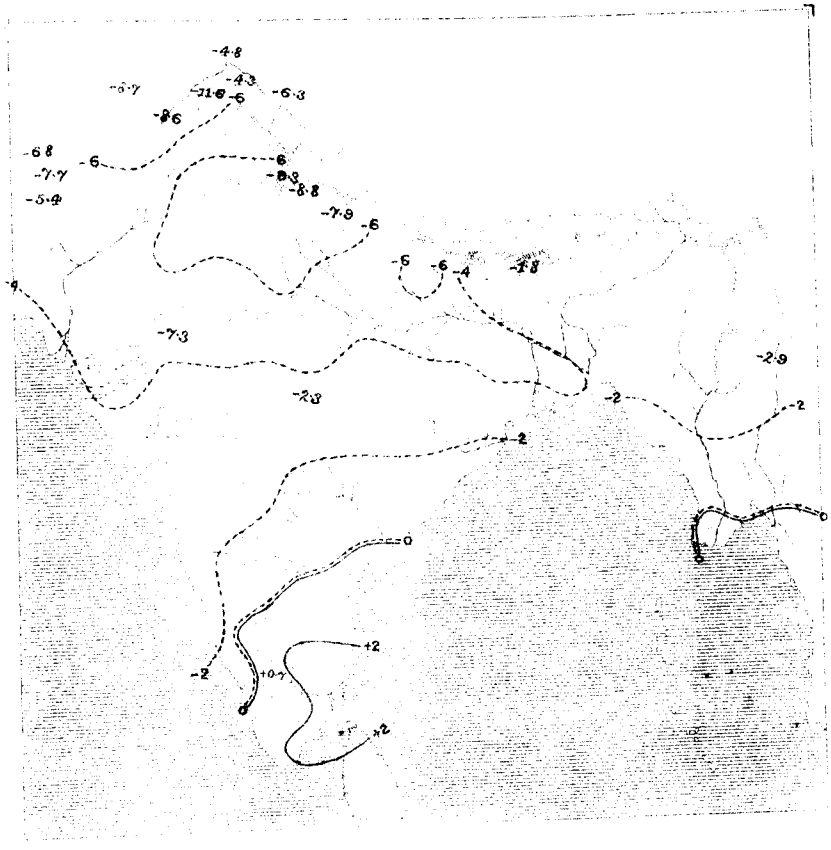
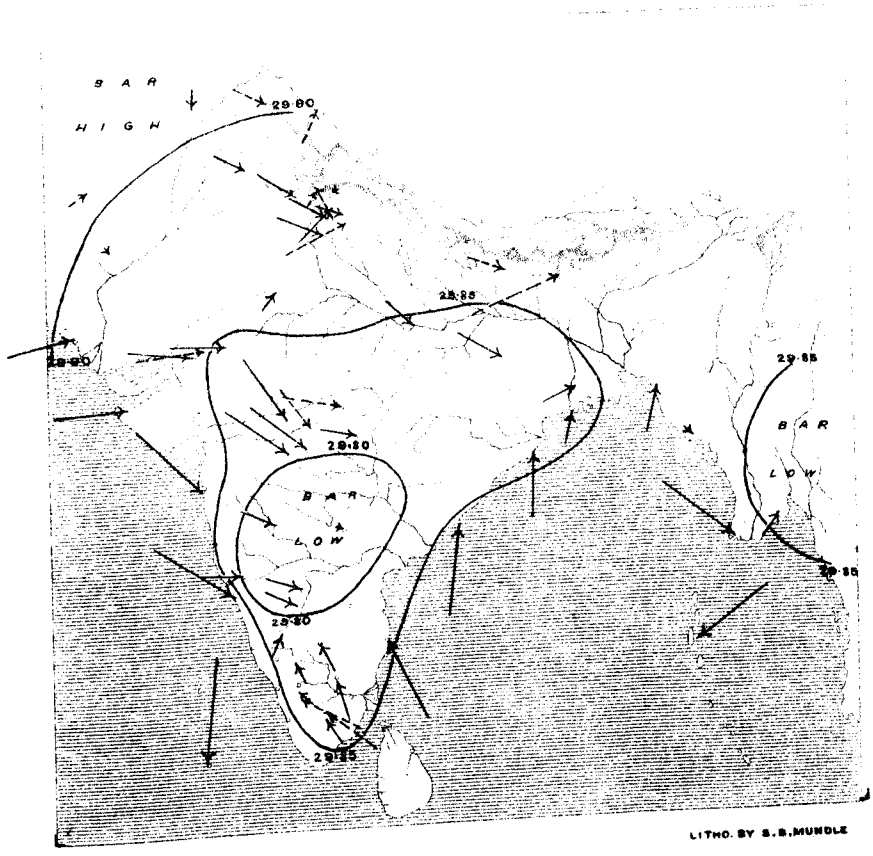


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S.S.MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF ABSOLUTE
HUMIDITY AT 8 A. M.

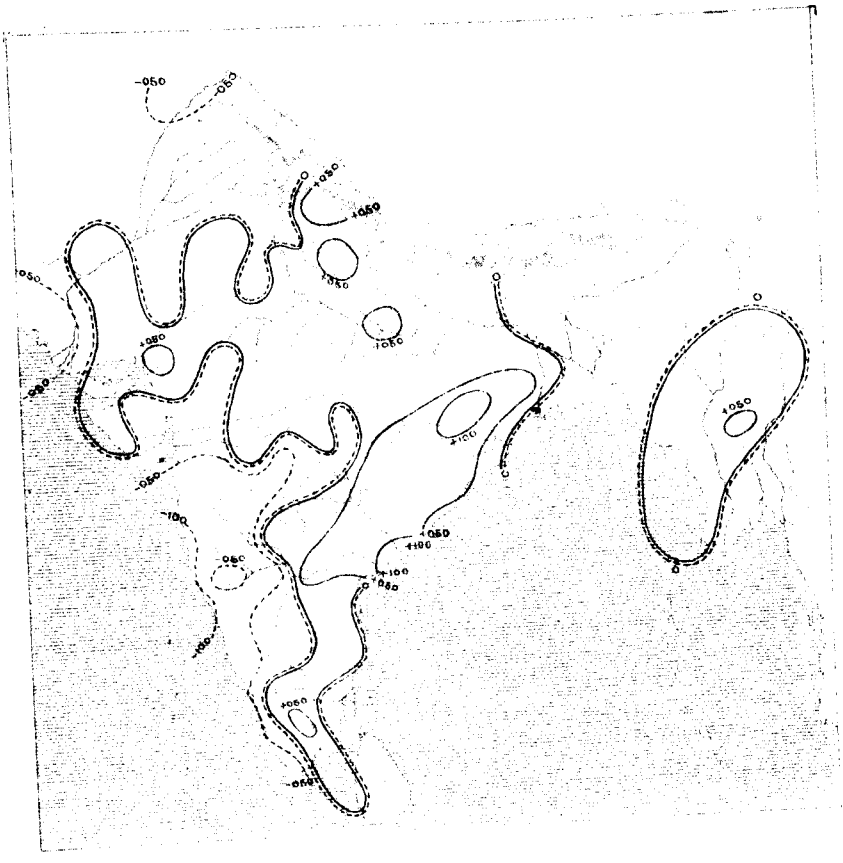


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF RELATIVE
HUMIDITY AT 8 A. M.

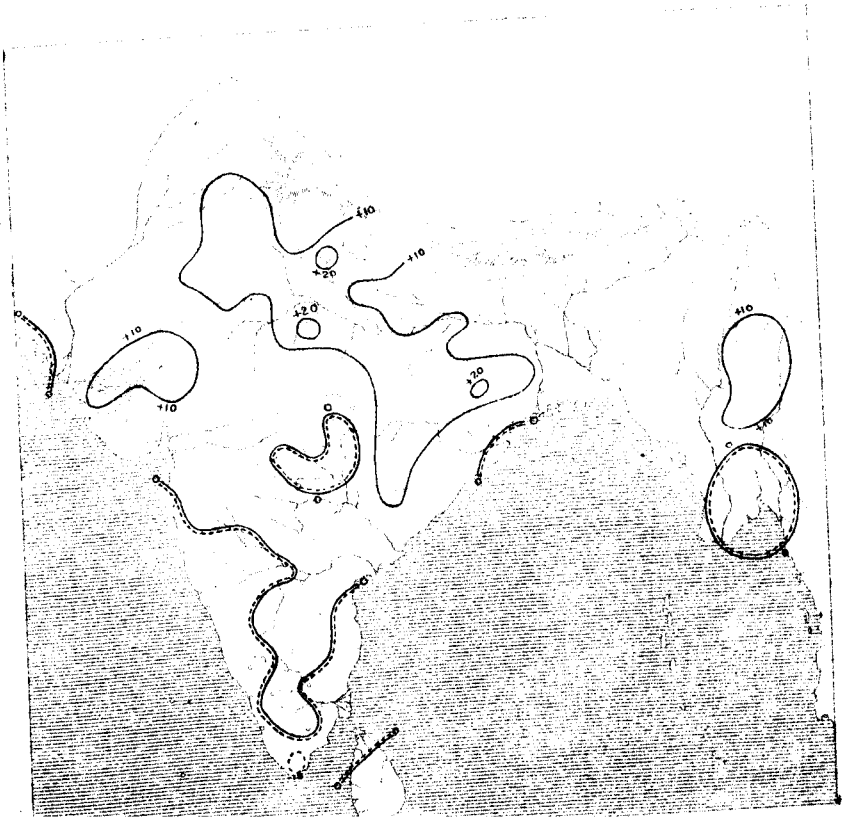


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF CLOUD
AMOUNT AT 8 A. M.

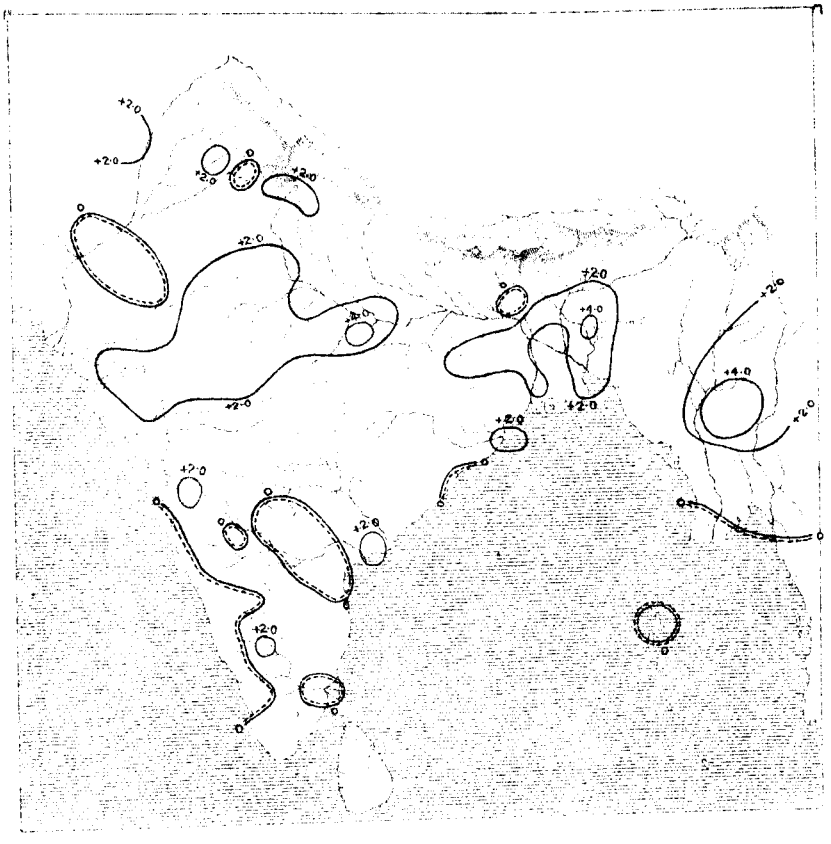
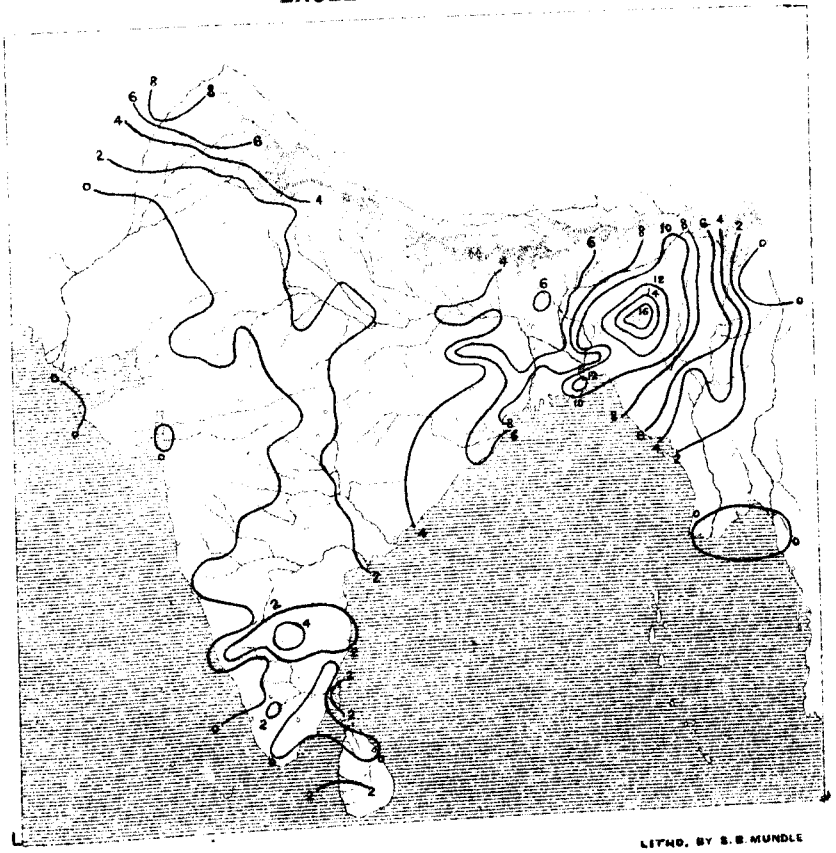
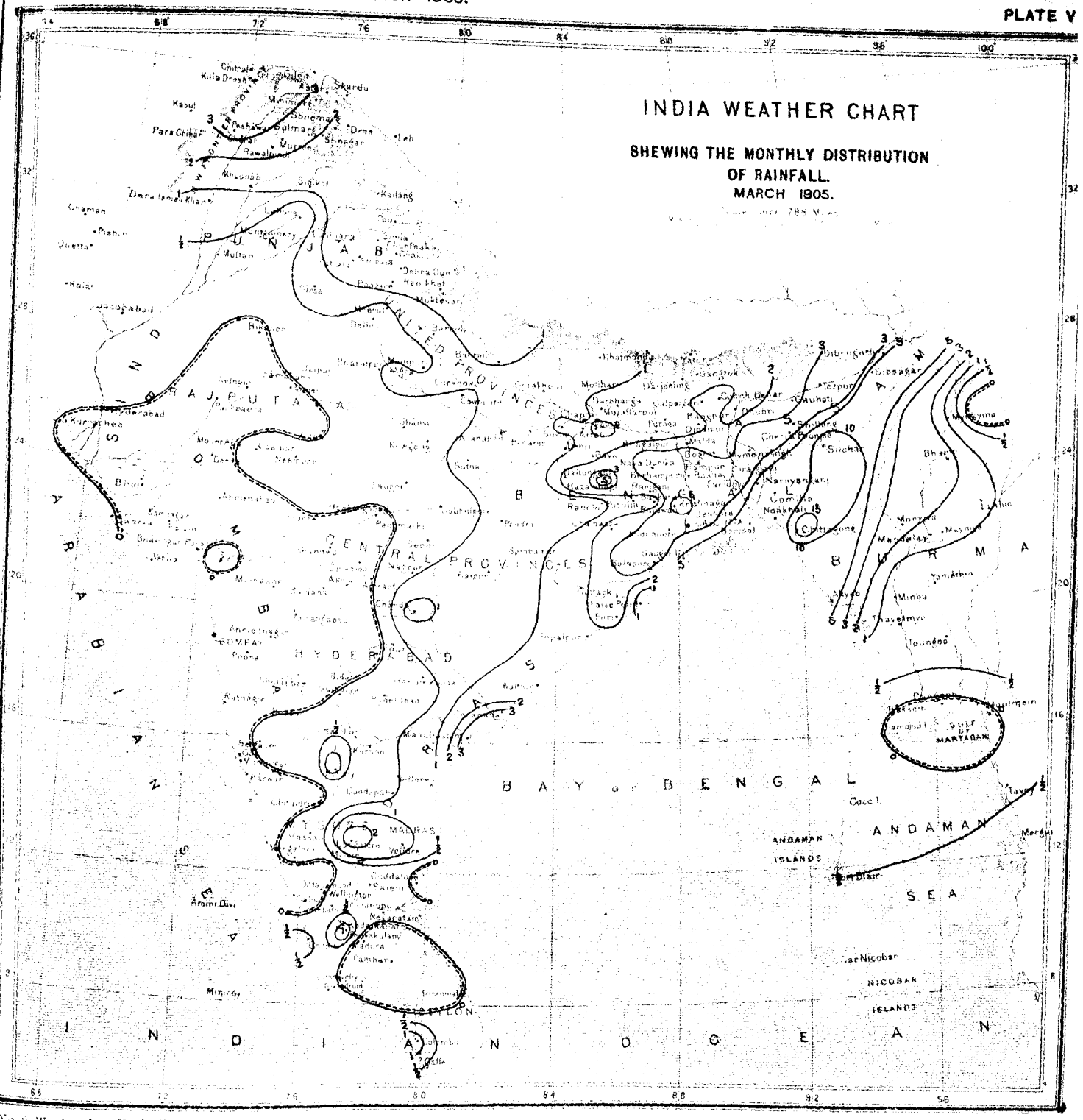


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE
MONTH ON WHICH RAINFALL EQUALLED OR
EXCEEDED 0·10 INCH.



LITHO. BY S. E. MUNDLE



No. 9. W. I.—Jan. 05.—1,600.

Survey of India Office, Calcutta.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.

LITHO. BY S. R. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above these give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained by referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province
33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, APRIL, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of April, 1905, is based on observations taken daily at 8 A.M. at 228 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 64 stations. In the rainfall summary the rainfall data of the meteorological observatories and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the review, are utilized, and brief notes on solar and magnetic disturbances are supplied by the observatories.

Summary of the chief features of the weather in India during the month of April, 1905.

Weather conditions in April, 1905, were little changed as compared with those of the preceding months of February and March. The low temperature conditions were, relatively to the normal, almost as strongly marked and extensive in April as in the earlier months and a series of depressions crossed northern India from west to east occasioning showers over a wide area.

On the first four days of the month the weather was generally fine and quiet, but the mean temperature was low except on the Madras and Burma coasts. The depression was large at the hill stations and over north-west and central India and the mean temperature was more than 16° below the normal at the following places on the following dates:—

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
1st April	Neemuch	—19·1
	Jaipur	—19·0
	Indore	—18·7
	Bikaner	—18·4
	Khandwa	—17·9
	Akola	—17·0
	Sambhar	—16·8
1st April	Ajmer	—16·8
	Hoshangabad	—16·8
	Montgomery	—16·7
	Sirsa	—16·4
	Malegaon	—16·3
	Deesa	—16·2
	Chanda	—16·2
	Amraoti	—16·1
2nd "	Roorkee	—17·6
	Khandwa	—16·9
	Cawnpore	—16·4
	Mainpuri	—16·4
	Allahabad	—16·4
	Benares	—16·1
	Nowgong	—16·1
3rd "	Montgomery	—17·5
	Benares	—16·3
4th "	Roorkee	—16·9

On the 5th, the first disturbed period commenced. A depression appeared over Sind and thence advanced eastward as far as Bengal where it filled up on the 10th. Showers of rain occurred over northern India and the mean temperature was low except over parts of the Peninsula. The depression of temperature was less than during the first four days of the month and the amount gradually diminished as the period progressed. The following gives comparative data for the divisions of northern India for the 5th and the 10th and shows the change which took place:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of	
	5th April.	10th April.
	°	°
Assam	−5·7	−5·2
Bengal	−6·9	−3·3
Orissa	−2·8	−1·0
Bihar	−11·8	−5·3
Chota Nagpur	−10·0	−4·4
United Provinces of Agra and Oudh	−12·8	−5·7
Punjab	−9·0	−4·8
North-west Frontier Province	−5·6	−3·4
Sind	−3·9	−0·6
Rajputana	−9·6	−2·1
Gujarat (East)	−4·3	−1·8
Central India	−11·4	−4·4
Central Provinces	−9·3	−4·0

On the 10th the second barometric depression of the month appeared. It entered Sind on the 10th and passed through Rajputana, the United Provinces and Bihar into Bengal where it disappeared on the 16th. Scattered rain accompanied it in its progress eastward and showers also fell over the south of the Peninsula. Temperature was low except in Madras where it was normal or nearly so. The amount of the temperature deficiency increased again during this period—more particularly in the north-east. The following gives comparative data for the divisions of northern India for the 13th in illustration:—

Province or division.	Departure from normal of		
	Mean maximum temperature, 13th April.	Mean minimum temperature, 13th April.	Mean temperature, 13th April.
	°	°	°
Assam	−2·7	−5·6	−4·2
Bengal	−6·6	−5·4	−6·0
Orissa	−9·8	−3·6	−6·7
Bihar	−4·1	−6·2	−5·2
Chota Nagpur	−12·9	−8·1	−10·5
United Provinces of Agra and Oudh	−5·2	−3·5	−4·4
Punjab	−4·1	−3·1	−3·6
North-west Frontier Province	−5·7	−3·9	−4·8
Sind	−1·7	−2·2	−2·0
Rajputana	−3·8	−2·7	−3·3
Gujarat (east)	−3·7	−1·5	−2·6
Central India	−6·2	−2·1	−4·2
Central Provinces	−5·8	−2·5	−4·2

On the 17th, temperature rose generally and on the 18th, the mean temperature exceeded the normal over a considerable part of north-west India. On the 19th, the third depression of the month appeared over Sind whence it advanced eastward into the United Provinces where it was shown on the 21st and 22nd. The relatively high temperatures which first appeared over north Bombay and the Indus Valley on the 17th or 18th, extended eastward during the next few days, while at the same time temperature rose to above the normal over parts of north-east India. The following gives data for the northern India divisions from the 17th to the 22nd:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					
	17th April.	18th April.	19th April.	20th April.	21st April.	22nd April.
	°	°	°	°	°	°
Assam	−1·5	+0·3	−3·1	−1·9	−2·2	−3·9
Bengal	−1·8	−1·4	+0·1	−0·2	−0·9	−3·2
Orissa	−2·4	−2·3	−1·1	−1·7	−0·6	−1·1
Bihar	−2·3	−2·0	−1·1	+1·1	+0·5	−2·9
Chota Nagpur	−2·9	−2·2	−2·0	−1·0	−1·2	+0·6
United Provinces of Agra and Oudh.	−5·6	−3·2	−2·2	−0·3	−2·4	−2·5
Punjab	−2·8	−0·7	+1·7	+4·4	−2·9	−5·7
North-west Frontier Province.	−1·4	+1·3	+4·4	+0·8	−2·2	−6·6
Sind	+0·1	+0·6	+2·5	+1·2	−1·3	−2·8
Rajputana	−1·6	−2·2	−1·2	+4·6	−2·8	−6·4
Gujarat (East)	−0·6	+0·8	+0·6	−2·0	−2·0	−2·6
Central India	−3·2	−3·4	−1·5	+0·3	−1·1	−3·0
Central Provinces	−1·9	−1·9	−1·8	−3·1	−2·4	−1·8

Showers were, however, general at this time over north-west and north-east India. A terrific hail storm occurred in the extreme north-west on the 20th, and occasioned great damage to the crops in some villages of Peshawar. The hail stones in some cases weighed from four to five ounces and were from seven to eight inches in circumference and these showers, as shown in the above table, occasioned a brisk fall of temperature over northern India between the 20th and 22nd.

On the 23rd, the temperature conditions agreed closely with the mean conditions of the month. The mean temperature was in some excess over Madras and Burma and was in more or less defect elsewhere. These conditions lasted till the 27th, and during this interval the fourth depression of the month passed through Sind into Central India.

Between the 27th, and the close of the month showers were generally confined to north-east India and the weather was fine in the north-west. In consequence while the temperature rose in the north-west it was generally low in

other parts of India. The following gives comparative data for all divisions from the 27th to the 30th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	27th April.	28th April.	29th April.	30th April.
	°	°	°	°
Burma	+0·1	−2·4	+0·3	+0·7
Assam	−6·8	−5·9	−4·1	−1·9
Bengal	−9·2	−8·3	−8·4	−4·0
Orissa	−7·9	−3·4	−2·3	−0·8
Bihar	−8·4	−14·1	−8·3	−4·6
Chota Nagpur	−11·7	−7·4	−4·7	−2·2
United Provinces of Agra and Oudh.	−5·5	−5·4	−4·0	−1·3
Punjab	−5·7	−1·4	+3·1	+4·7
North-west Frontier Province	−5·8	−1·2	+3·7	+4·0
Sind	+0·1	−0·1	+0·6	+0·6
Rajputana	+0·3	+1·3	+3·5	+1·6
Gujarat (East)	−2·3	−0·9	−2·5	−3·3
Central India	−5·9	−1·2	+0·5	+0·7
Central Provinces	−6·0	−1·3	−0·2	+1·1
Berar	−4·0	−0·5	+1·1	+1·4
West Coast	−1·8	−1·7	−1·9	−1·9
Bombay Deccan	−0·4	−0·5	−0·1	−0·3
Mysore	+1·3	−0·4	+0·2	+1·7
Madras Coast	−0·8	−0·7	−0·1	+0·3
Madras Deccan	−0·8	−2·8	−0·6	+0·6
South India	+0·8	+0·8	−1·1	+0·1

As shown above the deficiency of temperature was greatest in Bengal, Bihar and Chota Nagpur and at the following places on the following dates the mean temperature was more than 10° below the normal :

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
27th April . .	Hazaribagh	−12·5
	Chaibassa	−12·5
	Bogra	−12·4
	Berhampore	−12·2
	Dinajpur	−11·9
	Burdwan	−11·3
	Jalpaiguri	−10·3
	Dhubri	−10·3
	Ranchi	−10·1
28th „ . . .	Purnea	−17·2
	Patna	−14·9
	Darbhanga	−14·6
	Dinajpur	−13·3
	Gorakhpur	−13·2
	Berhampore	−12·2
	Bogra	−11·0
	Hazaribagh	−10·5
29th „ . . .	Bogra	−13·2
	Berhampore	−11·9
	Mymensingh	−11·2
	Dinajpur	−10·1

Solar and Magnetic Disturbances.

The following notes on solar and magnetic disturbances have been received from the Observatories :—

Kodaikanal :—Solar Observations—April 1905.

During the month there was one day on which no observations could be made and five other days on which observations of prominences were not possible.

Spots.—Twenty-seven groups of spots, of which two were returns of spots seen before, appeared during the month, but most of them were very short-lived, so that the average daily number of groups visible was only 3·7. In February with 26 groups the daily average was 6·1. Only 3 groups (Nos. 511, 520, 529) appearing at the east limb lived long enough to cross to the west limb and these along with No. 507 which was near the centre of the disc on the 1st were the only groups of any importance. The remainder were small dots which lived for only one or two days. Group No. 507, as mentioned last month, was the fourth appearance of the great spot. It rapidly decreased in size and before it reached the west limb it was reduced to a small dot. No trace of it could be found when this portion of the sun's disc returned to view, so that it had lasted for only little over three months, which cannot be considered long for a spot of this size. Group 520 was the return of group 500 which was visible from March 14 to 26. It re-appeared on the east limb on the 10th as a double group, but the following group disappeared after a few days. This was the largest group of the month and on the 16th, it extended over 15° of longitude. Group 529 first appeared as a small spot surrounded with faculæ near the east limb on the 20th. In two days it had developed into a regular double group accompanied by small scattered spots. It underwent several changes in size during the time that it remained visible, but the spectrum did not indicate any great disturbance.

The spots were almost equally distributed between the north and south hemispheres. In the northern hemisphere two spots appeared in very high latitudes; one in 32° and the other in 41°, but they each lasted for only one day.

Prominences.—Small or moderate sized prominences were abundant, but there were few conspicuous displays. The tallest prominence seen was one of 2′ on the 15th at position angle 59°. On the 14th the whole limb for about 40° was covered with short, bright prominences, none of which exceeded 45″ in height. On the 24th two great arches each covering 8° of the limb and joined in the middle, were photographed in calcium light. These reached heights of 65″ and 70″ respectively. Only one metallic prominence and one prominence showing rapid motion in the line of sight were observed.

There was a great magnetic disturbance from 6h. 10m. on the 1st to 3h. 0 m. on the 2nd. At the beginning, group 507 which had given rise to disturbances on its previous transits, was a little past the central meridian and before its end group 508 was crossing this meridian, so that probably both spots combined to produce the observed effects. There were moderate disturbances on the 20th and 26th. The former of these could not be connected with any visible spot, but a bright group of flocculi was on the central meridian. The latter took place when spot 529 was on the central meridian.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Bombay. Colaba :—

Note on the Colaba magnetic record.—During the month the traces showed 14 calm days, 15 days of small and one day of great disturbance.

Movements suspected to be due to seismic causes occurred on the 1st at about 6 A. M., the strain apparently lasting for about 3 hours.

The selected quiet days of the month were the 8th, 11th, 14th, 18th and 24th.

The following gives the record of the magnetic disturbances during the month :—

April, 1905.		April, 1905.		April, 1905.	
1	G.	11	C.	21	S.
2	S.	12	C.	22	C.
3	S.	13	S.	23	C.
4	S.	14	C.	24	C.
5	S.	15	S.	25	C.
6	S.	16	C.	26	S.
7	S.	17	C.	27	S.
8	C.	18	C.	28	S.
9	C.	19	C.	29	S.
10	C.	20	S.	30	S.

The magnitudes of the disturbances are determined from horizontal Force traces.
C=Calm ; S=Small ; M=Moderate ; G=Great ; V. G=Very great. Days are reckoned from midnight to midnight.

The mean observed absolute values of the several elements, as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follows:—

Declination	0° 12′ 39″ east.
Horizontal Force . . .	·37397 C. G. S. Unit.
Dip	21° 54′·0
Horizontal Force range .	·00053 C. G. S. Unit.
Horizontal Force summed range.	·00349 „ „
Declination range . .	3′·85
Declination summed range. .	14′·84

Note:—[Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.]

One very great seismic disturbance was recorded on the 4th and a small one on the 7th.

The preliminary tremors of the great seismic disturbance which occurred on the 4th April last were picked up by the Milne's seismograph at about 5h. 44·1m. (Bombay time) and by the Colaba seismograph (N—S) at 5h. 44m. 24s. There was a short temporary lull after the arrival of the preliminary waves—more clearly indicated by the open diagram of the Colaba seismograph—and the larger waves followed 3·4m later as registered by the Milne's and about 3m.–37s. later as recorded by the Colaba seismograph.

Colaba seismograph No. 1 (E—W) was unfortunately writing very faintly and was displaced by the first shock of the larger movements and the record is incomplete.

It is somewhat difficult to fix the exact time of occurrence of the maximum movement accurately as all the traces marking this phase are more or less blurred on account of the violence of the movement except in one of the records of the vertical movement seismograph. In Milne's seismograph the traces overlap. In the Horizontal Force magnetogram, however, the time of the maximum effect can be fairly accurately ascertained to have occurred at 5h. 53m. about five minutes after the commencement of the disturbance (at 5h. 48m.). The Declination magnetogram, which shows a series of clearly marked magnetic waves and the Vertical Force, which shows a sharp and well-defined disturbance, both indicate the commencement and the maximum phase to have occurred at 5h. 48·5m. and 5h. 51m. respectively The movement in the Horizontal Force shows unequal amplitudes. The increase in forcewas about ·00109 C. G. S. unit, while the decrease in force was about ·00067 C. G. S. unit only, apparently indicating a mean rise of force of about ·00021, C. G. S. during the disturbance. The Declination Chart similarly showed unequal amplitudes, 5′·4 towards the west and 4′·8 towards the east, showing a mean increase of 0′·3 in the westerly direction. The Vertical Force showed movements of nearly equal amplitudes both ways, equivalent to about ·00038 C. G. S. unit.

Both the seismographs for recording vertical movement have given fairly good records. The 'Float' record indicates the commencement of the movement at 5h. 44·8m. and the maximum phase as can be approximately ascertained (the trace is blurred on account of the violence of the movement) at 5h. 49·4m. This phase as also the commencement, both of which are clearly shown by the 'Balance' Seismograph are recorded exactly at the same time as the former. In the latter record, however, five distinct

disturbances with intervals of lull, are recorded, the time of the fourth—the largest movement corresponding with that of the maximum phase as indicated by the 'Float' record. This initial disturbance, which undoubtedly caused all the destruction of life and property continued to affect the vertical motion seismographs for about 30·6m. The trace then runs normally smooth till 6h. 31·3m. when the 'Float' record again shows another disturbance but of much smaller magnitude, which attained its maximum at 6h. 32.8m. and ended at 6h. 37·9m. Yet a third disturbance of still smaller amplitude commenced at 6h. 45·5m. and ended at 6h. 47·1m.

The disturbance as picked up by the barograph, shows the commencement at 5h. 48m. the maximum effect having been registered in this instrument at 5h. 49·4m. The change due to the oscillation in the column of mercury corresponds to a fall of ·02 inch.

The pulsation and after tremors of the convulsion as noted by the seismographs continued for about four hours, the last smallest being noted at about 10 hours.

The magnetograms, &c., present features markedly similar to those noted and discussed on the occasion of the Assam earth-quake which occurred on the 12th June 1897.

N. A. F. MOOS,
Director,
Government Observatory, Bombay.

List of displacements recorded by the Seismograph at the Alipore Observatory during April 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum amplitude in m.m.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M.	
4·4·05	0-52·0	0-56·1	?	4-30·7	?	3-38·7	As the boom moved throughout the entire body of the trace the time of the maximum and its amplitude could not be determined.
12·4·05	17-16·6	17-21·2	17-21·7	17-27·8	1·00	0-11·2	Sensibility 1-m.m.-0·"38 of tilt.
19·4·05	12-55·2	13-28·7	13-32·8	14-0·3	0·75	1-5·1	
22·4·05	5-44·3	6-17·8	6-22·9	7-19·9	1·00	1-35·6	
,,	10-44·3	10-53·4	11-9·7	12-45·3	0·75	1-1·0	
26·4·05	22-15·3	22-27·5	22-30·5	22-49·9	1·00	0 34·6	

The local times of the commencement.

Date 1905.	H. M.
4th April 1905	6-45·3
12th ,, ,,	23-9·9
19th ,, ,,	18-48·5
22nd ,, ,,	11-37·6
,, ,, ,,	16-37·6
27th ,, ,,	4-8·6

G. W. KÜCHLER,
Asstt. Meteorological Reporter to the Govt. of India.

Mauritius.—Royal Alfred Observatory :—No spots were observed on the 9th, 23rd, 24th and 25th. Groups of spots were observed on all other days except the 20th and single spots were recorded on the 10th to 18th, the 20th to 22nd and the 26th to the 28th. Faculæ were observed on all days on which observations were made.

Magnetic record.

Day.	Hour.	Magnetic disturbances.
1 to 2	5 to 2	Large disturbance.
2	17¾—18½	Increase of H. F. (·00022)
3	2¾—5¼	Wave in H. F. (+·00020)
5	12½—21¼	Decrease of H. F. (·00071)
20	7½—8½	Small fluctuations in H. F. and Dec.
21	6—12½	Wave in H. F. (—·00028)
	16—19	Wave (—·00020)
26	7—23	Small rapid fluctuations in H. F.
	7—14	Ditto. ditto Dec.
27	2—17	Small rapid fluctuations in H. F.
29	1—8	Ditto ditto.
	3¾—5¼	Wave in H. F. (+·00019) in Dec. (2'·3 E.)

T. F. CLAXTON.
Director.

Weather in Indian Monsoon region.

During the month of April 1905, pressure was more or less above the normal over the Trades-monsoon area.

In the extreme south the departures from normal were as follows:—

APRIL 1905.	Zanzibar.	Seychelles.	Mauritius.
	"	"	"
Departure of pressure . . .	+·029	+·036	+·034
	°	°	°
Actual mean wind direction . .	S 19 E	N 14 W	S 70 E
Normal mean wind direction . .	S 5 E	S 63 E	S 70 E
Actual mean wind velocity . .	180	124	256
Normal mean wind velocity . .	170	?	252
Rainfall departure	+29·13	−0·02	−2·64

Pressure exceeded the normal by fairly uniform amounts at all three stations. The wind directions were irregular except at Mauritius where the mean direction was exactly normal. At the Seychelles the mean direction was north-north-west instead of east-south-east and at Zanzibar the direction was 14° more easterly than usual. The velocities were about the average. The month's rainfall was in large excess at Zanzibar, normal at the Seychelles and in considerable defect at Mauritius.

Over the Indian seas conditions were apparently approximately normal except that pressure generally exceeded the normal. Over the Indian land area pressure, on the mean of the month, was also in excess of the average, but the weather was somewhat disturbed and showery and a series of small storms passed from west to east across the country. To the northward of India pressure was, as is usual at this season, very unsteady. In western Siberia there was a large excess of pressure between the 1st and the 11th, but thereafter pressure decreased, the excess disappeared for a time and a considerable deficiency was shown on the 15th. The barometer then rose and the next important falls occurred between the 20th and 22nd, on the 24th and 25th and on the 29th and 30th. The observations over India do not show that these changes over western Siberia directly influenced the weather over the Indian land area, but the rainfall periods experienced over the extreme north-west were on the 6th and 7th, the 11th and 12th, the 20th and 21st and the 26th to 30th. In Egypt at this time the pressure, on the mean of the month exceeded the normal everywhere but most markedly in the Sudan.

Depressions and cyclonic storms.

During the first four days of the month the weather was quiet and the barometer high over the Indian region.

On the 4th, a brisk barometric fall was reported over upper Sind and the west Punjab, and on the morning of the 5th, a slight depression was advancing over upper Sind from the west-south-westward. The depression continued to travel east-north-eastward during the 5th, and on the morning of the 6th, was central near Bikaner Falls of rain had occurred in Baluchistan and Kashmir and the winds were irregularly cyclonic over north-west India. The depression travelled along a curved path during the 6th and the reports of the 7th showed the centre lying over the south of the United Provinces and the adjacent districts of Central India. The depression was ill-defined and the winds variable. Showers had occurred at some central stations and had continued in Kashmir. By the 8th, the depression had reached the neighbourhood of Benares. Light showers were reported from north-east India and showery weather from the north-west Himalayas and their neighbourhood. The reports of the 9th showed the depression over Lower Bengal where it eventually filled up. A considerable amount of rain had fallen in the extreme north-east.

On the 10th, pressure was giving way over Baluchistan and the whole of western India, and a depression was crossing the Indus Valley between Hyderabad and Jacobabad. The depression passed through the western desert during the day and was central near Bikaner on the 11th. The depression was slight and unimportant, the winds were irregular and the rainfall connected with the depression very light. The depression, which remained very shallow and unimportant, lay over the United Provinces on the 12th. Light rain was falling in its neighbourhood, but the amounts were unimportant. By the 13th, the depression had almost filled up, but it had continued to move slowly eastward and rain had increased over the extreme north-east.

Quiet weather prevailed until the 18th, but on the 19th the third depression of the month was appearing over the Indus Valley where pressure was decreasing rapidly. This depression passed into the east Punjab and thence into the United Provinces, decreasing quickly in intensity, while at the same time a fresh depression appeared over the Punjab on the 21st and 22nd.

On the 24th, the barometer was beginning to fall at Jacobabad and a fresh depression was appearing over upper Sind. The winds were irregular and the sky cloudy to overcast. The depression never developed, but filled up over Rajputana, while two other depressions which appeared, one over the Central India Plateau and the other over the Deccan were almost equally slight and unimportant.

Pressure.

The mean 8 A.M. pressure of the Indian land area was 0·059″ above the normal. This positive departure from normal was larger than had been recorded in April since 1877 and was in marked contrast to the condition in April 1904, when the mean departure was −0·042″. The mean temperature was generally low as is shown by the

following table which gives pressure and temperature departure data for the larger divisions :—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of April 1905.	Departure from normal of mean temperature, April 1905.
	"	°
Burma Coast and Bay Islands	+·042	−0·9
Burma Inland	+·054	−3·6
Assam	+·083	−4·1
Bengal and Orissa	+·080	−4·5
Gangetic Plain and Chota Nagpur	+·078	−0·3
Upper Sub-Himalayas	+·062	−5·0
Indus Valley and North-West Rajputana	+·062	−3·5
East Rajputana, Central India and Gujarat	+·058	−4·2
Deccan	+·054	−3·7
West Coast	+·054	−2·8
South India	+·044	−0·4

The preceding data show that the greatest excess of pressure agreed roughly with the greatest deficiency of temperature.

The actual distribution of pressure, on the mean of the month, is shown in Pl. I. Pressure was high over the North-west Frontier Province, over the west coast of the Peninsula and part of Mysore, over Assam and the extreme north of Burma and the Tenasserim coast, while it was low over the western desert, the Gangetic Plain and Bengal and the north-east of the Peninsula, as well as within small areas over the Deccan and over Central Burma. The mean 8 A.M. pressure exceeded the normal at all stations—but especially so in the north-east. Relatively to the geographical mean, pressure was high over north-east India, low over Burma, the south of the Peninsula and Ceylon and normal elsewhere. The following shows the principal anomalies :—

STATIONS.	Positive anomalies.	STATIONS.	Negative anomalies.
	"		"
Purnea	+·043	Colombo	−·034
Narayanganj	+·033	Bangalore	−·031
Mymensingh	+·031	Trichinopoly	−·029
Dinajpur	+·031	Salem	−·028
Gorakhpur	+·029	Negapatam	−·025
Darbhanga	+·028	Kurnool	−·024
Dhubri	+·028	Mysore	−·024
Bhamo	+·026	Chitaldroog	−·023
Bogra	+·022	Yamethin	−·023
		Moulmein	−·023
		Tavoy	−·023

At the Himalayan hill stations and at Lashio the mean pressure of the month was normal or in trifling defect, but at Quetta, Mount Abu and Wellington it was in slight excess The vertical pressure gradients everywhere exceeded the average and in the Hima layan hill regions the difference was large. This is shown below :—

HILL STATION.	Departure from normal pressure, April, 1905.	PLAIN STATION.	Departure from normal pressure, April 1905.	Departure of pressure difference.
	"		"	
Quetta	+·024	Jacobabad	+·054	+·030
Leh	−·007	Lahore	+·061	+·068
Simla	−·005	Ludhiana	+·060	+·065
Murree	+·008	Peshawar	+·048	+·040
Chakrata	−·013	Roorkee	+·068	+·081
Ranikhet	+·011	Bareilly	+·071	+·060
Darjeeling	−·004	Dhubri	+·087	+·091
Mount Abu	+·022	Deesa	+·052	+·030
Pachmarhi	...	Khandwa	+·051	...
Lashio	+·014	Bhamo	+·085	+·071
Wellington	+·027	Coimbatore	+·038	+·011

The excess of pressure noticed over the Indian area extended westward through Baluchistan and Afghanistan into Persia, but disappeared over Asiatic Turkey, Baghdad, reporting a deficiency of 0·026". The excess extended southward over Ceylon and the Indian Ocean as far as the south-east Trades region and amounted to the following at the stations in these regions :—

STATION.	Departure from normal of mean 8 A.M. pressure of April 1905.
	"
Trincomalee	+·051
Colombo	+·025
Zanzibar	+·029
Seychelles	+·036
Mauritius	+·034

The following is a summary of the chief abnormal features of the pressure distribution during April 1905 :—

(1) Pressure exceeded the normal at all the plains stations in the Indian area.

(2) The excess extended westward into Persia and southward into the Trades region.

(3) Pressure was normal or in very slight excess or defect at the hill stations in India.

(4) The vertical pressure gradient was hence steeper than usual.

The following table gives the mean pressure departures and anomalies of the month for the eleven meteorological provinces of India:—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of April 1905.	Pressure anomaly, April 1905.
	"	"
Burma Coast and Bay Islands	+·042	—·017
Burma Inland	+·054	—·005
Assam	+·083	+·024
Bengal and Orissa	+·080	+·021
Gangetic Plain and Chota Nagpur	+·078	+·019
Upper Sub-Himalayas	+·062	+·003
Indus Valley and North-West Rajputana	+·062	+·003
East Rajputana, Central India and Gujarat	+·058	—·001
Deccan	+·054	—·005
West Coast	+·054	—·005
South India	+·044	—·015

Temperature.

The low temperature conditions which had prevailed uninterruptedly from the 20th January to the end of March over the Indian region continued during April.

The mean maximum temperature of the month exceeded the normal only at the stations for which comparative data are given below:—

PROVINCE OR DIVISION.	STATION.	MEAN MAXIMUM TEMPERATURE. Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
		°	°	°
PENINSULA	Hassan	95·1	91·0	+4·1
	Mysore	96·0	94·0	+2·0
	Mercara	85·5	83·9	+1·6
	Chitaldroog	96·8	95·8	+1·0
	Cuddalore	93·3	92·8	+0·5
	Ahmednagar	99·1	98·9	+0·2
BURMA	Toungoo	101·5	100·4	+1·1
	Tavoy	95·1	94·0	+1·1
	Moulmein	95·3	94·6	+0·7
	Mergui	92·3	91·9	+0·4

In all other places, both on the hills and plains, it was lower than usual and at the following large number of stations the departure from normal exceeded —6°:—

STATION.	MEAN MAXIMUM TEMPERATURE. Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	°	°	°
Bahraich	90·4?	99·6	— 9·2?
Gorakhpur	92·4	100·4	— 8·0
Patna	93·0	100·6	— 7·6
Benares	95·7	103·1	— 7·4
Agra	95·2	102·6	— 7·4
Gaya	96·2	103·4	— 7·2
Roorkee	91·0	98·2	— 7·2
Neemuch	93·9	100·9	— 7·0
Raipur	97·3	104·3	— 7·0
Delhi	92·8	99·7	— 6·9
Lucknow	95·5	102·4	— 6·9
Allahabad	97·0	103·8	— 6·8
Bareilly	92·5	99·3	— 6·8
Jessore	90·6	97·2	— 6·6
Sirsa	94·6	101·1	— 6·5
Burdwan	94·1	100·6	— 6·5
Nowgong	97·0	103·4	— 6·4
Berhampore	93·6	100·0	— 6·4
Balasore	91·2	97·5	— 6·3
Ranchi	90·9	97·1	— 6·2
Purnea	90·8	97·0	— 6·2
Sutna	95·5	101·7	— 6·2
Montgomery	93·9	100·1	— 6·2
Leh	48·4	57·1	— 8·7
Kailang	42·9	53·0	—10·1
Ranikhet	68·5	74·8	— 6·3

There were thus two districts of marked deficiency. One included the hill districts of Leh and Kailang while the second lay along the foot of the central Himalayas and was represented by the stations of Bahraich and Gorakhpur.

The departures of the mean minimum temperature from the normal exhibited a general distribution similar to that of the mean maximum temperature. There was some excess over parts of Madras and Mysore and of the Burma coast. The following gives data:—

Province or Division.	Station.	Mean minimum temperature. Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
		°	°	°
Madras	Salem	77·1	75·8	+1·3
	Cuddalore	77·7	76·8	+0·9
	Masulipatam	78·3	77·5	+0·8
	Madras	77·8	77·1	+0·7
	Madura	77·0	76·4	+0·6
	Coimbatore	75·9	75·4	+0·5
	Cochin	78·6	78·4	+0·2
	Negapatam	79·1	79·0	+0·1
Mysore	Chitaldroog	72·3	71·8	+0·5
Burma	Mergui	75·3	73·7	+1·6
	Moulmein	76·6	76·4	+0·
	Diamond Island	78·5	78·3	+0·2

Over the whole of the remainder of the country, both on the hills and plains, the mean minimum temperature was in defect, the deficiency exceeding 6° at the stations for which comparative data are given below:—

Station.	Mean minimum temperature. Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	°	°	°
Gorakhpur	64·9	72·4	−7·5
Darbhanga	64·6	71·9	−7·3
Ludhiana	60·7	67·2	−6·5
Patna	67·3	73·5	−6·2
Roorkee	60·2	66·5	−6·3
Benares	65·7	71·9	−6·2
Hazaribagh	66·3	72·5	−6·2
Murree	45·3	52·3	−7·0

The mean temperature of the month was in slight excess of the average at the following stations:—

Province or Division.	Station.	Mean temperature. Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
		°	°	°
Madras and Mysore	Hassan	79·7	78·7	+1·0
	Mysore	83·1	82·1	+1·0
	Chitaldroog	84·6	83·8	+0·8
	Cuddalore	85·5	84·8	+0·7
	Coimbatore	85·6	85·4	+0·2
	Cochin	85·0	84·9	+0·1
	Salem	88·4	88·3	+0·1
Burma	Mergui	83·8	82·8	+1·0
	Moulmein	86·0	85·5	+0·5
	Tavoy	84·4 ?	84·1	+0·3?

In all other parts of the Indian region it was in defect, and the departures from normal exceeded −6° at the stations for which comparative data are given below:—

Station.	Mean temperature. Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	°	°	°
Gorakhpur	78·7	86·5	−7·8
Cawnpore	79·9	87·3	−7·4?
Bahraich	77·1?	84·3	−7·2?
Patna	80·2	87·1	−6·9
Roorkee	75·6	82·4	−6·8
Benares	80·7	87·5	−6·8
Hazaribagh	78·9	85·4	−6·5
Lucknow	80·4	86·7	−6·3
Gaya	83·0	89·2	−6·2
Bareilly	78·1	84·2	−6·1
Ludhiana	76·2	82·3	−6·1
Leh	37·1	44·0	−6·9
Kailang	34·3	42·1	−7·8
Ranikhet	59·9	66·0	−6·1

The following gives mean temperature data for the 57 meteorological divisions of the empire :—

Province.	Division.	Actual temperature.					Departure from normal of month of		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	93·8	76·0	85·0	17·9	27·8	+0·6	+0·9	−0·3
	Lower Burma (Deltaic)	93·2	76·1	84·6	17·1	27·4	−1·3	−0·6	−0·7
	Central do.	101·5	72·0	86·8	29·5	43·6	−0·2	−3·9	+3·7
	Upper do.	95·1	70·2	82·7	24·8	41·6	−3·6	−3·3	−0·3
	Arakan	88·3	72·9	80·6	15·4	28·7	−3·5	−3·1	−0·4
Bengal and Assam	Eastern Bengal	87·6	69·0	78·3	18·6	33·7	−4·3	−4·0	−0·3
	Assam (Surma)	86·2	65·8	76·0	20·4	32·6	−2·3	−3·4	+1·1
	Do. (Hills)	69·8	53·5	61·7	16·4	32·2	...	...	...
	Do. (Brahmaputra)	81·2	63·4	72·3	17·8	34·2	−4·3	−5·0	+0·7
	Deltaic Bengal	91·3	72·2	81·8	19·1	36·8	−4·5	−4·0	−0·5
	Central do.	93·4	69·6	81·5	23·8	43·7	−6·1	−4·8	−1·3
	North do.	86·4	64·4	75·4	22·0	41·0	−4·9	−5·4	+0·5
	Bengal Hills	53·9	37·5	45·7	16·4	34·4	−3·4	−5·0	+1·6
	Orissa	91·1	75·6	83·4	15·5	36·4	−4·3	−2·4	−1·9
	Chota Nagpur	94·8	67·7	81·3	27·1	46·5	−6·4	−5·6	−0·8
	Bihar (South)	95·1	68·7	82·0	26·4	45·5	−7·4	−5·8	−1·6
	Do. (North)	91·8	64·4	78·1	27·5	46·8	−5·5	−6·5	+1·0
United Provinces of Agra and Oudh.	United Provinces (East)	96·4	66·6	81·5	29·8	52·5	−7·1	−5·6	−1·5
	Oudh (South)	95·5	65·3	80·4	30·2	51·1	−6·9	−5·6	−1·3
	Do. (North)	90·4?	64·5?	77·1?	25·9	47·1?	−9·2?	−5·2?	−4·0?
	United Provinces (Central)	97·0	67·8	82·4	29·2	52·2	−5·6	−4·1	−1·5
	Do. (West)	94·3	66·2	80·3	28·2	50·8	−6·3	−4·8	−1·5
	Do. (East Submontane).	92·4	64·9	78·7	27·5	48·0	−8·0	−7·5	−0·5
	Do. (West Submontane).	89·6	60·8	75·2	28·8	52·5	−6·4	−5·7	−0·7
	Do. (Hills)	65·5	47·	56·7	17·6	42·3	−6·1	−5·6	−0·5
Punjab	Punjab (South-East)	92·8	69·5	81·2	23·3	48·8	−6·9	−4·0	−2·9
	Do. (South)	92·7	64·1	78·4	28·6	54·9	−6·5	−3·7	−2·8
	Do. (Central)	92·5	63·6	78·0	28·9	59·3	−5·7	−0·7	−5·0
	Do. (Submontane)	89·6	61·0	75·3	28·7	55·6	−5·1	−3·9	−1·2
	Do. (Hills)	56·5	35·7	46·1	20·8	50·0	−7·4	−4·5	−2·9
	Do. (West)	93·4	64·8	79·1	28·6	59·9	−4·8	−3·5	−1·3
N.-W. F. Province	North-west Frontier Province	86·5	59·2	72·8	27·3	59·9	−4·3	−4·3	0
Bombay and Malabar Coast Districts (Madras).	Malabar	88·5	77·3	83·0	11·2	19·6	−1·9	−1·0	−0·9
	Madras (South Central)	98·4	75·5	87·0	22·9	31·7	−0·7	+0·9	−1·6
	Coorg	85·5	61·9	73·7	23·6	32·9	+1·6	−2·3	+3·9
	Mysore	95·1	68·9	82·0	26·2	35·7	+1·6	−0·6	+2·2
	Konkan	85·2	74·7	80·0	10·4	23·2	−4·3	−3·9	−0·4
	Bombay Deccan	99·0	68·3	83·7	30·7	45·6	−1·6	−3·6	+2·0
	Hyderabad (North)	98·1	71·6	84·8	26·5	45·9	...	...	...
	Khandesh	101·0	66·6	83·8	34·4	57·2	−2·2	−5·2	+3·0
Central Provinces and Berar.	Berar	102·3	71·9	87·1	30·4	56·1	−3·3	−3·7	+0·4
	Central Provinces (West)	101·0	70·7	85·9	30·3	55·7	−4·0	−4·4	+0·4
	Do. (Central)	97·3	68·8	83·1	28·5	53·0	−5·5	−4·1	−1·4
	Do. (East)	96·3	70·6	83·5	25·7	48·5	−6·5	−3·9	−2·6
Bombay (North)	Gujarat (East)	100·2	70·2	85·2	29·9	53·8	−3·1	−3·0	−0·1
	Kathiawar and Cutch	94·1	69·5	81·8	24·5	41·7	−3·9	−3·0	−0·9
	Sind	96·4	69·8	83·1	26·7	50·9	−2·0	−1·9	−0·1
	Baluchistan Hills	74·3	45·4	59·8	28·9	58·2	−3·0	−1·8	−1·2
Rajputana and Central India.	Central India (East)	95·8	66·9	81·4	28·9	56	−5·9	−4·1	−1·8
	Rajputana (East), Central India (West)	90·1	68·6	82·4	27·5	54·4	−5·0	−4·1	−0·9
	Do. (West)	98·2	69·5	83·8	28·7	57·0	−5·2	−3·5	−1·7
Madras	East Coast (North)	90·1	77·1	83·6	13·1	24·3	−1·1	−0·9	−0·2
	Hyderabad (South)	100·6	75·4	88·0	25·3	41·3	−1·3	−1·6	+0·3
	Madras (Central)	103·6	77·8	90·7	25·8	42·7	−0·4	−0·8	+0·4
	East Coast (Central)	95·5	77·8	86·7	17·7	29·2	−2·4	+0·4	−2·8
	Do. (South)	93·8	77·6	85·7	16·2	26·5	−1·2	+0·4	−1·6
	Madras (South)	94·7	77·6	86·2	17·0	27·1	−1·4	−0·4	−1·0

The hottest areas were thus Madras Central (90°·7), Hyderabad south (88°·0); Berar (87°·1) and Madras, South-Central (87°·0), while the coolest areas on the plains were North Oudh (77°·1), the west submontane division of the United Provinces (75°·2), the submontane Punjab (75°·3) and the North-west Frontier Province (72°·8). The mean maximum temperature of the month exceeded 100° over Central Burma, Khandesh, Berar, the west of the Central Provinces, East Gujarat, South Hyderabad and Central Madras, where it was highest (103°·6). On the Punjab Hills the mean minimum temperature of the month was only 3°·7 above freezing point.

The mean daily range of temperature was considerably less than usual over the greater part of the country.

The following gives temperature data for the extra-Indian stations for the month of April 1905:—

Station.	Mean temperature.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	°	°	°
Trincomalee	82·5	84·4	−1·9
Colombo	82·3	82·5	−0·2
Kashgar	55·5	60·3	−4·8
Kabul	55·7	58·4	−2·7
Ispahan	60·3	59·4	+0·9
Bushire	74·1	74·1	0
Jask	77·4	80·3	−2·9
Muscat	80·5	83·2	−2·7
Baghdad	71·9	69·3	+2·6
Perim	82·0	82·0	0
Zanzibar	77·9	79·4	−1·5
Seychelles	81·4	80·7	+2·0
Mauritius	75·3	75·3	0

The following summarises the chief abnormal features of the temperature conditions of the month under review:—

(1) The low temperature conditions which appeared over the Indian area about the 20th January and continued till the close of March, were maintained practically undisturbed during April.

(2) The mean maximum temperature was lower than usual, except at a few places in the Peninsula and on the Burma coast.

(3) The deficiency was more than 6° over a considerable part of northern India and at some hill stations.

(4) The mean minimum temperature was higher than usual at some places in Madras and on the Burma coast, but was lower than usual elsewhere. The deficiency was greatest in west Bengal.

(5) The mean temperature was hence below the average except over parts of the south of the Peninsula and of Tenasserim. The deficiency was considerable to large over northern India, both on the hills and plains.

(6) The temperature was thus above the normal, both by day and night, over parts of the south of the Peninsula and of Lower Burma and lower than usual, both by day and night, in all other regions.

The following table gives the mean departure data of the eleven meteorological provinces:—

Meteorological province.	Departure from normal of		
	Mean maximum temperature, April 1905.	Mean minimum temperature, April 1905.	Mean temperature, April 1905.
	°	°	°
Burma Coast and Bay Islands	−0·8	−1·0	−0·9
Burma Inland	−3·3	−3·7	−3·6
Assam	−3·6	−4·5	−4·1
Bengal and Orissa	−4·9	−4·1	−4·5
Gangetic Plain and Chota Nagpur.	−6·7	−5·9	−6·3
Upper Sub-Himalayas	−5·8	−4·3	−5·0
Indus Valley and North-west Rajputana.	−3·9	−3·2	−3·5
East Rajputana, Central India and Gujarat.	−4·7	−3·5	−4·2
Deccan	−3·6	−3·7	−3·7
West Coast	−3·1	−2·5	−2·8
South India	−0·6	−0·2	−0·4

The following gives a brief account of the principal daily changes of temperature:—

During the first four days of the month, there was very little rain anywhere, but the mean temperature was lower than usual, except over parts of Madras. The departures from normal were very large, both by day and night, over north-western and central India and the departures of maximum temperature exceeded 20° at the following places on the following dates:—

Date.	Station.	Departure from normal of	
		Maximum temperature of date.	Minimum temperature of date.
		°	°
1st April	Sirsa	−22·3	−10·5
	Montgomery	−22·2	−11·1
	Leh	−20·7	−17·0
	Chaman	−21·1	−16·4
	Bikaner	−20·7	−16·1
2nd „	Leh	−21·7	−15·8
	Mainpuri	−20·1	−12·7
3rd „	Leh	−22·2	−10·9

On the 5th, a barometric depression appeared over Sind and thence advanced eastward to Bengal, where it disappeared on the 10th. During the existence of this depression scattered showers occurred over a large part of northern India and temperature remained low except over Madras and the Deccan though the depression of temperature over northern India was less than during the preceding four days. As the barometric depression moved eastward a steady rise of temperature occurred in the north-west, and on the 9th the mean temperature of upper Sind slightly exceeded the normal. The following gives data from the 5th to the 10th for northern India ;—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					
	5th April.	6th April.	7th April.	8th April.	9th April.	10th April.
	°	°	°		°	°
Assam	−5·7	−4·2	−4·3	−4·2	−4·1	−5·2
Bengal	−6·9	−6·0	−4·7	−3·6	−4·5	−3·3
Orissa	−2·8	−4·3	−4·1	−5·0	−3·4	−1·0
Bihar	−11·8	−11·0	−7·6	−4·4	−3·2	−5·3
Chota Nagpur	−10·0	−10·0	−6·7	−4·5	−3·1	−4·4
United Provinces	−12·8	−9·6	−5·2	−4·0	−5·8	−5·7
Punjab	−9·0	−6·2	−4·4	−5·6	−4·4	−4·8
N.-W. F. Province	−5·6	−6·5	−5·9	−3·8	−4·2	−3·4
Sind	−3·9	−2·6	−3·2	−1·5	+0·2	−0·6
Rajputana	−9·6	−5·0	−2·9	−5·6	−5·2	−2·1
Gujarat	−4·3	−3·9	−4·0	−4·2	−2·1	−1·8
Central India	−11·4	−8·8	−5·1	−3·[illegible]	−	−4·4
Central Provinces	−9·3	−7·4	−4·5	−4·2	−4·2	−4·0

On the 10th, another barometric depression appeared over Sind and in its turn advanced eastward to Bengal, where it disappeared on the 16th. Showery, cloudy weather accompanied the passage of the depression, so that the sky was cloudy and the mean temperature, though generally lower than usual, departed by small amounts from the normal. The following gives comparative data for all divisions for the seven days 10th to 16th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of						
	10th April.	11th April.	12th April.	13th April.	14th April.	15th April.	16th April.
	°	°	°	°	°	°	°
Burma	−2·5	−1·3	−2·0	−1·6	−3·8	−2·8	−0·9
Assam	−5·2	−2·2	−2·0	−4·2	−6·5	−5·7	−4·4
Bengal	−3·3	−1·8	−2·1	−6·0	−5·0	−4·7	−3·4
Orissa	−1·0	−1·9	−3·7	−6·7	−0·9	−2·1	−2·2
Bihar	−5·3	−3·0	−5·4	−5·2	−5·2	−4·7	−3·6
Chota Nagpur	−4·4	−2·0	−5·2	−10·5	−6·0	−5·2	−4·2
United Provinces	−5·7	−3·6	−4·6	−4·4	−5·6	−5·9	−7·1
Punjab	−4·8	−3·1	−1·3	−3·6	−6·8	−6·0	−4·6
North-west Frontier Province	−3·4	−0·7	−2·7	−4·8	−6·1	−5·4	−2·8
Baluchistan	+1·2	−3·1	−4·7	−5·9	−8·3	−2·4	+1·5
Sind	−0·6	−1·9	−3·1	−2·0	−3·1	−1·2	+0·1
Rajputana	−2·1	−1·6	−2·4	−3·3	−2·8	−4·4	−5·5
Gujarat	−1·8	−2·2	−1·9	−2·6	−3·0	−3·8	−2·6
Central India	−4·4	−0·5	−3·8	−4·2	−4·9	−4·5	−5·2
Central Provinces	−4·0	−2·2	−4·0	−4·2	−4·3	−3·2	−1·7
Berar	−1·3	−2·1	−3·0	−4·5	−3·3	−1·9	−0·5
West Coast	−3·4	−3·4	−2·7	−3·4	−3·0	−3·3	−3·0
Bombay Deccan	−2·6	−2·1	−2·4	−2·7	−3·0	−1·7	−1·2
Mysore	−0·4	+0·1	+0·1	+0·8	+0·7	+0·5	+0·7
Madras Coast	−0·8	−1·5	−1·4	−0·9	−0·6	+0·5	−1·0
Madras Deccan	−0·2	−0·2	−0·8	+0·9	+0·7	+0·3	+0·8
South India	−2·4	−3·9	−2·2	−2·5	−1·2	−0·8	−2·9

On the 19th, a fresh barometric depression appeared over Sind and thence travelled into the Punjab and the United Provinces. Previous to the appearance of the depression temperature had again risen in the north-west and from the 18th to the 21st, the mean temperature was higher than usual over north-west India and a considerable part of Bombay. The following gives comparative data for the north-western and some central divisions and shows the temperature conditions in these regions :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	18th April.	19th April.	20th April.	21st April.
	°	°	°	°
United Provinces	−3·2	−2·2	−0·3	−2·4
Punjab	−0·7	+1·7	+4·4	−2·9
North-west Frontier Province	+1·3	+4·4	+0·8	−2·2
Baluchistan	+3·1	+5·4	+0·1	−8·3
Sind	+0·6	+2·5	+1·2	−1·3
Rajputana	−2·2	−1·2	+4·6	−2·8
Gujarat	+0·8	+0·6	−2·0	−2·0
Central India	−3·4	−1·5	+0·3	−1·1
Berar	+0·6	−1·4	−1·2	−1·6

On the 22nd and 23rd the departures of the mean temperature from the normal were irregular and unimportant, but between the 24th and 27th, the earlier distribution was re-established and the mean temperature became relatively high over Madras and Burma and low elsewhere. The following gives comparative data for all divisions for these four days:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	24th April.	25th April.	26th April.	27th April.
	°	°	°	°
Burma	+1·1	+0·2	+0·4	+0·1
Assam	−2·5	−5·8	−4·6	−6·8
Bengal	−5·0	−4·5	−3·0	−9·2
Orissa	−3·7	−2·1	−3·7	−7·9
Bihar	−8·4	−7·7	−5·0	−8·4
Chota Nagpur	−6·2	−6·1	−8·1	−11·7
United Provinces	−7·5	−5·9	−10·0	−5·5
Punjab	−4·0	−3·5	−2·9	−3·7
N.-W. Frontier Province	−3·3	−8·2	−4·6	−5·8
Baluchistan	+0·5	−0·7	−1·7	+0·5
Sind	−1·3	−0·8	−1·5	+0·1
Rajputana	−4·2	−0·8	−5·8	+0·3
Gujarat	−3·1	−2·2	−3·9	−2·3
Central India	−3·6	−0·9	−9·7	−3·9
Central Provinces	−4·8	−2·1	−5·1	−6·0
Berar	−2·9	−3·4	−2·9	−4·0
West Coast	−2·2	−2·2	−2·2	−1·8
Bombay Deccan	−1·3	−0·8	−1·4	−0·4
Mysore	+2·5	+3·2	+2·5	+1·3
Madras Coast	−1·7	−1·5	−0·9	−0·8
Madras Deccan	+0·4	−0·3	+0·2	−0·8
South India	+0·8	+0·2	+0·5	+0·8

Between the 27th and the end of the month rain ceased over north-west India while it continued in the north-east with the result that a considerable increase of temperature occurred in the north-west while in the north-east and more particularly in Bengal it remained low. The following gives data for all divisions for these four days:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	27th April.	28th April.	29th April.	30th April.
	°	°	°	°
Burma	+0·1	−2·4	+0·3	+0·7
Assam	−6·8	−5·9	−4·1	−1·9
Bengal	−9·2	−8·3	−8·4	−4·0
Orissa	−7·9	−3·4	−2·3	−0·8
Bihar	−8·4	−14·1	−8·3	−4·6
Chota Nagpur	−11·7	−7·4	−4·7	−2·2
United Provinces	−5·	−5·4	−4·0	−1·3
Punjab	−3·7	−1·4	+3·1	+4·7
N.-W. Frontier Province	−5·8	−1·2	+3·7	+4·0
Baluchistan	+0·5	+4·9	+4·6	+3·8
Sind	+0·1	−0·1	+0·6	+0·6
Rajputana	+0·3	+1·3	+3·5	+1·6
Gujarat	−2·3	−0·9	−2·5	−3·3
Central India	−3·9	−1·2	+0·5	+0·7
Central Provinces	−6·0	−1·3	−0·2	+1·1
Berar	−4·0	−0·5	+1·1	+1·4
West Coast	−1·8	−1·7	−1·9	−1·9
Bombay Deccan	−0·4	−0·5	−0·1	−0·3
Mysore	+1·3	−0·4	+0·2	+1
Madras Coast	−0·8	−0·7	−0·1	+0·3
Madras Deccan	−0·8	−2·8	−0·6	+0·6
South India	+0·8	+0·8	−1·1	+0·1

Although the depression of temperature at this time in the north-east was strongly marked both by day and might the deficiency was greater by day than by night and at the following places on the following dates the departure from normal was more than 15°:—

Date.	Station.	Departure from normal of	
		Maximum temperature of date.	Minimum temperature of date.
		°	°
27th April	Bogra	−18·3	− 6·5
	Chaibassa	−18·3	− 6·6
	Berhampore	−16·9	− 7·5
	Dinajpur	−16·6	− 7·2
	Burdwan	−15·4	− 7·2
28th „	Purnea	−23·5	−10·8
	Darbhanga	−19·9	− 9·2
	Patna	−19·0	−10·7
	Gorakhpur	−17·6	− 8·8
	Dinajpur	−16·9	− 9·7
29th „	Bogra	−18·7	− 7·6
	Berhampore	−15·7	− 8·1
	Mymensingh	−15·2	− 7·1

Winds.

The wind directions varied irregularly from the normal at the stations in the Bay Islands and Burma. Thus at Port Blair and Diamond Island the direction was more northerly than the average, at Rangoon it was about normal and at Akyab was unusually southerly. This is shown below:—

STATION.	MEAN WIND DIRECTION.	
	Actual, April 1905.	Normal, April.
	°	°
Port Blair	N 56 E	N 89 E
Diamond Island	N 48 W	N 63 W
Rangoon	S 30 W	S 24 W
Akyab	S 20 W	S 66 W

At Port Blair and Diamond Island, where the wind was unusually northerly, both the steadiness and velocity exceeded the average, while at Rangoon and Akyab the wind was very unsteady and the velocity low.

Around the head of the Bay the mean wind directions were slightly more southerly than usual, and both the steadiness and velocity were somewhat less than the average.

In the Gangetic Plain wind conditions were about the average. The following gives data for Allahabad in illustration.

STATION.	MEAN STEADINESS.			MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, April 1905.	Normal percentage, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
				°	°			
Allahabad . .	45	35	+10	N 52 W	N 54 W	100	127	—27

At Dehra Dun the mean wind was more southerly and at Roorkee more northerly than the average, the velocity having been approximately normal. Further to the westward at Meerut, Lahore and Ludhiana the mean wind was unusually westerly and unusually light. This is shown below:—

STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, April 1905.	Normal, April.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	°	°			
Meerut . . .	N 69 W	N 63 W	27	60	—33
Lahore . . .	N 40 W	N 15 W	62	77	—15
Ludhiana . . .	N 77 W	N 48 W	26	58	—32

At Kurrachee the mean wind conditions were about normal while in the upper Indus Valley the departures from the average were irregular. At Jaipur the mean wind was slightly more southerly and at Deesa slightly more northerly than the average but the departures were unimportant.

The following gives mean comparative data of the air movement for the different divisions of northern India and for Burma and the Bay Islands:—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, April 1905.	Normal percentage, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal.
Bay Islands . .	75	51	+24	124	115	+ 9
Burma . . .	43	54	—11	148	143	+ 5
Bengal . . .	58	63	— 5	226	255	—29
Chota Nagpur . .	45	46	— 1	189	214	—25
Orissa . . .	72	80	— 8	281	331	—50
United Provinces of Agra and Oudh.	35		+ 3	66	80	—14
Punjab . . .	43	29	+14	44	68	—24
North-west Frontier Province . . .	35	25	+10	44	96	—52
Rajputana . . .	45	53	— 8	165	169	— 4
Sind . . .	48	47	+ 1	216	209	+ 7

The above shows that accompanying the higher pressures and slighter barometric gradients than usual, the velocity of the winds over northern India was less than usual though the steadiness was approximately average in most divisions.

In the west Deccan the winds were approximately normal, but at Nagpur and Hyderabad unusual south-

south-east winds were experienced. The following gives data for these two stations:—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, April 1905.	Normal percentage, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
				°	°			
Nagpur . .	13	22	— 9	S 14 E	N 66 W	134	144	—10
Hyderabad (Dn.) .	25	5	+20	S 38 E	S 9 W	97	108	—11

Along the West Coast the winds were also approximately normal in direction and were steadier than usual.

In South India the departures of the mean winds from the normal were irregular. At Madras, Bangalore and Salem south-easterly and east-south-easterly winds were reported, while elsewhere the directions varied between north-east and north-west.

The following gives mean comparative data of the air movement for the different divisions of the Peninsula:—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, April 1905.	Normal percentage, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
Central Provinces . .	13	22	— 9	134	144	—10
Berar	49	57	— 8	174	179	— 5
Bombay Deccan . .	57	24	+33	275	263	+12
Madras Deccan . .	28	8	+20	121	130	— 9
West Coast . . .	82	67	+15	172	185	—13
Mysore . .	19	19	0	135	137	— 2
Madras Coast . .	85	83	+ 2	171	182	—11
South India . . .	35	28	+ 7	138	110	+28

The preceding data show that in the Peninsula also the velocity of the wind was generally below the normal, the steadiness being above the average.

At the northern hill stations the winds varied irregularly from the normal, but the departures were generally small and unimportant. At the central hill stations the mean directions varied between north-west and west-south-west and at the southern stations between north-east and east-north-east.

At Perim the mean wind was more southerly than the average and was steadier than usual. This is shown below:—

Station.	Mean steadiness.			Mean wind direction.	
	Actual percentage, April, 1905.	Normal percentage, April.	Departure from normal, April, 1905.	Actual, April, 1905.	Normal April.
				°	°
Perim	87	63	+24	S 23° E	S 88° E

In the South-east Trades region the winds were irregular. At Mauritius both the mean wind direction and the velocity were normal; at Zanzibar the wind was unsteady and slightly more easterly than the average, while at the Seychelles there was a moderately steady north-by-west wind instead of the normal unsteady east-south-east wind. The following gives data:—

Station.	Mean steadiness.			Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual percentage, April 1905.	Normal percentage, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
				°	°			
Zanzibar . .	70	81	—11	S 19 E	S 5 E	180	170	+10
Seychelles . .	33	6	+27	N 14 W	S 63 E	124	?	?
Mauritius . .	...	...	...	S 70 E	S 70 E	256	252	+ 4

The following summarises the departures of the wind from the normal:—

(1) Owing to the high barometric pressure in the north-east the wind was more northerly than usual over the east of the Bay.

(2) The wind was slightly more southerly than the average at the head of the Bay.

(3) The mean winds were about normal over the Gangetic Plain, but were more westerly and lighter than usual in north-west India.

(4) The winds were approximately normal over the Peninsula.

(5) At Mauritius the mean wind was exactly normal but at Zanzibar the direction was more easterly than the average while at the Seychelles it was N 14° W instead of S 63°.

Humidity and Cloud.

The departures of absolute humidity from the normal showed that during April 1905, the air was drier than usual over by far the greater part of the country. There were, however, certain areas where the air was damper than the average. At the foot of the central Himalayas this was the case and from this region two arms extended southward one over the region represented by the stations of Mainpuri, Jhansi, Hoshangabad and Khandwa and the other by Benares, Allahabad, Raichur and Masulipatam where the mean vapour tension exceeded the normal. The mean absolute humidity also exceeded the normal over the interior of the south of the Peninsula. In all other parts of the country the mean absolute humidity was lower than usual, and over the west of the Peninsula and over large areas in north-west and noth-east India and Burma, the deficiency was considerable to large. The departures of the mean absolute humidity are shown in the chart on Pl. V.

Owing to the low temperature prevailing the departures of mean relative humidity from the normal differed considerably from those of absolute humidity.

Over Burma and the delta of Bengal where the air was much drier than the normal, but the mean temperature in considerable defect, the mean relative humidity was in only slight defect and in some places in slight excess. The following gives data for those stations at which the mean relative humidity was in defect by 5 or more:—

	Station.	Absolute humidity.			Relative humidity.		
		Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
		"	"	"	%	%	
Burma.	Minbu	·539	·677	—·138	51	60	— 9
	Moulmein	·808	·861	—·053	71	79	— 8
	Bassein	·821	·870	—·049	73	79	— 6
	Yamethin	·650	·742	—·092	59	65	— 6
	Mandalay	·556	·710	—·154	53	59	— 6
	Toungoo	·805	·848	—·043	68	73	— 5
Bengal.	Dinajpur	·550	·679	—·129	65	72	— 7
	Berhampore	·651	·787	—·136	70	76	— 6

In north-west India where the actual humidity, on the mean of the month, was practically everywhere in defect, the departures of relative humidity, were generally small and rather irregular. At the following places the departures were 5 or more in amount :—

Station.	Absolute humidity.			Relative humidity.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	"		"	%	%	
Montgomery	·283	·413	—·130	30	38	—8
Multan	·377	·471	—·094	42	48	—6

Over the greater part of the Central India plateau the actual humidity was generally in considerable defect and at several stations in this division the mean relative humidity was in defect by 5 or more. The following gives data :—

Station.	Absolute humidity.			Relative humidity.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	"	"	"	%	%	
Neemuch	·267	·422	—·155	27	35	—8
Indore	·344	·458	—·114	32	39	—7
Amraoti	·338	·443	—·105	28	35	—7
Saugor	·253	·351	—·098	24	30	—6
Seoni	·356	·444	—·088	34	39	—5

Over the whole of the west of the Peninsula the absolute humidity was lower than usual, but owing to the temperature conditions the mean relative humidity was higher than usual over the northern half of this region though it was

below the normal in the south. At the following places the deficiency was 5 or more :—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	"	"	"	%	%	
Belgaum	·378	·564	—·186	41	62	—21
Hassan	·548	·635	—·087	59	73	—14
Chitaldroog	·539	·628	—·089	52	63	—11
Raichur	·548	·635	—·087	45	53	—8
Bijapur	·566	·658?	—·092?	52	60?	—8?
Sholapur	·387	·472	—·085	34	39	—5
Mangalore	·776	·863	—·087	71	76	—5

Over the interior of the south of the Peninsula both the absolute and relative humidities were in excess while along the east coast both were in defect. At the following stations the departures were 5 or more:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	"	"	"	%	%	
Kurnool	·739	·666	+·073	60	54	+ 6
Trichinopoly	·834	·804	+·030	73	68?	+ 5?
Cuddalore	·905	·967?	—·062?	75	81	— 6
Gopalpur	·821	·884	—·063	77	82	— 5

Within the area of high absolute humidity described above and its connected arms, the mean relative humidity, owing to the low temperature prevailing, was in large excess, the departures from normal having been 5 or more at the following places:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	"	"	"	%	%	
Darbhanga	·700	·623	+·077	83	63	+20
Jhansi	·524	·364	+·160	47	28	+19
Bahraich	·592	·553	+·039	68	51	+17
Bareilly	·491	·445	+·046	56	45	+11
Raipur	·499	·456	+·043	47	37	+10
Khandwa	·405	·360?	+·045?	39	30	+ 9
Mainpuri	·429	·400	+·029	46	37	+ 9
Gorakhpur	·572	·534	+·038	60	51	+ 9
Sirsa	·396	·392	+·004	47	39	+ 8
Chaibassa	·597	·655	—·058	63	55	+ 8
Burdwan	·710	·764	—·054	77	70	+ 7
Hazaribagh	·371	·390	—·019	43	36	+ 7
Allahabad	·438	·424	+·014	44	36	+ 8
Gaya	·567	·598	—·031	57	51	+ 6
Bhuj	·579	·610	—·031	61	55	+ 6
Hoshangabad	·464	·446	+·018	44	38	+ 6
Veraval	·698	·724	—·026	77	72	+ 5
Benares	·543	·494	+·049	53	48	+ 5

The air was much drier at the hill stations than the average, so that notwithstanding the low temperatures prevailing the mean relative humidity was also generally in defect. This is shown below :—

HILL STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, April 1905.	Normal April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	"	"	"	%	%	
Darjeeling	·262	·349	—·087	70	81	—11
Chaman	·250	·308	—·058	43	53	—10
Quetta	·228	·282	—·054	44	52	— 8
Mount Abu	·197	·264	—·067	24	29	— 5
Pachmarhi	·237	·305	—·068	27	29	— 2
Simla	·159	·197	—·038	39	40	— 1
Murree	·192	·225	—·033	45	46	— 1
Wellington	·454	·417	+·037	71	63	+ 8
Chakrata	·191	·210	—·019	48	43	+ 5
Ranikhet	·249	·278	—·029	51	48	+ 3
Cherat	·270	·277	—·007	51	48	+ 3
Gilgit	·223	·244	—·021	52	50	+ 2
Leh	·092	·110	—·018	48	48	0
Srinagar	·289	·333	—·044	84	84	0
Lashio	·476	·511	—·035	70	70	0

The following gives the highest (above 85%) and lowest (below 30%) mean humidities and shows the dampest and driest areas on the mean of the month:—

Station.	Relative humidity above 85%, April 1905.	Station.	Relative humidity below 30%, April 1905.
	%		%
Sibsagar	91	Amraoti	28
Sirajganj	91	Jodhpur	27
Dibrugarh	87	Malegaon	25
Dwarka	87	Saugor	24
		Aurangabad	23
		Kotah	22
		Neemuch	22

At Perim where the wind was unusually southerly, both the absolute and relative humidities were below the normal. The following gives data:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April, 1905.	Normal, April.	Departure from normal, April 1905.
	"	"	"	%	%	
Perim	·748	·873	—·125	66	78	—12

In the south-east Trades region the humidity conditions were about normal, as is shown below:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
	"	"	"	%	%	
Seychelles	·857	·863	—·006	77	80	— 3
Mauritius	·710	·704	+·006	81	81	0

The following summarises the mean humidity conditions of the month:—

(1) The absolute humidity was less than usual over the greater part of the country.

(2) There was, however, some excess over parts of the Gangetic Plain and neighbouring districts, as well as over the interior of the south of the Peninsula.

(3) The mean relative humidity was in excess over the Gangetic Plain, west Bengal, the north and centre of the Peninsula and part of north-west India and was generally in defect elsewhere.

(4) The departures from normal were not generally large except in parts of northern and north-eastern India.

(5) At most of the hill stations the departures were small.

The following table gives departure data of the mean aqueous vapour pressure, and of mean humidity of the nine meteorological provinces for the month of April 1905:—

Meteorological Province.	Mean absolute humidity.		Mean relative Humidity.	
	Average actual, April 1905.	Departure from normal, April 1905.	Average actual, April 1905.	Departure from normal, April 1905.
	"	"	%	
Burma Coast and Bay Islands.	·837	—·042	73	—3
Bengal and Orissa	·806	—·065	79	+1
Gangetic Plain and Chota Nagpur.	·390	+·039	39	+9
Upper Sub-Himalayas	·328	—·040	40	+1
Indus Valley and north-west Rajputana.	·512	—·018	54	—1
East Rajputana, Central India and Gujarat.	·292	—·045	27	—1
Deccan	·399	—·028	36	—1
West Coast	·756	—·093	76	—1
South India	·647	—·012	58	—1

The cloud amount, on the mean of the month, exceeded the normal within an area which extended eastward from the Sind and Kathiawar coasts as far as Mainpuri, Cawnpore and Sutna. The excess was generally small, but was more than 1·0 at the following places:—

Station.	Mean cloud amount.		
	Actual, April 1905.	Normal, April.	Departure from normal, April 1905.
Kurrachee	4·5	2·2	+2·3
Sutna	2·6	1·0	+1·6
Mainpuri	2·5	1·4	+1·1

Cloud was also in excess (1) over west and south-west Bengal and the east of the Peninsula (2) over Assam and part of East Bengal (3) over Central Burma and (4), at one or two places in the west of the Peninsula. At the

following places in these areas the excess was 1·0 or more :—

Area.	Station.	Mean cloud amount. Actual, April 1905.	Normal April.	Departure from normal, April 1905.
First area	Masulipatam	5·9	4·0	+1·9
	Waltair	5·5	3·7	+1·8
	Burdwan	4·8	3·3	+1·5
	Salem	4·9	3·5	+1·4
	Cuddalore	5·8	4·4	+1·4
	Colombo	6·3	4·9	+1·4
	Negapatam	5·8	4·5	+1·3
Second „	Sibsagar	8·2	6·9	+1·3
	Mymensingh	6·4	5·3	+1·1
Third „	Yamethin	3·9	1·0	+2·9

In all other parts of the country and particularly over north-west India, over the Central Provinces and the west of the Peninsula, over Central Bengal and over the Burma coast districts, the sky was clearer than usual on the mean of the month. The deficiency equalled 1·5 or more at the following places :—

Area.	Station.	Mean cloud amount. Actual April 1905.	Normal April.	Departure from normal, April 1905.
North-West India.	Ludhiana	1·1	2·7	—1·6
	Sirsa	1·3	2·9	—1·6
Central Provinces.	Amraoti	0·6	2·1	—1·5
West of the Peninsula.	Gulbarga	0·2	2·5	—2·3
	Malegaon	0	2·0	—2·0
	Mercara	2·2	4·2	—2·0
	Poona	0·1	1·9	—1·8
	Ratnagiri	1·3	3·0	—1·7
	Karwar	1·6	3·3	—1·7
	Chitaldroog	1·4	2·9	—1·5
Bengal	Purnea	0·7	2·6	—1·9
	Barisal	3·3	4·9	—1·6
Cachar	Silchar	3·8	6·1	—2·3
Burma Coast.	Tavoy	0·1	4·3	—4·2
	Akyab	2·2	4·5	—2·3
	Bassein	1·3	3·5	—2·2
	Moulmein	2·1	4·0	—1·9
	Mergui	2·9	4·6	—1·7

At the following stations the mean cloud amount was more than 5·5 or less than 0·5, and these stations hence outline the areas of least and greatest serenity on the mean of the month :—

Station.	Mean cloud amount over 5·5.	Station.	Mean cloud amount less than 0·5.
Sibsagar	8·2	Arrah	0·4
Dibrugarh	6·7	Ahmednagar	0·4
Mymensingh	6·4	Khandwa	0·4
Narayanganj	6·1	Bharatpur	0·3
Masulipatam	5·9	Aurangabad	0·2
Cuddalore	5·8	Gulbarga	0·2
Negapatam	5·8	Tavoy	0·1
Tezpur	5·7	Poona	0·1
		Malegaon	0

At Perim the sky on the mean of the month, was clearer than usual but by small amounts. This is shown below :—

Station.	Mean cloud amount. Actual, April 1905.	Normal, April.	Departure from normal, April. 1905.
Perim	0·9	1·7	— 0·8

In the south-east Trades region, on the contrary, the sky was slightly more cloudy than usual on the mean of the month. The following gives data for the stations :—

Station.	Mean cloud amount. Actual, April, 1905.	Normal, April.	Departure from normal, April 1905.
Seychelles	5·7	5·1	+0·6
Mauritius	6·2	5·7	+0·5

The following summarises the cloud departures of the month :—

(1) The mean cloud amount of the month was greater than usual, (1) over the Sind and Kathiawar coasts, and part of Central India, (2) over the east of the Peninsula and south-west and west Bengal, (3) over Assam and part of East Bengal, and (4) over Central Burma.

(2) The excess was generally unimportant except at Kurrachee (+2·3) and Yamethin (+2·9).

(3) In other parts of the country the sky was clearer than the average.

(4) The deficiency was considerable at some stations in the west of the Peninsula, and around the head of the Bay, but was greatest in Tenasserim (Tavoy —4·2).

The following table gives departure data of the mean cloud amount of the nine meteorological provinces of India for the month of April 1905.

Meteorological Province.	Mean cloud amount.	
	Average actual, April 1905.	Departure from normal, April 1905.
Burma Coast and Bay Islands	3·0	—0·6
Bengal and Orissa	4·3	+0·5
Gangetic Plain and Chota Nagpur	2·3	—0·1
Upper Sub-Himalayas	1·7	—0·8
Indus valley and North-west Rajputana	2·5	—0·3
East Rajputana, Central India and Gujarat	1·7	—0·4
Deccan	2·4	—0·5
West Coast	1·2	—0·9
South India	4·4	0

Rainfall.

Frequent thunderstorms and showers rendered the weather more disturbed and the rainfall heavier than usual over a large part of Bengal, the east of the United and Central Provinces and the east and south of the Peninsula while on either side of this band, *viz.*, over western India on the one hand and Burma on the other, the weather was quieter and less showery than the average.

The following were the principal periods of rainfall:—

The 5th to the 11th when showers fell over north-east India and the south of the Peninsula.

The 13th to the 19th when showers extended from north-west to north-east India, and also occurred over the south of the Peninsula.

The 20th to the 25th when rain fell in north-west and north-east India.

The 27th to the 30th when rain fell in the north-east.

The following table gives the mean actual, mean normal and departure data for the 57 meteorological divisions :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, April, 1905.	Average normal, April.	Average actual, April, 1905.	Average normal, April.	Departure from normal, April, 1905.
				Inches.	Inches.	Inches.
Burma	Tenasserim	0·4	5·0	0·17	4·00	—3·83
	Lower Burma (Deltaic)	0·1	2·5	0·05	1·79	—1·74
	Central do.	0·2	1·7	0·08	0·95	—0·87
	Upper do.	0·9	2·2	0·30	1·14	—0·84
	Arakan	1·8	1·7	1·22	1·44	—0·22
Bengal and Assam	Eastern Bengal	10·3	5·2	6·97	4·45	+2·52
	Assam (Surma)	14·6	12·1	10·45	13·08	—2·63
	Do. (Hills)	11·6	9·0	6·58	8·01	—1·43
	Do. (Brahmaputra)	12·4	11·5	8·24	8·14	+0·10
	Deltaic Bengal	6·9	3·5	4·77	2·31	+2·46
	Central do.	3·6	2·4	2·27	1·40	+0·87
	North do.	6·9	5·1	3·98	3·97	+0·01
	Bengal Hills	8·6	8·4	3·77	4·32	—0·55
	Orissa	3·7	2·2	1·95	1·26	+0·69
	Chota Nagpur	3·2	1·7	1·47	0·87	+0·60
	Bihar (South)	1·5	0·7	0·53	0·29	+0·24
	Do. (North)	2·6	1·3	1·23	0·81	+0·45
United Provinces of Agra and Oudh.	United Provinces (East)	0·5	0·3	0·17	0·13	+0·04
	Oudh (South)	0·1	0·3	0·05	0·10	—0·05
	Do. (North)	1·0	0·4	0·28	0·17	+0·11
	United Provinces (Central)	0·4	0·3	0·11	0·09	+0·02
	Do. do. (West)	0·5	0·5	0·13	0·16	—0·03
	Do. do. (East Submontane)	0·9	0·5	0·26	0·25	+0·01
	Do. do. (West do.)	0·6	0·8	0·22	0·33	—0·11
	Do. do. (Hills)	2·3	2·5	0·72	1·06	—0·34

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, April, 1905.	Average normal, April.	Average actual, April, 1905.	Average normal, April.	Departure from normal, April, 1905.
				Inches.	Inches.	Inches.
Punjab	Punjab (South-East)	0·3	0·5	0·11	0·19	−0·08
	Do. (South)	0	0·5	0·01	0·22	−0·21
	Do. (Central)	0·2	1·2	0·19	0·51	−0·32
	Do. (Submontane)	0·3	1·6	0·13	0·74	−0·61
	Do. (Hills)	3·1	3·3	0·95	1·91	−0·96
	Do. (West)	0·2	0·9	0·08	0·37	−0·29
North-west Frontier Province.	North-west Frontier Province	1·9	3·0	0·56	1·48	−0·92
Bombay and Malabar Coast Districts (Madras).	Malabar	1·0	4·8	0·71	3·35	−2·64
	Travancore	9·3	...	7·04	...	...
	Madras (South Central)	3·9	2·8	1·96	1·71	+0·25
	Coorg	1·9	...	0·95	...	...
	Mysore	1·7	2·4	0·95	1·20	−0·25
	Konkan	0·2	0·8	0·10	0·45	−0·35
	Bombay Deccan	0·8	2·3	0·36	1·13	−0·77
	Hyderabad (North)	1·5	1·3	0·72	0·48	+0·24
	Khandesh	0	0·3	0	0·13	−0·13
Central Provinces and Berar.	Berar	0·2	0·6	0·09	0·24	−0·15
	Central Provinces (West)	0·6	0·6	0·24	0·24	0
	Do. (Central)	1·8	0·8	0·76	0·30	+0·46
	Do. (East)	2·8	1·2	1·04	0·49	+0·55
Bombay (North)	Gujarat East	0·1	0·1	0·02	0·02	0
	Kathiawar and Cutch	0·1	0·1	0·03	0·03	0
	Sind	0·4	0·3	0·15	0·13	+0·02
	Baluchistan Hills	0·8	1·3	0·20	0·50	−0·30
Rajputana and Central India.	Central India (East)	0·3	0·2	0·12	0·07	+0·05
	Rajputana (East), Central India (West)	0·3	0·3	0·07	0·11	−0·04
	Do. (West)	0·2	0·2	0·06	0·06	0
Madras	East Coast (North)	3·1	1·6	1·85	0·85	+1·00
	Hyderabad (South)	1·9	1·6	0·75	0·67	+0·08
	Madras (Central)	1·4	1·3	0·53	0·61	−0·08
	East Coast (Central)	0·6	0·8	0·23	0·41	−0·18
	East Coast (South)	2·9	1·4	1·75	0·92	+0·83
	Madras (South)	6·4	3·5	3·89	2·22	+1·67

The preceding data show that the total rainfall of the month was actually or practically *nil* (*i.e.*, was less than one-tenth of an inch) over Deltaic and Central Burma, South Oudh, the South Punjab, the West Punjab, Khandesh, Berar, Gujarat East, Kathiawar, Rajputana and the west of Central India. From these areas the rainfall increased and the average actual fall measured 10·45″ in the Surma Valley of Assam, 8·24″ in the Brahmaputra Valley, 7·04″ in Travancore and 7·01″ in East Bengal.

The total rainfall was in excess of the normal in seventeen divisions, normal in fourteen divisions and in defect in twenty-five divisions. The total rainfall was more than 100% in excess of the normal in the following divisions:—

Division.	Rainfall.			
	Average actual, April 1905.	Average normal, April.	Departure from normal, April 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Deltaic Bengal	4·77	2·31	+2·46	+107
Central Provinces, Central	0·76	0·30	+0·46	+153
„ „ East	1·04	0·49	+0·55	+112
East Coast, North	1·85	0·85	+1·00	+118

It was more than 90 per cent. in defect of the normal in the following divisions:—

Division.	Rainfall.			
	Average actual, April 1905.	Average normal, April.	Departure from normal, April 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Tenasserim	0·17	4·00	−3·83	− 96
Lower Burma Deltaic	0·05	1·79	−1·74	− 97
Central, Burma	0·08	0·95	−0·87	− 92
South Punjab	0·01	0·22	−0·21	− 95
Khandesh	0	0·13	−0·13	−100

The departure from normal of the rainfall of the whole country (excluding the hill divisions) calculated from the fifth figure column of the table on pp. 120 and 121 was — 0·08″.

Scattered showers only were received over Burma during the month. They occurred over a considerable part of the country on the 1st, and in several districts of Upper Burma between the 9th and 15th, and the 24th and 29th. In Arakan the showers occurred between the 12th and 15th, and the 25th and 28th. There were no heavy falls and except in Arakan, where it was normal, the month's fall was considerably less than usual.

In the Surma Valley of Assam showery weather commenced on the 5th, and with a few interruptions continued till the close of the month. The total rainfall of the month was nearly normal (10·45″ instead of 13·08″) and the heaviest falls, exceeding 3·50″ in 24 hours were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Cachar	Kukicherra	10th April	3·76
Sylhet	Dullabcherra	" "	3·72
Cachar	Koyah	" "	3·62
Sylhet	Adamtila	" "	3·55

In the Brahmaputra Valley the rainfall was somewhat less continuous than in the Surma Valley. The chief showery periods were the 9th and 10th, the 13th to 15th, the 18th and 19th, and the 21st to the 28th. The month's rainfall was about normal and the following were the falls exceeding 3″ in 24 hours, recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Darrang	Behali	21st April	3·07
	Kerkeriya	22nd "	5·95
	Majleat	" "	3·05
Nowgong	Kuturi	26th "	3·96
Goalpara	Damra	27th "	3·50

The average actual rainfall on the hills was lighter than on the plains and was slightly less than usual. At Cherrapoonjee the total rainfall of the month was only 14·56″ instead of the normal 32·24″ and the only heavy fall reported was 4·91″ on the 13th.

The month's rainfall was normal in North Bengal and in the Bengal Hills, but was heavier than usual in other parts of the province and in Bihar. Rain fell generally on the 8th and 9th, the 12th to the 15th, and the 22nd to the 29th, and was, on the whole, heaviest during the second rainfall period. The following gives the amounts exceeding 2·50″ in 24 hours recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Puri	Bhanpur	13th April	2·86
Hooghly	Serampore	" "	2·53
Noakhali	Hatya	15th "	3·71
	Harishpur	" "	3·60
Balasore	Baliapal	" "	3·07
24-Parganas	Canning Town	23rd "	2·82
Jalpaiguri	Bhagatpur	26th "	3·00
Dacca	Munshiganj	" "	2·98
Murshidabad	Kandi	28th "	3·23
Tippera	Kaslea	" "	2·58

The rainfall of the month, both actually and relatively to the normal, was heaviest in Deltaic Bengal, and the following

gives comparative data of the districts contained in this division :—

Division.	District.	Rainfall. Average actual, April 1905.	Average normal, April.	Departure from normal, April 1905.	Percentage departure from normal.
		Inches.	Inches.	Inches.	
Deltaic Bengal.	Midnapore	3·10	1·54	+1·56	+101
	Hooghly	5·00	2·07	+2·93	+142
	Howrah	4·11	1·64	+2·47	+151
	24-Parganas	5·21	1·73	+3·48	+201
	Nadia	4·77	2·82	+1·95	+ 69
	Jessore	4·80	3·30	+1·50	+ 45
	Khulna	5·76	2·61	+3·15	+121
	Faridpur	6·86	3·89	+2·97	+ 76

The rainfall over the United Provinces was, as usual, light during April, but in several divisions it slightly exceeded the small normal amount. The rain fell during thunderstorms and the showers generally occurred on the 7th and 8th, 12th and 13th and the 22nd to 27th. There were no large amounts recorded during the month.

Except on the hills, the weather was fine over the Punjab during the first half of the month, but during the second half it became feebly disturbed and showery over the sub-montane and north-west divisions. The average actual rainfall was less than the small normal fall in all divisions and in the south and west divisions there was practically no rain throughout the month.

In the North-west Frontier Province, showers occurred on the 6th and 7th, the 11th and 12th, the 20th and 21st and the 26th and the 30th. Except on the hills, however, there were no heavy falls and the total amount for the month was little more than one-third of the normal. The following were the falls exceeding 1·00″ in 24 hours :—

District.	Station	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Peshawar	Landi Kotal	21st April 1905.	2·25
Hazara	Dunga Gali	,, ,,	1·19
Peshawar	Malakand	,, ,,	1·07

Baluchistan received showers on the 5th and 6th, the 10th to 12th, the 19th and 20th, the 23rd and 24th and the 29th and 30th. The amounts were, however, small and the total rainfall, as was the case in the North-west Frontier Province, was only a little more than one-third of the normal amount.

In Kashmir the weather was showery—more particularly during the second half of the month—but the rainfall was not heavy and, so far as can be judged, the total fall was less than the usual amount.

In Rajputana a few light showers occurred between the 20th and the 25th. The rainfall was, except in Dholpur, Jhalawar and Karauli, even lighter than usual, as is shown by the following data for some of the larger states :—

State.	Rainfall. Average actual, April 1905.	Average. normal, April.	Departure. from normal, April 1905.	Percentage departure from normal.
	Inch.	Inch.	Inch.	
Jaisalmer	0	0·09	—0·09	—100
Jodhpur	0·06	0·06	0	0
Bikaner	0·09	0·14	—0·05	—36
Jaipur	0·08	0·10	—0·02	—20
Alwar	0·05	0·10	—0·05	—50
Bharatpur	0·02	0·15	—0·13	—87
Dholpur	0·33	0·01	+0·32	+3200
Karauli	0·13	0·08	+0·05	+63
Kotah	0·08	0·12	—0·04	—33
Jhalawar	0·28	0·05	+0·23	+460
Ajmer-Merwara	0·03	0·15	—0·12	—80
Udaipur	0	0·11	—0·11	—100

In Central India, there were two showery periods, *viz.*, between the 11th and 13th, and the 21st and 24th, and the small normal fall was exceeded in Rewah and Bundelkhand. This is shown below :—

State.	Rainfall. Average actual, April 1905.	Average normal, April.	Departure from normal, April 1905.	Precentage departure from normal.
	Inch.	Inch.	Inch.	
Bhopal Agency	0·01	0·05	—0·04	—80
Gwalior	0·03	0·43	—0·40	—93
Rewah	0·38	0·16	+0·22	+138
Bundelkhand	0·22	0·09	+0·13	+144

Very little rain fell over the Bombay Presidency during April. On the Konkan coast there were showers on the 18th, 19th, 20th and 29th, but the total fall was small and less than one quarter of the average. In the Karnatak

there occurred general showers on the 19th and scattered showers between the 28th and 30th, but the amounts were generally small and the total for the month was below the normal. In the South Deccan a few showers occurred between the 17th and 19th, but the remainder of the month was rainless. In Khandesh there was no rain and in Gujarat and Sind a few light showers fell between the 21st and 24th.

Scattered showers occurred throughout the month in the Central Provinces, the rainfall amount for the month increasing steadily from west to east. Thus in Berar the total for the month was considerably less than usual, in the west division it was exactly normal and in the central and east divisions it was largely in excess of the average.

In the Nizam's Territory the weather was fine during the first half of the month, but became showery after the 15th and the total rainfall of the month exceeded the normal in both divisions.

In Mysore showers occurred between the 7th and 9th, between the 19th and 22nd and between the 26th and 29th. The principal amounts exceeding 1·50″ in 24 hours were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Mysore	Chamrajnagar	19th April	1·60
„	Haggaddevankote	21st „	1·55
„	Nanjangud	22nd „	2·36
Kolar	Chintamani	27th „	2·62
„	Chikballapur	„ „	2·15
Bangalore	Kankanhalli	„ „	1·80
„	Hoskote	„ „	1·80
„	Anekal	28th „	1·83
„	Devanhalli	„ „	1·64
„	Closepet	„ „	1·62

The total fall for the whole Province for the month was practically normal.

In the Madras Presidency the rainfall was irregularly distributed. In Malabar the total fall was considerably short of the normal and the only period of general rain occurred between the 18th and the 20th. Some heavy falls occurred during the period in the Travancore State but in Malabar and Kanara there was no rain of importance. In South Madras the rainfall considerably exceeded the normal while in South-Central and Central Madras the total fall was approximately the average. Along the east coast the rainfall was equally unevenly distributed, the south and north divisions reporting an excess and the central division a deficiency. The following gives data for the 23 collectorates of the Madras Presidency :—

Collectorate.	Rainfall. Average actual, April 1905.	Average normal, April.	Departure from normal, April 1905.	Percentage departure from normal,
	Inches.	Inches.	Inches.	
Ganjam	3·13	1·02	+2·11	+207
Vizagapatam	2·56	0·82	+1·74	+212
Godavari	1·40	0·62	+0·78	+126
Kistna	0·13	0·47	—0·34	— 72
Guntur	0·10	0·55	—0·45	— 82
Nellore	0·23	0·41	—0·18	— 44
Madras	0·56	0·63	—0·07	— 11
Chingleput	1·32	0·59	+0·73	+124
North Arcot	0·97	0·64	+0·33	+ 52
South Arcot	2·42	0·74	+1·68	+227
Tanjore	1·57	1·21	+0·36	+ 30
Trichinopoly	3·27	1·50	+1·77	+118
Madura	3·64	2·23	+1·41	+ 63
Tinnevelly	3·82	2·22	+1·60	+ 72
Malabar	1·34	4·09	—2·75	— 67
South Canara	0·09	2·04	—1·95	— 96
Salem	2·11	1·34	+0·77	+ 57
Coimbatore	1·84	2·13	—0·29	— 14
Coorg	0·95	...	...	...
Cuddapah	0·40	0·51	—0·11	— 63
Anantapur	0·33	0·63	—0·30	— 48
Bellary	0·78	0·76	+0·02	+ 3
Kurnool	0·82	0·59	+0·23	+ 39

The following gives data of the month's rainfall at the extra-Indian stations :—

Station.	Rainfall. Average actual, April 1905.	Average normal, April.	Departure from normal, April 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee	9·25	1·81	+7·44	+411
Colombo	6·23	12·03	—5·80	— 48
Minicoy	0	3·67	—3·67	—100
Kabul	0·68	2·24	—1·56	— 70
Kashgar	0·65	0·12	+0·53	+442
Meshed	0·85	1·78	—0·93	— 52
Ispahan	0·13	0·38	—0·25	— 66
Bushire	0	0·53	—0·53	—100
Jask	0	0·03	—0·03	—100
Muscat	0	0·03	—0·03	—100

STATION.	RAINFALL. Average actual, April, 1905.	Average normal, April.	Departure from normal, April, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Baghdad . . .	0·14	0·96	−0·82	− 85
Aden	0	0·38	−0·38	−100
Perim	1·01	0·02	+0·99	+4950
Zanzibar . . .	30·52	10·39	+20·13	+194
Seychelles . . .	3·89	3·91	−0·02	− 1
Mauritius . . .	2·07	4·71	−2·64	− 56

These stations show very irregularly distributed rainfall. On the east coast of Ceylon the fall was very excessive, while on the west coast as in Malabar the fall was very deficient. Minicoy had no rain throughout. Kashgaria had more rain than the average while, on the contrary, in Afghanistan, Persia, Asiatic Turkey and northern Arabia, rainfall was either altogether absent or much lighter than usual. Perim reported a heavy fall of rain on the 21st and the total for the month largely exceeded the average while at Aden the month was rainless. At Zanzibar the month's rainfall was three times as heavy as usual while at the Seychelles it was normal and at Mauritius less than half the average.

Snowfall.

I.—AFGHAN MOUNTAIN DISTRICTS.

(1) *Kurram*:—Snow fell on the 6th, 7th, 11th, 19th, 21st, 24th, 25th, and 26th of April, on the higher ranges of the Sufed-i-Koh. The fall of the 6th descended to about 6,000 feet, as far as Malana. The depth of accumulated snow on the higher summits of the Sufed-i-Koh is said to be about 5 feet, and the passes are reported to be still closed.

It is stated that there has not been such a snowfall in this district for many years past.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Leh*:—Snow fell as follows:—

8th April	1½ inch
13th „	Sprinkle
22nd „	do

(2) *Kashmir*:—The winter during the past three months has been very severe. Snow fell frequently and unusually heavily on the higher ranges, and the fall was heavier than for many years past. In Gulmarg, at the end of April, heavy snow lay on the ground as well as on all the high passes. The Jhelum Valley road was never so blocked as during this winter and even at the end of April many slips were taking place.

(3) *Simla, Kilba*:—Snow fell as follows:—

1st	descending to	7,000 feet	where depth was 1 inch
8th	„	„ 8,000 „	„ „ 2 inches
9th	„	„ 9,000 „	„ „ ½ inch
13th	„	„ 8,000 „	„ „ 1 „
14th	„	„ 9,000 „	„ „ ½ „
21st	„	„ 10,000 „	„ „ 1 „
22nd	„	„ 10,000 „	„ „ 2 inches
26th	„	„ 10,000 „	„ „ ½ inch

All the passes were still closed at the end of April and the accumulated snow measured as follows:—

Rupan Pass	7 feet.
Bruin „	5 „
Harang „	4 „
Shatul „	5 „
Buldar „	6½ „
Runang „	5 „

The snowfall of the month was much heavier than that of the corresponding month last year.

(4) *Kulu*:—Snow fell on ten days in the Kulu and Soaraj Tehsils, the snow descending to an elevation of 9,000 feet.

The depth of snow on the various passes was as follows:—

Tehsil Kulu.	Ft.	Tehsil Soaraj.	Ft.
Rohtang	17	Sirikhand . . .	15
Hamta	18	Chul	4
Chandar Khani . . .	7	Maghini	7
Barsai	6	Dundku	8
Puja Dhar . . .	2¼	Tikkar	7
Luhri Achhri . . .	11	Nohnun	3
Bhuboo	5	Raghopur . . .	6
Bashtari	2	Jalori	6
Sari	11	Nimbri	6
		Tikaru	6
		Gargarasan . . .	12
		Supakun	6
		Bashleo	7
		Plach	8
		Tirath	9

The snowfall of the month under review was heavier than that in the corresponding month of 1904.

(5) *Kailang*:—Snow fell as follows:—

6th April	1 inch
13th „	4 inches
14th „	6 „
TOTAL .	11 inches.

(6) *Chamba*:—In the Chamba Division the Sach and Padri passes and most of the other passes were still closed at the end of the month.

The winter snow had been very continuous over the Dalhousie Range, and had caused an immense loss of cattle, owing to want of fodder.

In Chamba the snow had been constant and heavy. In the Pangi range, the snowfall was lighter in January and February and heavier in March and April than usual Snow slides caused immense loss of men, sheep, goats,

and cattle. A village in Paddar inhabited by 28 persons was completely buried under a snow slide. The Chenab River was blocked by a snow slide from the 27th March to the 8th of April, and when the obstacle gave way, the current carried all before it—bridges, timber, &c., &c.

III.—UNITED PROVINCES HIMALAYAS.

(1) *Almora*:—The following falls of snow were reported:—

Malla Johar.

	Ft.	in.
1st April	1	0
3rd "	0	6
7th "	0	6
13th "	1	0
17th "	0	6
22nd "	1	6
23rd "	0	6
25th "	0	6
TOTAL	6	0

Danpur.

	Ft.	in.
12th to 14th April	0	6
20th to 23rd "	0	6
30th "	0	6
TOTAL	1	6

Chandas, Byans and Darma.

	Ft.	in.
6th April	1	6
7th "	1	0
12th "	1	0
19th "	1	6
20th "	1	6
21st "	2	0
22nd "	0	6
23rd "	0	6
29th "	0	6
TOTAL	10	0

The snowline descended to a distance of three miles.

The snow accumulation at the close of the month on the following passes and ranges was as follows:—

	Ft.	in.
Untdhura	21	0
Ralam Dhura	19	6
Milam Dhura	15	0
Pindari, Kopini Kaunela Peaks	1	6
Nirwe	18	0
Limpa Pass	16	0
Lipu Pass	15	0

The snowfall was much heavier than in the previous year.

IV.—SIKIM HIMALAYAS.

(1) *Sadiya*:—The snowline on the Himalayas bordering on Sadiya has been lower this year than for many years past.

Crop Report.

Madras:—The standing crops were generally fair, but required more rain in parts of Tanjore, Tinnevelly, and South Canara. Pasture was insufficient, except in parts of the Circars, Tanjore and in the hills. The condition of cattle was, however, generally good.

Bombay:—Preparation of lands for next season was generally in progress at the end of the month. The fodder supply was sufficient except in parts of Sukkur, Hyderabad, Thar and Parkar, Ahmedabad, Broach, Surat, Khandesh, Nasik, Belgaum, Dharwar and Baroda. Agricultural stock was generally sufficient and generally in good condition.

Bengal:—Agricultural operations were being pushed on, and prospects were generally good.

United Provinces:—The spring crops continued to be harvested in places. The supply of fodder was ample.

Punjab:—The condition of the standing crops was good to average. The outturn of unirrigated crops was generally below average and of irrigated crops average to good.

North-West Frontier Province:—The standing crops were in good condition except where damaged by hail. The crops were excellent, and harvesting of barley had commenced.

Burma:—The standing crops were generally in good condition.

Central Provinces:—Threshing and winnowing of spring crops were in progress.

Assam:—Planting had commenced in most districts. The prospects of early transplanted rice were good.

Mysore:—The prospects of the season were fair in Bangalore and Mysore, but indifferent in other parts of the Province. The crops were in fair condition, except in the Kolar and Shimoga Districts where rain was badly needed.

Coorg:—Rain was badly needed.

Hyderabad:—Late rice needed rain in three taluks while the week's rain had damaged the crop in two taluks. Fodder scarcity was reported from twenty-seven, and water scarcity from nineteen taluks.

Rajputana:—The harvesting of spring crops was in progress in almost all states except Jaisalmer, Agricultural stock was satisfactory and fodder was sufficient.

Central India:—The standing crops were in bad condition in Gwalior, indifferent in Bhopal and fair in Malwa. Agricultural stock and pasturage were generally good.

Kashmir, Jummoo:—The condition of the standing crops was good.

Nepal:—Hailstorms had somewhat damaged the standing crops.

W. L. DALLAS.

TABLE I.—Abstract of Observations taken at 8 A.M. at 228 Stations in India, Burma, etc., in April, 1905.

Table

Abstract of Observations taken at 8 A.M. at 228

Number of District	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma Coast and Bay Islands.			**+·042**								**93·8**	**—0·8**	**75·0**	**—1·0**	**84·5**	**—0·9**	**18·8**					**29·7**
1	Port Blair	61	29·912	+·059	29·904	29·993	7th	29·832	2nd	·161	82·2	92·2	—0·3	78·0	—0·8	85·2	—0·6	14·2	94·8	30th	76·1	1st	18·7
	Mergui	96	29·871	+·048	29·897	29·938	10th	29·804	1st	·134	83·2	92·3	+0·4	75·3	+1·6	83·8	+1·0	17·0	96·9	6th	71·4	1st	25·5
	Tavoy	26	29·950	+·036	29·907	30·054	7th	29·882	2nd	·172	85·8	95·1	+1·1	73·6?	—0·6?	84·4?	+0·3?	21·5?	98·0	29th & 30th.	68·1?	5th & 12th.	29·9?
	Moulmein	94	29·853	+·036	29·884	29·960	7th	29·777	21st	·183	83·0	95·3	+0·7	76·6	+0·2	86·0	+0·5	18·7	99·4	28th	69·3	5th	30·1
2	Rangoon	57	29·889	+·038	29·884	30·001	7th	29·818	1st	·183	79·8	97·8	—0·8	74·8	—1·4	86·3	—1·1	23·0	103·6	30th	67·8	5th	35·8
	Bassein	27?	29·919	+·050	29·884	30·019	7th	29·840	1st	·179	82·5	96·0	—0·2	74·9	—0·6	85·5	—0·4	21·1	99·2	10th, 16th & 24th.	67·9	4th	31·3
	Diamond Island	41	29·915	+·040	29·890	30·018	7th	29·839	1st	·179	82·2	85·8	—2·9	78·5	+0·2	82·2	—1·3	7·3	89·9	25th	74·7	8th	15·2
5	Akyab	20	29·928	+·050	29·891	30·039	7th	29·808	1st	·231	78·1	88·3	—3·5	72·9	—3·1	80·6	—3·3	15·4	90·9	24th & 25th.	62·2	3rd	28·7
2	Toungoo	183	29·740	+·037	29·866	29·849	7th	29·647	1st	·202	83·7	101·5	+1·1	72·3	—3·7	86·9	—1·3	29·2	105·3	23rd & 24th.	64·1	4th	41·2
	II.—Burma Inland.			**+·054**								**96·0**	**—3·3**	**70·4**	**—3·7**	**83·2**	**—3·6**	**25·5**					**42·2**
3	Thayetmyo	121	29·792	+·047	29·855	29·915	7th	29·691	1st	·224	84·0	101·5	—1·5	71·7	—4·1	86·6	—2·8	29·8	105·5	30th	59·5	3rd	46·0
4	Minbu	*165*	29·740	+·049	29·848	29·867	7th	29·633	1st	·234	82·2	100·5	—2·9	74·5	—2·4	87·5	—2·7	26·0	104·7	5th	64·1	3rd	40·6
	Yamethin	657	29·237	+·036	29·847	29·343	7th	29·132	1st	·211	82·1	99·3	—3·0	74·2	—1·9	86·8	—2·5	25·1	103·3	30th	63·7	5th	39·6
	Monywa	*280*	29·662		29·881	29·791	7th	29·515	1st	·276	79·7	97·6		71·5		84·6		26·1	103·7	22nd & 23rd.	61·7	4th	42·0
	Mandalay	250	29·649	+·053	29·849	29·786	7th	29·521	1st	·265	81·2	99·1	—3·2	73·1	—4·7	86·1	—4·0	26·0	105·6	23rd	62·8	4th & 5th.	42·8
	Myitkyina	458	29·458?		29·886?	29·598	7th	29·262	1st	·336	70·4	85·3		64·5		74·9		20·8	96·7	21	52·3	3rd	44·4
	Bhamo	*381*	29·557	+·085	29·903	29·693	7th	29·392	1st	·301	70·9	88·5	—5·4	63·5	—4·1	76·0	—4·8	25·0	95·5	18th	55·2	3rd & 4th.	40·3
a)	Maymyo	3,545	26·495		26·440	26·605	7th	26·357	1st	·248	70·4	83·7		55·1		69·4		28·6	88·9	22nd & 23rd.	43·6	4th	45·3
	Lashio	*2,751*	27·127	+·014	27·073	27·233	7th	26·988	1st	·245	67·7	86·9	—4·0	57·9	—5·0	72·4	—4·5	29·0	94·5	23rd	49·0	4th & 5th.	45·5
	III.—Assam.			**+·083**								**82·0**	**—3·6**	**63·8**	**—4·5**	**73·0**	**—4·1**	**18·2**					**33·9**
7	Silchar	104	29·859	+·082	29·919	29·985	7th	29·725	1st	·260	71·8	86·2	—2·3	65·8	—3·4	76·0	—2·9	20·4	90·5	h	57·9	3rd	32·6
9	Sibsagar	333	29·627	+·090	29·928	29·747	7th	29·468	1st	·279	66·3	78·0	—4·5	62·5	—4·0	70·3	—4·3	15·5	88·2	1 th	56·9	3rd, 4th 5th.	31·3
	Dhubri	115	29·808	+·087	29·882	29·931	7th	29·681	1st	·250	70·7	84·6	—4·1	64·7	—6·0	74·7	—5·1	19·9	91·7	18th	54·3	4th	37·4
	Gauhati	135	29·759		29·916	29·888	7th	29·607	1st	·281	63·9	84·0		63·8		73·9		20·2	90·5	18th	53·6	2nd & 4th.	36·9
	Tezpur	252	29·699		29·918	29·836	7th	29·534	1st	·302	67·4	80·9		63·8		72·4		17·1	89·6	18th	56·0	2nd	33·6
	Dibrugarh	353	29·604		29·930	29·728	7th	29·455	1st	·273	66·1	78·5		62·2		70·4		16·3	88·2	18th	56·4	3rd	31·8
	IV.—Bengal and Orissa.			**+·080**								**90·2**	**—4·9**	**69·8**	**—4·1**	**80·0**	**—4·5**	**20·4**					**38·5**
6	Chittagong	87	29·854	+·063	29·890	29·966	7th	29·729	1st	·237	76·3	85·5	—3·4	70·5	—3·2	78·0	—3·3	15·0	88·5	18th	62·1	3rd	26·4
	Noakhali	43	29·878		29·868	29·996	7th	29·776	1st	·220	78·1	85·7		70·3		78·0		15·4	90·7	11 th	61·0	2nd	29·7
	Comilla	36	29·890		29·875	30·010	7th	29·783	19th	·227	75·5	88·2		69·0		78·6		19·2	93·3	11th	60·3	2nd & 3rd.	33·0
	Sirajganj	49	29·867		29·866	29·977	7 th	29·732	19th	245	73·9	89·9		67·9		78·9		22·0	99·3	12th	57·3	2nd	42·0
	Narayanganj	26	29·903	+·092	29·878	30·022	7th	29·784	19th	·238	75·8	88·2	—5·0	69·7	—4·6	79·0	—4·8	18·5	93·6	11th	62·3	3rd	31·3
	Barisal	13	29·911	+·078	29·869	30·032	7th	29·805	19th	·227	79·7	88·2	—4·0	68·6	—6·8?	78·4	—5·4?	19·6	92·8	11th	59·7	2nd	33·1
	Mymensingh	63	29·870	+·090	29·884	29·985	7th	29·755	19th	·230	73·5	86·2	—4·6	68·0	—4·2	77·1	—4·4	18·2	93·7	12th	58·6	2nd	35·1
	Faridpur	46	29·874		29·870	29·985	7th	29·754	19th	·231	76·3	88·9		68·3		78·6		20·6	95·8	10th	57·0	2nd & 3rd.	38·8
D	Jessore	33	29·871	+·076	29·851	29·985	7th	29·745	19th	·240	77·5	90·6	—6·6	70·5	—4·6	80·6	—5·6	20·1	98·5	20th	58·1	2nd & 3rd.	40·4
.	Calcutta	21	29·881	+·079	29·848	29·993	7th	29·770	21st	·223	78·0	91·2	—4·4	71·7	—4·0	81·5	—4·2	19·5	99·0	10th & 20th.	60·9	2nd	38·1
	Saugor Island	25	29·868	+·065	29·837	29·977	7th	29·773	19th & 21st.	·204	82·4	88·2	—2·6	76·5	—3·4	82·4	—3·0	11·7	90·4	20th, 21st & 25th.	66·5	2nd	23·9

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any station, the data for that

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42, and 44 are derived

NOTE 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau

tions in India, Burma, etc., in April, 1905.

Wind Direction.								Wind Velocity.			Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Number of winds from							Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1904, to 30th April, 1905.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1904, to 30th April, 1905.		
N.E.	E.	S.E.	S.	S.W.	W.	N.W.																					
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
												76	—3	·826	—·040	1·9	—2·0				0·39	2·73	—2·34					I.—Burma Coast and Bay Islands.
11	1	1				13	N 1° E	4·7			5·2	82		·905		4·7		4			1·06	3·33	— 2·27	2·82	11·77	—8·95	0·37	Port Blair.
1	2		1		1	2	N 4° E	3·3	2·1	+57	2·9	78	—3	·878	—·015	2·9	—1·7	1	6·70	—5·70	0·39	6·54	— 6·15	3·21	12·84	—9·63	0·39	Mergui.
							Calm	1·4				81	—2	·839	—·028	0·1	—4·2	0	5·30	—5·30	0	3·78	— 3·78	1·88	5·94	—4·06	0	Tavoy.
		2	6	4	2		S 66° W	4·1	3·2	+28	4·6	71	—8	·808	—·053	2·1	—1·9	1	5·00	—4·00	0·24	3·11	— 2·87	0·24	4·13	—3·89	0·23	Moulmein.
			1		8	6	N 73° W	7·3	4·0	+83	6·1	76	—4	·780	—·068	2·0	—1·1	0	2·20	—2·20	0	1·83	— 1·83	0·04	2·55	—2·51	0	Rangoon.
					9	17	N 53° W	8·9	5·7	+56		73	—6	·821	—·049	1·3	—2·2	0	2·10	—2·10	0	1·55	— 1·55	0·12	2·12	—2·00	0	Bassein.
1		1			1	23	N 39° W	12·9	5·1	+153	12·9	76	+2	·850	+·001	3·1	—1·1	0	2·09	—2·09	0	1·46	— 1·46	0·05	2·49	—2·44	0	Diamond land.
18	1	3				1	N 40° E	2·9	7·2	—60	2·8	84	+4	·823	—·062	2·2	—2·3	2	1·80	+0·20	1·99	1·28	+ 0·71	7·86	2·68	+5·18	1·53	Akyab.
3	4	12	3	3	1	1	S 45° E	10·7	4·0	+168	10·6	68	—5	·805	—·043	1·4	—1·4	1	3·10	—2·10	0·52	2·28	— 1·76	1·34	2·79	—1·45	0·52	Toungoo.
												62	—4	·599	—·091	2·5	+0·4				0·34	1·13	—0·92					II.—Burma Inland.
	1		2	6	15	3	S 87° W	5·4	7·0	—23		59	—3	·707	—·028	1·1	0	1	1·60	—0·60	0·37	0·90	— 0·53	1·27	1·14	+ 0·13	0·37	Thayetmyo.
3		8	1	5	1	4	S 8° E	6·1			7·3	51	—9	·539	—·138	1·6	+0·4	0	1·20	—1·20	0	0·85	— 0·85	1·46	1·55	— 0·09	0	Minbu.
		10	10				S 24° E	2·6			2·7	59	—6	·650	—·092	3·9	+2·9	0	3·60	—3·60	0	1·52	— 1·52	1·35	2·68	— 1·33	0	Yamethin
			2	1	5	16	N 57° W	1·6			1·7	58		·581		2·0		1	2·00	—1·00	0·26	0·71	— 0·45	3·58	1·10	+ 2·48	0·26	Monywa.
3		2	2	3		1	N 67° E	2·2			2·2	53	—6	·556	—·154	2·2	—0·2	0	2·40	—2·40	0·02	1·12	— 1·10	2·34	1·67	+ 0·67	0·02	Mandalay.
7	6	1			1		N 36° E	4·8			4·9	77		·571		4·1		4			1·13			1·98			0·31	Myitkyina.
3	1	1		1		4	N 30° E	2·7			3·2	77	+3	·591	—·043	2·9	—0·9	3	4·80	—1·80	0·59	1·66	— 1·07	4·38	3·85	+ 0·53	0·26	Bhamo.
	1		7	6	1		S 22° W	3·0				67		·496		2·4		1	4·30	—3·30	0·13	2·80	— 2·67	3·87	3·95	— 0·08	0·10	Maymyo.
5	1			1		1	N 34° E	7·5				70	0	·476	—·035	2·3	—3·2	5			0·95	2·20	— 1·25	4·97	4·12	+ 0·85	0·35	Lashio.
												84	0	590	—·088	5·9	—0·1				9·04	8·23	+0·80					III.—Assam.
							Calm	0·2	3·4	—91	0·3	82	—1	·649	—·081	3·8	—2·3	18	13·70	+4·30	12·16	13·62	— 1·46	24·98	25·72	— 0·74	2·30	Silchar.
2			1	1			N 49° E	2·7	2·9	— 7	2·5	91	+1	·591	—·098	8·2	+1·3	13	14·50	—1·50	9·73	9·50	+ 0·23	18·49	18·47	+ 0·02	1·50	Sibsagar.
6	18	3		1	1		N 87° E	9·4	8·0	+18	11·1	78	—1	·601	—·086	5·5	+0·5	12	7·40	+4·60	6·70	4·73	+ 1·97	9·61	7·59	+ 2·02	2·19	Dhubri.
7	4	3	1	2			N 70° E	2·2			2·5	81		·574		5·4		13	10·20	+2·80	6·74	5·87	+ 0·87	10·46	10·30	+ 0·16	1·75	Gauhati.
3	11			1			N 67° E	7·1			7·5	83		·565		5·7		14	11·00	+3·00	11·24	5·92	+ 5·32	15·58	10·55	+ 5·03	2·77	Tezpur.
2	7	2	2				N 63° E	2·5			2·4	87		·559		6·7		14	13·50	+0·50	7·64	9·76	— 2·12	16·74	19·99	— 3·25	1·38	Dibrugarh.
												77	0	·708	—·092	3·6	—0·3				4·10	2·59	+1·51					IV.—Bengal and Orissa.
3	4	11	4	1		1	S 65° E	4·8	7·1	—32	4·5	83	+3	·756	—·084	4·1	—0·3	10	4·42	+5·58	8·53	3·85	+ 4·68	25·58	8·72	+16·86	1·94	Chittagong.
2	5	9	7	2	1	1	S 40° E	4·6			5·0	81		·792		3·4		10	4·61	+5·39	6·55	4·66	+ 1·89	17·87	9·23	+ 8·64	2·50	Noakhali.
1	3	7	8	2	1		S 23° E	5·2			4·4	82		·734		4·5		9	6·46	+2·54	8·74	6·27	+ 2·47	14·48	10·74	+ 3·74	2·50	Comilla.
2	5	4	3	1		1	S 63° E	2·3			2·3	91		·772		3·7		7	4·60	+2·40	5·47	2·95	+ 2·52	9·88	5·70	+ 4·18	2·00	Sirajganj.
5	6	6	4	5		2	S 56° E	6·2	6·7	— 8	5·3	84	+ 2	·763	—·087	6·1	+0·2	13	6·59	+6·41	8·10	4·51	+ 3·59	15·84	9·08	+ 6·76	0·97	Narayanganj.
1	2	8	9	5	1	2	S 7° E	3·9			2·4	82	0	·834	—·069	3·3	—1·6	14	4·29	+9·71	8·56	3·12	+ 5·44	15·50	7·39	+ 8·11	1·68	Barisal.
1	12	13			1		S 67° E	3·7			3·2	79	— 3	·652	—·120	6·4	+1·1	9	6·23	+2·77	4·96	5·37	— 0·41	9·93	8·98	+ 0·95	1·10	Mymensingh.
	3	6	11	2		1	S 18° E	4·3			3·7	81		·748		2·1		8	6·00	+2·00	9·21	4·16	+ 5·05	16·21	8·35	+ 7·86	2·00	Faridpur.
	2	2	4	2			S 16° E	3·0	4·5	—33	3·0	81	0	·769	—·118	3·5	—1·2	7	4·68	+2·32	6·42	3·18	+ 3·24	11·92	6·91	+ 5·01	1·74	Jessore.
2		4	8	11			S 15° W	6·0	7·5	—20		81	+ 3	·784	—·069	3·8	+0·4	6	2·92	+3·08	4·98	1·43	+ 3·55	11·02	4·16	+ 6·86	2·03	Calcutta
3	1		14	11			S 15° W	18·0	16·7	+ 8		81	+ 1	·854	—·074	4·4	—1·4	2	2·00	0	2·86	0·85	+ 2·01	13·36	3·84	+ 9·52	2·45	Saugor Island.

re not utilized in calculating the provincial departures from normal.
nplete.
the elevations of which exceed 3,200 feet.

Table

Abstract of Observations taken at 8 A.M. at 228

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10	Krishnagar	47	29·853		29·849	29·963	6th	29·724	21st	·239	75·9	93·2		70·0		81·6		23·2	103·1	20th	57·5	3rd	45·6
	Midnapore	149	29·744		29·842	29·847	7th	29·622	21st	·225	78·3	93·2		72·2		82·7		21·0	100·3	20th & 21st.	64·3	2nd	36·0
11	Bankura	298	29·573		29·841	29·689	6th	29·428	21st	·261	78·9	96·5		71·9		84·2		24·6	107·6	21st	64·2	3rd	43·4
	Raniganj	334	29·564?		29·857?	29·691	6th	29·418	21st	·273	75·7	95·5		69·9		82·7		25·6	107·0	22nd	60·1	2nd	46·9
	Burdwan	99	29·792	+·081	29·841	29·901	6th & 7th.	29·654	21st	·247	76·5	94·1	−6·5	70·8	−4·9	82·5	−5·7	23·3	102·4	19th, 20th & 21st.	61·8	3rd	40·6
	Naya Dumka	489	29·391		29·846	29·523	6th	29·248	21st	·2 5	77·0	94·4		68·9		81·6		25·5	105·5	21st	59·0	6th	46·5
	Berhampore	67	29·827	+·087	29·845	29·950	6th	29·685	19th	·265	76·2	93·6	−6·4	69·7	−4·9	81·7	−5·7	23·9	104·3	20th	59·7	2nd	44·6
	Rampur Boalia	70	29·829		29·849	29·945	6th	29·684	19th	·261	76·5	91·6		68·3		80·0		23·3	102·0	20th	58·1	4th & 6th	43·9
	Malda	72	29·811		29·837	29·930	6th	29·667	19th	·263	74·5	90·7		69·2		80·0		21·5	100·1	20th	59·6	6th	40·5
	Bogra	61	29·831	+·081	29·846	29·942	7th	29·698	19th	·244	72·5	90·4	−5·8	67·5	−4·4	79·0	−5·1	22·9	99·7	12th	56·2	4th	43·5
12	Dinajpur	123	29·783	+·090	29·865	29·903	6th	29·651	19th	·252	73·8	89·7	−4·9	64·7	−6·0	77·2	−5 ·5	25·0	98·3	18th & 20th.	51·9	4th	46·4
	Rangpur	123	29·807		29·889	29·923	7th	29·689	1st	·234	71·8	86·7		64·5		75·6		22·2	94·2	18th	52·8	3rd & 4th.	41·4
	Jalpaiguri	284	29·630	+·082	29·880	29·757	7th	29·507	1 st	·250	71·3	84·6	−4·9	63·4	−4·8	74·1	−4·	21·2	89·9	18th	50·6	2nd	39·3
	Cooch Behar	156	29·765		29·881	29·889	7th	29·622	1st	·267	71·2	84·6		65·1		74·8		19·5	90·4	18th	53·7	2nd	36·7
17	Purnea	125	29·776	+·102	29·860	29·904	6th	29·641	19th	·263	72·3	90·8	−6·2	64·4	−5·6	77·6	−5·9	26·4	99·3	16th, 18th & 20th.	53·1	5th	46·2
14	Balasore	50	29·852	+·073	29·845	29·958	6th & 7th.	29·739	21st	·219	79·2	91·2	−6·3	72·3	−3·7	81·8	−5·0	18·9	96·4	12th & 20th.	61·6	2nd	34·8
	False Point	21	29·892	+·070	29·855	30·003	7th	29·803	19 h	·200	81·9	87·7	−2·2	75·8	−1·8	81·8	−2·0	11·9	97·5	1st	62·5	2nd	35·0
	Cuttack	80	29·816	+·063	29·849	29·907	6th	29·720	21st	·187	81·4	97·7	−4·3	76·0	−2·0	86·9	−3·2	21·7	104·4	20th	63·2	1st	41·2
	Puri	24	29·895		29·858	30·007	7th	29·814	21st & 22nd.	·193	81·3	88·0		78·1		83·1		9·9	93·2	1st	68·6	2nd	24·6
	V.—Gangetic Plain and Chota Nagpur.			+·078								94·4	−6·7	66·5	−5·9	80·5	−6·3	27·9					47·9
5	Hazaribagh	2,007	27·857	?	29·829	27·971	6th	27·753	21st	·218	75·0	91·4	−6·7	66·3	−6·2	78·9	−6·5	25·1	100·2	21st & 22nd.	57·2	5th	43·0
	Ranchi	2,128	27·764?	+·055?	29·854?	27·869	6th	27·659	21st	·210	75·1	90·9	−6·2	66·5	−5·6	78·7	−5·9	24·4	98·7	22nd	57·5	2nd & 3rd.	41·2
	Daltonganj	*730*	29·143		29·840	29·270	6th	29·021	21 st	·249	76·4	98·0		65·3		81·7		32·7	106·6	21st & 22nd.	53·5	5th & 6th	53·1
	Purulia	*816*	29·062		29·835	29·190	6th	28·923	1s t	·267	77·7	96·6		69·4		83·0		27·2	107·2	22nd	60·3	2nd	46·9
	Chaibassa	*760*	29·118	+·076	29·838	29·222	6th	29·007	21st	·215	77·2	97·6	−6·0	71·0	−5·0	84·3	−5·5	26·6	105·4	21st	57·0	5th	48·4
6	Gaya	375	29·496	+·082	29·829	29·619	5th	29·355	21st	·264	78·7	96·2	−7·2	69·7	−5·2	83·0	−6·2	26·5	103·0	18th, 20th & 22nd.	58·7	3rd	44·3
	Dehri	351	29·507		29·818	29·631	6th	29·368	21st	·263	78·3	97·3		70·7		84·0		26·6	107·4	21st & 22nd.	61·6	5th	45·8
	Patna	183	29·689	+·082	29·829	29·810	6th	29·566	21st	·244	75·6	93·0	−7·6	67·3	−6·2	80·2	−6·9	25·7	102·0	20th	57·8	6th	44·2
	Arrah	190	29·704?		29·851?	29·831	6: h	29·573	21st	·258	77·1	94·7		68·3		81·6		26·4	104·4	21st	60·1	3rd, 4th & 5th.	44·3
	Buxar	239	29·623		29·822	29·743	5th	29·466	21st	·277	76·1	94·5		67·8		81·2		26·7	104·5	21st & 22nd.	55·9	5th	48·6
7	Bhagalpur	160	29·727		29·842	29·858	6th	29·597	19th & 21st.	·261	76·2	9 ·[illegible]		66·4		79·6		26·4	102·3	20th	57·2	4th	45·1
	Darbhanga	166	29·718	+·087	29·842	29·852	7th	29·586	19th	·266	74·0	91·4	−4·7	64·6	−7·3	78·0	−6 0	26·8	99·6	20th & 21st.	53·8	3rd	45·8
	Muzaffarpur	178	29·709		29·846	29·841	7th	29·593	21st	·248	75·0	90·2*		61·8*		76·1*		28·5	97·2	16th	53·8	3rd	43·4
	Motihari	224	29·655		29·844	29·788	7th	29·479	19th	·309	72·0	91·7		62·7		77·2		29·0	99·4	19th, 20th & 21st.	47·7	3rd	51·7
	Chapra	181	29·684		29·824	29·800	6th & 7th.	29·557	21st	·243	75·5	93·5		66·3		79·9		27·2	102·9	20th	56·1	3rd	46·8
	Benares	267	29·600	+·082	29·821	29·717	5th	29·443	21st	·274	79·2	95·7	−7·4	65·7	−6·2	80·7	−6·8	30·0	106·1	21st	52·1	3rd	54·0
	Allahabad	309	29·554	+·074	29·821	29·679	5th	29·412	21st	·267	79·5	97·0	−6·8	67·4	−5·0	82·2	−5·9	29·6	106·1	21st	55·1	2nd & 3rd.	51·0
	Gorakhpur	257	29·603	+·088	29·821	29·740	7th	29·468	21st	·272	76·9	92·4	−8·0	64·9	−7·5	78·7	−7·8	27·5	102·1	21st	54·1	5th	48·0
	Lucknow	368	29·476	+·069	29·808	29·593	5th	29·322	21st	·271	7· 4	95·5	−6·9	65·3	−5·6	80·4	−6·3	30·2	105·8	21st	54·7	3rd	51·1
	Bahraich	401	29·438	+·068	29·866	29·567	7th	29·290	21s	·277	75·3	90·4?	−9·2?	64·5?	−5·2?	77·1?	−7·2?	25·9?	99·6	20th	52·5	2nd & 4th	47·1
	Cawnpore	416	29·437	+·079	29·818	29·560	5th	29·293	21st	·267	78·0	95·4	−6·8	64·3	−8·0?	79·9	−7·4?	31·1	105·4	21st	52·1	3rd	53·3
	Mainpuri	516	29·334	+·075	29·816	29·441	5th	29·191	21st	·250	76·4	96·5	−6·0	65·5	−5·0	81·0	−6·5	31·0	106·3	20th	52·3	3rd	54·0

N. B.—Elevations in italics indicate barometrical determinations.

* Mean of 17 days.

Note 1.—When a query is inserted against any reading

Note 2.—The data from which divisional means of the

tinued.

ts in India, Burma, etc., in April, 1905—continued.

Wind Direction.							Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
r of winds from																											
E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1904, to 30th April, 1905.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1904, to 30th April 1905.		
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
3	6	6	4	7	1	S 15° W	3·5			3·9	78		·707		4·9		8	3·39	+4·61	3·79	2·43	+ 1·36	13·24	5·17	+ 8·07	1·26	Krishnagar.
	3	16	2			S 8° E	3·8			3·3	74		·721		2·9		4	3·10	+0·90	2·67	1·78	+ 0·89	10·89	5·29	+ 5·60	1·10	Midnapore.
3	3	2	3	7		S 45° W	4·8			4·2	64		·627		2·1		4	3·00	+1·00	1·25	1·53	− 0·28	5·08	4·33	+ 0·75	0·57	Bankura.
1	1					E	1·8				65		·592		2·7		3	2·47	+0·53	1 71	1·59	+0·12	9·30	3·91	+ 5·39	1·20	Raniganj.
1	2	6	4	5	1	S 18° W	2·8	4·8	−·42	2·7	77	+ 7	·710	−·054	4·8	+1·5	6	3·48	+2·52	3·52	1·75	+1·77	13·55	4·41	+ 9·14	1·04	Burdwan.
3	1	2	1			S 45° E	2·1			2·4	58		·544		1·5		2	2·38	−0·38	0·86	1·02	−0·16	6·73	3·28	+ 3·45	0·61	Naya Dumka.
3		7	4	4	1	S 27° W	3·7	5·2	−29	3·2	70	− 6	·651	−·136	3·7	−0·1	3	2·56	+0·44	3·30	1·24	+2·06	8·64	3·70	+ 4·94	1·57	Berhampore.
1	2	4	4	3		S 21° W	4·0			4·0	82		·764		2·1		5	2·95	+2·05	2·49	1·81	+0·68	8·63	4·21	+ 4·42	1·19	Rampur Boalia.
1	3	4	3	2	1	N 77° E	6·4			5·9	72		·626		2·1		2	1·81	+0·19	0·33	1·25	−1·02	5·95	3·24	+ 2·71	0·17	Malda.
3	1	3				S 77° E	2·9			2·5	75	− 2	·612	−·148	3·0	−0·8	4	3·81	+0·19	2·38	2·07	+0·31	7·07	4·84	+ 2·23	1·26	Bogra.
1	3	3	2	1		N 83° E	4·4			4·2	65	− 7	·550	−·129	3·8	−0·3	5	3·21	+1·79	2·78	2·33	+0·45	6·22	3·92	+ 2·30	0·75	Dinajpur.
	5		5			N 65° E	3·7			3·5	74		·589		5·2		7	4·39	+2·61	3·10	3·16	−0·06	5·92	5·33	+ 0·59	0·84	Rangpur.
1	7	2		1		S 82° E	2·0			2·5	74	− 2	·570	−·107	2·4	−0·4	9	5·53	+3·47	6·17	3·85	+2·32	10·40	6·07	+ 4·33	1·28	Jalpaiguri.
1	3	1	1			S 89° E	3·2			3·3	81		·622		4·2		11	7·41	+3·59	3·63	5·88	−2·25	6·91	8·47	− 1·56	0·63	Cooch Behar.
1	4		1		3	N 56° E	3·8	3·6	+ 6	3·3	70	+ 3	·570	−·081	0·7	−1·9	6	1·93	+4·07	2·85	1·22	+1·63	5·91	2·79	+ 3·12	0·91	Purnea.
		6	15	3	1	S 45° W	6·5			4·8	76	− 2	·772	−·101	4·0	0	10	3·58	+6·42	4·89	1·86	+3·03	10·90	5·33	+ 5·57	1·80	Balasore.
2	6	16	1	1		S 37° W	1·1	13·3	−92	1·2	80	− 2	·872	−·056	5·1	+0·2	4	1·84	+2·16	2·26	0·73	+1·53	5·49	3·98	+ 1·51	0·80	False Point.
	6	12	2			S 33° W	1·8	5·1	− 6		72	0	·782	−·044	3·5	0	1	1·97	−0·97	0·34	0·98	−0·64	3·86	3·10	+ 0·76	0·10	Cuttack.
	2	20	2	1		S 48° W	15·6			15·3	83		·895		2·6		2	1·17	+0·83	0·40	0·80	−0·40	5·71	3·35	+ 2·36	0·20	Puri.
											54	+ 7	·492	−·014	1·6	+ 0·1				0·64	0·44	+ 0·20				V.—Gangetic Plain and Chota Nagpur.
1	7	13	4	2		S 45° W	8·9	8·4	+ 6	7·9	43	+ 7	·371	−·019	2·9	+0·9	5	1·35	+3·65	2·13	0·39	+1·74	11·39	2·63	+ 8·76	0·94	Hazaribagh.
1	6	5	6	6		S 86° W	7·2			8·5	47	+ 3	·416	−·066	2·0	+0·5	5	2·16	+2·84	1·50	0·84	+0·66	6·70	3·95	+ 2·75	0·55	Ranchi.
3		2				S 63° E	4·7			3·8	43		·397		1·2		2	0·70	+1·30	0·29	0·27	+0·02	5·06	2·48	+ 2·58	0·13	Daltonganj.
1	4	3	13	3		S 77° W	4·0			5·0	58		·556		2·8		4	2·39	+1·61	1·49	0·99	+0·50	7·75	3·64	+ 4·11	0·57	Purulia.
		5	1			S 51° W	2·3			1·9	63	+ 8	·597	−·058	2·0	+0·2	5	2·06	+2·94	2·11	1·36	+0·75	9·23	3·91	+ 5·32	0·88	Chaibassa.
4	6	3	7			S 21° W	5·1	3·8	+34	4·0	57	+ 6	·567	−·031	1·6	−0·1	2	0·58	+1·42	0·74	0·15	+0·59	4·78	2·09	+ 2·69	0·35	Gaya.
2	11	8	2	1		S 13° W	7·6			6·8	53		·520		3·5		0	0·41	−0·41	0·23	0·10	+0·13	2·95	2·06	+ 0·89	0·09	Dehri.
1	1	5	4	1		S 77° E	6·2	4·4	+41	5·5	54	+ 3	·485	−·071	1·5	+0·2	3	0·58	+2·42	0·45	0·27	+0·18	3·76	1·92	+ 1·84	0·18	Patna.
3	1	2	2	2		S 27° W	3·4			3·3	46		·437		0·4		2	0·55	+1·45	0·47	0·47	0	2·73	2·56	+ 0·17	0·30	Arrah.
2	5	9	2			S 18° E	7·5			7·1	44		·401		1·7		1	0·35	+0·65	0·50	0·15	+0·35	3·34	1·93	+ 1·41	0·44	Buxar.
2	1		3			N 72° E	3·8			3·5	59		·529		1·7		3	1·45	+1·55	0·52	0·88	- 0·36	4·51	2·62	+ 1·89	0·20	Bhagalpur.
1		2	2			N 77° E	4·3	5·1	−16	3·8	83	+20	·700	+·077	1·6	+0·4	2	1·47	+0·53	0·73	0·70	+0·03	3·12	2·36	+ 0·76	0·42	Darbhanga.
6		1	3			S 77° E	4·1				65		·575		0·8		1	0·90	+0·10	0 27	0·47	−0·20	3·06	2·23	+ 0·83	0·20	Muzaffarpur.
1	1	2	4	1		N 84° E	5·6			5·4	62		·496		0·9		1	1·23	−0·23	0 33	0·68	−0·35	3·08	2·27	+ 0·81	0·21	Motihari.
2	3	7	2			S 54° E	3·8			3·4	54		·481		1·9		2	0·55	+1·45	0 93	0·32	+0·61	2·57	2·02	+ 0·55	0·60	Chapra.
6	1	3	6	5		S 56° W	3·4	5·0	−32	3·9	53	+ 5	·543	+·049	1·2	−0·1	1	0·40	+0·60	0 26	0·13	+0·13	2·80	1·72	+ 1·08	0·17	Benares.
2	1	5	9	3		S 83° W	5·2	4·9	+ 6	4·3	44	+ 8	·438	+·014	1·4	−0·2	1	0·20	+0·80	0·18	0·13	+0·05	2·58	1·86	+ 0·72	0·17	Allahabad.
1	1	3	4	4		N 12° W	2·5	4·4	−43		60	+ 9	·572	+·038	1·2	−0·1	2	0·50	+1·50	0·29	0·45	−0·16	3·59	2·17	+ 1·42	0·17	Gorakhpur.
3	2	4	6	4		S 67° W	2·6	4·4	−41	2·8	37	− 3	·366	−·079	0·9	−0·8	1	0·40	+0·60	0·16	0·04	+0·12	3·52	2·15	+ 1·37	0·13	Lucknow.
		2	5	4		S 51° E	4·0			3·8	68	+17	·582	+·039	0·9	−0·6	1	0·80	+0·20	0·31	0·40	−0·09	5·47	3·24	+ 2·23	0·23	Bahraich.
3	1	7	7	2		S 59° W	4·1				40	0	·365	−·100	1·1	+0·2	0	0·40	−0·40	0·05	0·03	+0·02	3·11	1·62	+ 1·49	0·05	Cawnpore.
5	2	6	3	4		S 34° W	3·1			3·1	46	+ 9	·429	+·029	2·5	+1·1	1	0·40	+0·60	0·17	0·48	−0·31	4·79	2· 5	+ 2·24	0·15	Mainpuri.

ns of any station, the data for that station are not utilized in calculating the provincial departures from normal.
s Nos. 40, 42 and 44 are derived are incomplete.

Tab

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
	VI.—Upper Sub Himalayas.			+·062								91·0	−5·8	62·5	−4·3	76·8	−5·0	28·4					54
24	Bareilly	568	29·266	+·071	29·811	29·372	5th	29·123	1 th & 21st.	·249	74·0	92·5	−6·8	63·6	−5·3	78·1	−6·1	28·9	103·4	21st	52·1	5th	51
	Dehra Dun	2,233	27·623	+·051	29·843	29·424	7th	27·490	19th	·234	68·5	85·3	−5·2	58·7	−5·6	72·0	−5·4	26·6	95·6	20th	47·0	3rd	48
	Roorkee	899	28·935	+·068	29·823	29·031	5th	28·776	19th	·255	71·9	91·0	−7·2	60·2	−6·3	75·6	−6·8	30·8	102·5	21st	45·1	4th	57
22	Meerut	738	29·090	+·059	29·807	29·196	5th	28·941	19th	·255	73·7	93·4	−5·1	62·6	−5·5	78·0	−5·3	30·8	103·2	20th	49·3	2nd	53
26	Delhi	718	29·117	+·059	29·811	29·224	5th	28·974	19th	·250	75·8	92·8	−6·9	69·5	−4·0	81·2	−5·5	23·3	104·7	30th	55·9	2nd	48
28	Lahore	702	29·127	+·061	20·813	29·258	3rd	28·947	20th	·311	73·7	92·5	−5·7	63·6	−0·7	78·0	−3·2	28·9	108·4	30th	49·1	3rd & 4th.	59
27	Sirsa	662	29·181	+·068	29·821	29·306	3rd	29·005	20th	·301	75·7	94·6	−6·5	64·8	−3·7	79·7	−5·1	29·8	107·8	29th	49·1	3rd	58
	Patiala	*818*	29·011		29·811	29·119	7th	28·848	20th	·271	74·9	90·8		63·4		77·1		27·4	102·0	30th	50·9	4th	51
29	Ludhiana	812	29·015	+·060	29·812	29·135	3rd	28·829	20th	·306	73·6	91·7	−5·7	60·7	−6·5	76·2	−6·1	31·0	105·0	30th	47·6	4th	57
	Sialkot	830	29·002	+·063	29·822	29·129	3rd	28·810	20th	·319	73·1	91·4	−3·8	64·7	−1·6	78·1	−2·7	26·7	107·7	30th	52·2	3rd & 4th.	55
	Ambala	892	28·935	+·062	29·813	29·060	9th	28·775	19th	·285	72·2	92·7	−5·0	62·2	−4·0	77·5	−4·5	30·5	104·0	30th	50·8	4th	53
	Rawalpindi	1,674	28·183	+·057	29·874	28·292	5th	27·986	21st	·306	67·7	82·7	−5·7	56·5	−3·4	69·6	4·6	26·2	99·5	30th	43·1	3rd	56
	VII.—Indus Valley and North-West Rajputana.			+·062								94·4	−3·9	66·4	−3·2	80·5	−3·5	28·0					56
32	Peshawar	1,110	28·781	+·048	29·905	29·922	6th	29·574	21st	·348	68·9	81·8	−5·1	56·9	−3·9	69·4	−4·5	24·9	97·8	29th	41·4	2nd	56
	D. I. Khan	590	29·286	+·058	29·841	29·430	3rd	29·054	19th	·376	73·4	91·2	−3·3	61·4	−4·7	76·3	−4·0	29·8	109·7	30th	44·6	2nd	65
31	Khushab	612	29·235	+·073	29·829	29·384	3rd	28·981	21st	·400	75·9	90·7	−4·6	63·7	−4·3	77·2	−4·5	27·0	106·3	30th	49·5	4th	56
	Montgomery	558	29·286	+·075	29·820	29·436	3rd	29·091	21st	·345	78·0	93·9	−6·2	63·8	−4·3	78·9	−5·3	30·1	108·8	29th & 30th.	46·5	2rd	62
	Multan	420	29·430	+·058	29·824	29·586	3rd	29·222	19th	·364	75·3	95·5	−3·5	66·8	−1·8	81·2	−2·7	28·7	109·9	25th	49·4	1st	60
47	Jacobabad	186	29·658	+·054	29·808	29·813	3rd	29·445	19th	·368	81·0	102·0	−1·1	68·5	−1·2	85·3	−1·1	33·5	114·2	29th	49·0	1st	65
	Hyderabad	96	29·781	+·065	29·855	29·910	7th	29·634	19th	·276	79·0	99·2	−3·5	69·1	−3·2	84·2	−3·4	30·1	106·7	19th	54·0	2nd	52
	Kurrachee	30	29·880	+·060	29·861	29·993	7th	29·744	19th	·249	77·2	89·1	−1·5	71·7	−1·4	80·4	−1·5	17·4	102·1	14th	63·2	1st	38
51	Bikaner	*771*	29·068	+·055	29·815	29·196	3rd	28·920	19th	·276	78·9	96·6	−4·7	71·1	−4·5	83·9	−4·6	25·5	108·0	29th	55·1	1st & 3rd.	52
	Pachpadra	*380*	29·497	+·075	29·840	29·608	3rd	29·360	19th	·248	74·0	100·2	−5·7	67·1	−2·4	83·6	−4·1	33·1	108·5	19th	47·5	1st	61
	Jodhpur	782	29·097		29·858	29·194	3rd	28·977	19th	·217	78·3	97·8		70·2		84·0		27·6	106·2	18th & 19th.	49·2	1st	57
	VIII—East Rajputana, Central India and Gujarat.			+·058								96·3	−4·7	69·1	−3·5	82·7	−4·2	27·2					50
50	Jaipur	1,431	28·447	+·052	29·849	28·546	5th	28·341	20th	·205	79·1	96·0	−5·7	67·6	−3·5	81·8	−4·7	28·4	106·2	29th & 30th.	48·5	1st	57
	Bharatpur	585	29·274		29·830	29·400	4th	29·135	19th	·265	76·1	95·6		66·9		81·3		28·7	106·4	30th	54·2	2nd	52
	Kotah	819?	29·032		29·852	29·193	4th	28·899	19th	·244	83·0	98·4		72·5		85·5		25·9	108·6	30th	58·0	1st	50
	Sambhar	1,254	28·621	+·064	29·852	28·723	4th	28·510	19th	·213	77·6	96·3	−4·1	66·5	−4·6	81·4	−4·4	29·8	106·5	20th	48·9	1st	57
	Ajmer	1,611	28·282	+·051	29·864	28·383	4th	28·169	19th	·214	78·2	95·5	−3·8	69·7	−1·7?	82·6	−2·8?	25·8	103·9	29th	51·3	1st	52
	Udaipur	1,925	27·991		29·869	28·061	4th & 8th.	27·909	19th	·152	79·7	94·8		68·1		81·5		26·7	104·0	30th	48·2	1st	55
46	Bhuj	365	29·530	+·074	29·883	29·612	7th	29·421	19th	·191	78·5	97·2	−3·8	69·2	−2·3	83·3	−3·1	28·0	103·3	19th	56·9	1st	46
	Jamnagar	61	29·874		29·880	29·949	1st	29·762	19th	·187	77·5	93·5		68·9		81·2		24·6	101·1	16th	58·3	1st	42
	Rajkot	429	29·503	+·057	29·890	29·567	7th	29·416	19th	·151	77·2	98·9	−3·9	65·8	−3·6	82·4	−3·8	33·1	104·9	18th	51·0	2rd	53
	Veraval	*18*	29·929	+·071	29·889	29·995	7th	29·858	18th	·137	76·2	82·9	−4	69·8? §	−3·0? §	76·3? §	−3·9? §	13·4?	92·1?	10th	58·3?	4th	33
	Dwarka	37?	29·916		29·899	29·996	7th	29·821	19th	·175	77·5	82·3		74·1		78·2		8·2	85·9	30th	68·2	1st	17
	Bhavnagar Para	55	29·883	+·044	29·882	29·950	6th	29·792	19th	·158	79·3	98·8	−1·8?	69·7§	−5·1?	84·1§	−3·5?	29·1	107·7	19th	60·0	1st	47
48	Nowgong	757	29·107	+·059	29·829	29·228	5th	29·003	21st	·225	79·4	97·0	−6·4	66·8	−4·5	82·0	−5·5	30·1	107·5	30th	52·5	1st & 3rd.	55
	Indore	1,823	28·091	+·059	29·866	28·158	5th	27·999	19th	·159	80·8	96·6	−4·0	65·9	−3·8	81·3	−3·9	30·7	105·1	29th	46·1	1st	59
	Neemuch	1,630	28·284	+·069	29·880	28·366	9th	28·177	19th	·189	79·3	93·9	−7·0	67·4	−3·9	80·7	−5·5	26·5	104·0	30th	47·8	1st	56
45	Surat	39	29·907	+·056	29·891	29·974	7th	29·839	18th	·135	79·9	95·6	−4·5	70·3	−2·5	82·9	−3·5	25·3	105·2	18th	59·0	1st	46

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or
Note 2.—The data from which divisional means of the figure

inued.

s in India, Burma, etc., in April, 1905—continued.

Wind Direction.						Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
No. of winds from																										
S.E.	S.	S.W.	W.	N.W.	Resultant direction	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1904, to 30th April 1905.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1904, to 30th April 1905.		
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
										47	+ 2	·384	−·033	1·5	−0·8				0·13	0·52	−0·39					VI.—Upper Sub-Himalayas.
1			3	1	E	2·2	4·5	−51	2·1	56	+11	·491	+·046	0·9	−0·5	1	0·45	+0·55	0·25	0·17	+0·08	5·73	3·05	+2·68	0·15	Bareilly.
	1		2	4	N 17° W	2·1*	2·6	−19		44	− 2	·314	−·053	1·8	−0·9	1	1·50	−0·50	0·20	0·59	−0·39	11·35	6·92	+ 4·43	0·10	Dehra Dun.
8			1	4	S 66° E	3·9	3·2	+22		45	+ 4	·350	−·071	0·5	−1·1	0	1·10	−1·10	0·01	0·39	−0·38	8·36	4·69	+ 3·67	0·01	Roorkee.
1		2	5	1	N 40° W	1·4	2·4	−42	1·4	43	+ 3	·362	−·032	1·7	+0·1	0	0·90	−0·90	0·07	0·19	−0·12	4·23	3·55	+ 0·68	0·07	Meerut.
3	2	2	8	10	N 72° W	4·9	3·9	+26	4·3	39	+ 3	·356	−·017	1·6	−0·4	0	0·90	−0·90	0·07	0·21	−0·14	3·48	3·18	+ 0·30	0·05	Delhi.
5				2	N 56° E	2·5	3·3	−24		51	+ 4	·426	+·007	1·7	−0·6	0	1·00	−1·00	0	0·42	−0·42	3·41	3·67	− 0·26	0	Lahore.
5	1	9	1	5	S 55° W	5·7	4·0	+43	4·9	47	+ 8	·396	+·004	1·3	−1·6	0	0·60	−0·60	0	0·26	−0·26	2·73	2·06	+ 0·67	0	Sirsa.
9	3		2	4	N 82° E	5·7			5·8	45		·395		2·8		0			0·08			6·92			0·05	Patiala.
4			2	3	N 8° E	1·2	2·1	−43	1·1	44	− 1	·374	−·057	1·1	−1·6	0	1·00	−1·00	0	0·71	−0·71	6·27	5·42	+ 0·85	0	Ludhiana.
2	1			5	N 15° E	3·1	2·3	+38	2·9	48	0	·387	−·049	1·0	−1·1	0	1·90	−1·90	0·12	0·80	−0·68	10·88	6·77	+ 4·11	0·06	Sialkot.
8			1	9	N	4·1			3·6	39	− 4	·391	−·084	1·1	−0·2	0	0·90	−0·90	0·04	0·31	−0·27	8·95	5·53	+ 3·42	0·03	Ambala.
		1	1	1	N 28° E	4·4	2·8	+57	4·0	55	− 1	·366	−·056	2·7	−0·4	2	3·20	−1·20	0·71	1·70	−0·99	11·20	9·31	+ 1·89	0·57	Rawalpindi.
										45	− 2	·423	−·057	1·8	−0·3				0·24	0·36	−0·11					VII.—Indus Valley and North-West Rajputana.
1		3	2		S 72° W	1·7	4·2	−60	1·9	58	− 4	·414	−·055	3·1	−0·3	2	3·40	−1·40	0·67	1·75	−1·08	9·26	6·94	+ 2·32	0·49	Peshawar.
				4	N 22° E	3·0‡	2·4	+25	3·2‡	51	− 3	·429	−·060	2·1	0	0	1·90	−1·90	0	0·70	−0·70	3·09	3·03	+ 0·06	0	D. I. Khan.
3	2	1	2		N 62° E	7·6			7·3	38	− 4	·338	−·064	1·9	−0·9	1	1·50	−0·50	1·12	0·62	+0·50	5·05	3·80	+ 1·25	1·12	Khushab.
8	3	2	1	4	S 61° E	7·1			6·6	39	− 8	·253	−·130	1·7	−0·5	0	0·70	−0·70	0·01	0·13	−0·12	2·57	2·41	+ 0·16	0·01	Montgomery.
2	2	3	1	1	N 6° E	2·1	2·5	− 8	1·9	42	− 6	·377	−·094	1·3	−0·3	0	0·70	−0·70	0	0·10	−0·10	1·96	1·56	+ 0·40	0	Multan.
4	2	3	3	4	E	5·5	3·9	+41	5·7	36	− 2	·402	−·019	1·0	−0·9	0	0·40	−0·40	0·07	0·15	−0·08	1·58	1·00	+ 0·58	0·07	Jacobabad.
	5	14	2	4	S 56° W	8·9	10·2	− 3	7·9	50	+ 2	·522	+·011	0·8	−0·8	1	0·20	+0·80	0·38	0·04	+0·34	1·93	0·71	+ 1·27	0·38	Hyderabad.
		2	13	10	N 66° W	12·4	14·0	−11	12·3	78	0	·733	−·060	4·5	+2·3	0	0·20	−0·20	0	0·25	−0·25	3·31	1·54	+ 1·77	0	Kurrachee.
7	8	4	2	1	S 17° E	6·6	4·7	+40		37	+ 1	·364	−·045	1·2	−0·6	0	0·30	−0·30	0·09	0·11	−0·02	1·87	1·12	+ 0·75	0·09	Bikaner.
2	5	9	2	1	S 12° W	9·8†	4·5	+118	8·5†	49	+ 4	·512	?	0·5	−1·4	0	0·20	−0·20	0·02	0·04	−0·02	0·28	0·73	− 0·45	0·02	Pachpadra.
		12	3		S 51° W	4·5	4·5	0	4·1	27		·276		1·6		1	0·20	+0·80	0·33	0·05	+0·28	0·87	0·55	+ 0·32	0·30	Jodhpur.
										49	0	·486	−·044	1·4	0				0·11	0·06	+0·08					VIII.—East Rajputana, Central India and Gujarat.
	2	1	5	3	N 10° W	4·6	5·7	−19		31	− 4	·317	−·076	2·0	−0·1	2	0·40	+1·60	0·39	0·07	+0·32	2·34	1·37	+ 0·97	0·28	Jaipur.
2		3	5	2	S 72° W	3·4			3·1	56		·501		0·3		0			0·04			3·93			0·02	Bharatpur.
2		4	8	4	N 56° W	4·1			3·3	22		·256		0·7		1	0·30	+0·70	0·46	0·02	+0·44	1·14	0·78	+ 0·36	0·46	Kotah.
1	3	1	5	3	N 73° W	6·9	7·0	− 1		36	+ 1	·361	−·016	1·4	−0·2	2	0·30	+1·70	0·73	0·09	+0·64	2·38	1·29	+ 1·09	0·43	Sambhar.
4	1	5	5	3	S 68° W	6·9	5·0	+38	6·0	36	− 1	·350	−·073	1·6	+0·1	0	0·50	−0·50	0·05	0·11	−0·06	1·60	1·22	+ 0·38	0·05	Ajmer.
	1		3	2	N 60° W	4·2			3·7	59		·615		0·6		0	0·30	−0·30	0			0·25			0	Udaipur.
		5	6	9	N 73° W	12·4	10·9	+14	10·4	61	+ 6	·579	−·031	1·7	+0·7	0	0	0	0·03	0·12	−0·09	0·19	0·41	− 0·22	0·03	Bhuj.
		8	15	6	S 89° W	16·6			20·1	72		·692		1·5		0			0			0·03			0	Jamna
		3	12	13	N 71° W	8·7	11·1	−22	8·6	61	− 4	·583	−·087	1·2	+0·1	0	0	0	0	0·01	−0·01	0	0·18	− 0·18	0	Rajkot.
		1	16	11	N 69° W	10·4	7·2	+44	10·4	77	+ 5	·698	−·026	1·8	−0·8	0	0	0	0	0	0	0	0·10	− 0·10	0	Veraval.
		3	5	11	9	N 85° W	11·3			87		·827		1·9		0			0			0·36			0	Dwarka.
		7	4	13	N 67° W	7·6§			6·9§	51	?	·504	?	0·8	−0·8	2	0	+2·00	0·52	0·01	+0·51	0·52	0·30	+ 0·22	0·37	Bhavnagar Para.
3	2	2	7	4	S 81° W	2·3	2·8	−18	2·3	37	− 1?	·370	− ·053?	2·0	+0·8	0	0·10	−0·10	0	0·05	−0·05	1·78	2·01	− 0·23	0	Nowgong.
1		1	5	8	N 15° W	6·3	4·4	+43	5·1	32	− 7	·344	−·114	1·8	+0·4	0	0·20	−0·20	0	0·13	−0·13	0·09	0·68	− 0·59	0	Indore.
		8	7	2	N 55° W	8·5	10·3	−17	7·1	27	− 8	·267	−·155	1·8	+0·5	0	0·10	−0·10	0	0·09	−0·09	0·47	0·79	− 0·32	0	Neemuch.
2	7	7	3	3	S 51° W	6·1	8·0	−24	5·7	67	+ 2	·695	−·044	0·7	−1·0	0	0	0	0	0	0	0·17	0·14	+ 0·33	0	Surat.

rms of any station, the data for that station are not utilized in calculating the provincial departures from normal.
ios. 40, 42 and 44 are derived are incomplete.

* Mean of 28 days. † Mean of 16 days. ‡ Mean of 23 days. § Mean of 29 days.

Ta

Abstract of Observations taken at 8 A.M. at

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
45	Ahmedabad	163	29·755	+·060	29·869	29·809	1 & 7	29·650	18th	·159	81·9	102·5	−2·9	71·6	−3·6	87·1	−3·3	30·9	111·3	19th	56·7	1st	
	Deesa	466	29·440	+·052	29·863	29·502	5th	29·330	19th	·172	81·0	102·4	−1·8	68·8	−2·9	85·6	−2·4	33·6	110·6	19th	50·1	1st	
22	Agra	555	29·281	+·046	29·806	29·399	5th	29·157	19th	·242	77·6	95·2	−7·4	69·7	−4·0	82·5	−5·7	25·5	105·0	20th	57·4	4th	
21	Jhansi	858	29·016	+·058	29·835	29·129	5th	28·909	19th	·220	82·0	99·0	−5·2	73·5	−3·2	86·3	−4·2	25·5	109·8	30th	60·6	1st & 4th	
	IX.—Deccan			+·054								99·0	−3·6	70·6	−3·7	84·8	−3·7	28·4					
38	Belgaum	2,539	27·409	+·044	29·874	27·474	7th	27·362	22nd	·112	76·5	94·9	−1·1	64·0	−3·5	79·5	−2·3	30·9	98·3	17th	56·9	1st	
	Sholapur	1,590	28·324	+·039	27·861	28·390	7th	28·273	22nd	·117	82·0	102·4	−2·4	72·2	−3·3	87·3	−2·9	30·2	105·3	30th	58·6	2nd	
	Poona	1,840	28·110	+·048	29·927	28·190	5th	28·052	22nd	·138	72·0	99·2	−2·4	64·5	−5·2	81·9	−3·8	34·7	103·5	17th	51·5	1st	
	Bijapur	*1,948*	27·981	+·047	29·863	28·052	7th	27·928	15th	·124	81·9	99·5	−0·3	71·9	−2·9	85·7	−1·6	27·6	103·4	17th	61·2	2nd & 3rd	
40	Malegaon	1,430	28·482	+·036	29·866	28·537	5th	28·417	18th	·120	81·7	101·0	−2·2	66·6	−5·2	83·8	−3·7	34·4	106·4	19th & 29th.	49·2	1st	
	Ahmednagar	2,154	27·795	+·052	29·885	27·844	7th	27·741	22nd	·103	80·7	99·1	+0·2						102·4	30th			
41	Akola	930	28·976	+·062	29·856	29·038	5th	28·899	22nd	·139	83·0	102·8	−3·2	70·2	−4·6	86·5	−3·9	32·6	109·1	30th	51·9	1st	
	Amraoti	1,215	28·683	+·061?	29·849?	28·748	5th	28·611	22nd	·137	83·6	101·7	−3·3	73·5	−2·8	87·6	−3·1	28·2	109·4	30th	54·5	1st	
42	Khandwa (a)	1,044	28·851	+·051	28·857	28·911	5th	28·766	19th	·145	81·5	101·5	−3·3	70·4	−4·9	86·0	−4·1	31·1	109·2	29th	52·1	2nd	
	Hoshangabad	1,006	28·898	+·062	29·869	28·988	5th	28·790	19th	·198	81·8	100·3	−4·5	70·5	−3·3	85·4	−3·9	29·8	108·9	29th, & 30th.	52·8	1st	
	Nagpur	1,025	28·870	+·068	29·854	28·953	5th	28·785	22nd	·168	81·9	101·0	−4·5	71·1	−5·1	86·1	−4·8	29·8	111·2	30th	57·2	1st	
43	Chanda	*634*	29·276	+·077	29·857	29·347	5th	29·185	22nd	·162	83·0	100·6	−5·9	72·4	−4·0	86·5	−5·0	28·2	108·7	30th	53·1	1st	
	Seoni	2,033	27·873?	?	29·850?	27·948	5th	27·798	22nd	·150	80·1	96·2	−4·9	67·8	−4·0	82·0	−4·5	28·4	105·9	29th	53·0	1st	
	Jubbulpore	1,327	28·556	+·059	29·851	28·653	5th	28·464	22nd	·189	78·2	96·7	−5·3	65·2	−5·4	81·0	−5·4	31·5	105·0	29th, & 30th.	50·9	1st	
	Saugor	1,807	28·078	+·047	29·838	28·170	5th	27·985	19th	·185	80·3	95·6	−5·9	69·7	−3·1	82·7	−4·5	25·9	105·4	30th	56·1	1st	
49	Sutna	1,040	28·822	+·061	29·833	28·958	5th	28·712	21st	·246	79·4	95·5	−6·2	67·4	−4·2	81·5	−5·2	28·1	106·6	30th	54·3	1st	
44	Raipur	970	28·915	+·063	29·840	29·000	5th	28·826	19th	·174	80·7	97·3	−7·0	71·9	−5·0	84·7	−5·0	25·4	107·3	30th	58·9	2nd	
	Pendra	2,123?	27·861		29·842	27·960	7th	27·776	22nd	·184	77·9	93·2		67·2		80·2		26·0	102·8	30th	55·6	1st	
	Sambalpur	486	29·407	+·067	29·845	29·523	7th	29·314	21st	·209	80·8	98·4	−5·9	72·8	−2·8	85·6	−4·4	25·6	107·6	30th	57·7	2nd	
39	Aurangabad	1,905	28·018		29·858	28·076	7th	27·927	22nd	·149	82·0	98·6		67·5		83·0		31·1	105·0	18th	52·7	3rd	
	Indur	1,260	28·649		29·855	28·665	7th	28·621	28th	·044	84·2	101·0		72·8		86·9		28·2	105·7	22nd & 30th.	55·1	1st	
	Bidar	*2,165*	27·767		29·861	27·829	17th	27·681	29th	·148	81·5	94·6		74·4		84·5		20·2	100·1	29th	65·3	1st	
53	Gulbarga	1,503	28·385?	?	29·829?	28·439	17th	28·338	15th	·101	83·3	102·1	−1·1	74·2	−1·9	88·2	−1·5	27·9	104·9	15th	61·8	1st	
	Raichur	1,326?	28·572	+·042	29·839	28·635	7th	28·519	23rd	·116	84·2	101·9	−0·2	77·3	−1·9	89·3	−1·1	24·6	104·5	30th	63·1	1st	
	Hyderabad (Dn.)	1,690	28·224	+·045	29·855	28·277	7th	28·146	22nd	·131	82·0	99·5	−2·5	74·4	−0·9	87·0	−1·7	25·1	103·4	23rd & 30th.	62·7	2nd,	
	Hanamkonda	871	29·029		29·846	29·087	7th	28·947	22nd	·140	81·4	99·0		75·6		87·3		23·4	105·3	30th	64·7	21st	
	X.—West Coast			+·054								86·8	−3·1	76·0	−2·5	81·5	−2·8	10·8					
37	Bombay	37	29·922	+·055	29·899	29·993	7th	29·836	18th	·157	77·7	85·7	−2·8	73·9	−3·8	79·6	−3·3	11·8	88·5	18th	68·0	1st	
	Ratnagiri	110	29·851	+·070	29·901	29·915	7th	29·795	18th	·120	78·3	85·8	−4·3	71·4?	−6·0?	78·6?	−5·2?	14·4?	89·8	18th & 19th.	60·5	1st	
	Mormugao	*60*	29·907	+·067	29·902	29·977	7th	29·843	18th	·134	79·7	84·9	−5·2	75·1	−4·9	80·0	−5·1	9·8	89·0	19th	67·8	1st	
	Goa	199	29·756	+·042	29·895	29·816	7th	29·684	18th	·132	80·0	84·5	−4·7	77·3	−1·6	80·9	−3·2	7·2	87·0	19th & 20th.	67·0	1st	
	Karwar	44	29·920	+·060	29·899	29·984	7th	29·859	18th	·125	76·8	85·5	−4·5	72·6	−5·3	79·1	−4·9	12·9	88·3	20th	62·5	1st	
33	Cochin	10	29·939	+·038	29·877	29·987	7th	29·879	18th	·108	83·0	91·4	−0·1	78·6	+0·2	85·0	+0·1	12·8	93·8	27th	70·7	19th	
	Calicut	27	29·930	+·046	29·885	29·997	5th	29·864	18th	·133	82·2	89·1	−2·2	77·6	−0·3	83·4	−1·3	11·5	91·3	21st	71·2	1st	
	Mangalore	65	29·899	+·054	29·896	29·959	7th	29·837	18th	·122	85·2	87·6	−3·5	76·0	−2·7	81·8	−3·1	11·6	90·7	20th	70·5	1st	
	Trivandrum	198	29·746	+·051	29·875	29·786	27th	29·665	1st	·121	80·5	85·9	−1·6	77·1	−1·2	81·6	−1·4	8·8	89·0	1st	74·0	8th	

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any statio
Note 2.—The data from which divisional means of the figure columns Nos. 40, 4

(*a*) Thermometers were removed to the temporary grass hut after 4 P.M. of 16th October 1904.

continued.

tions in India, Burma, etc., in April, 1905—continued.

Wind Direction.								Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
umber of winds from								Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 30th April 1905.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec. 1904 to 30th April 1905.		
N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.																					
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
1	2		1	1	5	10	N 40° W	2·5			3·1	44*	− 3	·473*	−·069	1·7	+0·2	0	0·10	−0·10	0	0	0	0·05	0·30	−0·24	0	Ahmedabad.
6	1	1	1	4	7	5	N 42° W	5·5	9·4	−41		39	− 1	·420	−·037	1·1	−0·1	0	0	0	0	0·01	−0·01	0·09	0·34	−0·25	0	Deesa.
2		2		13		9	S 77° W	5·5	4·7	+17	6·5	36	+ 1	·344	−·051	2·0	+0·8	0	0·40	−0·40	0	0·13	−0·13	3·78	1·50	+2·28	0	Agra.
1	1	2	3	6	3	4	S 59° W	5·5	4·2	+31	6·7	47	+19	·524	+·160	0·8	−0·1	0	0·50	−0·50	0·02	0·12	−0·10	2·10	1·65	+0·45	0·02	Jhansi.
												42	0	·451	−·055	1·3	−0·8				0·47	0·50	−0·14					IX.—Deccan.
	1	2	2	1	2	3	N 49° W	10·6	13·1	−19		41	−21	·378	−·186	3·1	+0·6	2	3·80	−1·80	0·41	1·90	−1·49	0·58	2·52	−1·94	0·24	Belgaum.
	2	6		2	2	15	N 44° W	9·6	8·2	+17	11·6	34	− 5	·387	−·085	1·3	−1·3	0	1·10	−1·10	0·12	0·43	−0·31	0·32	1·22	−0·90	0·07	Sholapur.
1	1	1	1	2	6	15	N 55° W	10·4	9·9	+ 5		42	+ 1	·338	−·088?	0·1	−1·8	0	1·40	−1·40	0	0·68	−0·68	0	1·01	−1·01	0	Poona.
	2	1	2	1	5	12	N 44° W	7·4			7·3	52	− 8?	·566	−·092?	1·1	−1·2	1	2·20	−1·20	0·15	0·80	−0·65	0·15	1·39	−1·24	0·15	Bijapur.
				1	9	15	N 62° W	7·5	7·7	− 3	8·6	25	−28?	·285	?	0	−2·0	0	0·30	−0·30	0	0·10	−0·10	0·01	0·54	−0·53	0	Malegaon.
1		1	2			20	N 35° W	7·5			9·2	55	0	·577	−·054?	0·4	−1·2	0	0·60	−0·60	0	0·33	−0·33	0	1·56	−1·56	0	Ahmednagar.
2	1	1	1		7	12	N 53° W	5·9	5·4	+ 9	5·2	31	+ 1	·355	−·023?	0·9	−1·0	0	0·50	−0·50	0	0·20	−0·20	0·15	1·88	−1·73	0	Akola.
4	3	5	4	6	5	1	S 6° W	6·9	4·4	+57	6·2	28	− 7	·338	−·105	0·6	−1·5	1	0·80	+0·20	0·21	0·23	−0·02	0·42	1·68	−1·26	0·21	Amraoti.
	1		1	2	4	17	N 60° W	5·3	5·6	− 5	5·0	39	+ 9	·405	+·045?	0·4	−1·0	0	0·30	−0·30	0	0·13	−0·13	0·06	0·99	−0·93	0	Khandwa.
10		3	2	14		1	S 13° W	8·4	2·9	+190	8·6	44	+ 6	·464	+·018	0·5	−1·2	1	0·30	+0·70	0·17	0·15	+0·02	0·51	1·39	−0·88	0·17	Hoshangabad.
10	2	4	3	1	4	1	N 56° E	7·2	6·7	+ 7	5·7	38	+ 2	·423	−·044	0·8	−1·7	2	1·10	+0·90	0·90	0·48	+0·42	2·08	2·25	−0·17	0·75	Nagpur.
1	1	7	5	2	2		S 17° E	4·1	3·8	+ 8	3·6	47	+ 2	·545	−·068	1·4	−1·0	4	1·80	+2·20	1·63	0·59	+1·04	3·58	2·91	+0·67	0·60	Chanda.
8	2	3	6	4	2	2	S 75° E	7·0	3·8	+84	5·9	34	− 5	·356	−·088	1·2	−0·9	2	1·30	+0·70	0·69	0·39	+0·30	1·79	2·91	−1·12	0·28	Seoni.
3		6	9	8	3		S 8° W	3·7	3·5	+ 6	3·3	57	+ 2	·363	−·027	1·0	−0·6	0	0·60	−0·60	0·09	0·15	−0·06	1·41	2·19	−0·78	0·05	Jubbulpore.
5	2	5	1	6	7	2	S 51° W	7·3	3·7	+97	6·5	24	− 6	·253	−·098	0·7	−0·6	0	0·30	−0·30	0	0·09	−0·09	1·20	2·13	−0·93	0	Saugor.
	1	2	2	3	11	7	N 89° W	4·2	6·8	−38	5·9	30	+ 4	·301	−·015	2·6	+1·6	1	0·20	+0·80	0·33	0·11	+0·22	4·83	2·54	+2·29	0·19	Sutna.
1	4		3	10	4	1	S 47° W	5·7	5·9	− 3	6·8	47	+10	·499	+·043	3·0	+0·5	1	1·40	−0·40	0·30	0·53	−0·23	3·52	1·98	+1·54	0·17	Raipur.
1	1	1	7	4		3	S 43° W	5·4			4·6	32		·310		1·6		2			1·31			4·03			0·75	Pendra.
5	3	1	5	11	3		S 25° W	4·9	2·6	+89	4·8	55	+ 4	·576	−·034	2·3	+0·1	3	1·50	+1·50	0·50	0·60	−0·10	5·54	2·70	+2·84	0·20	Sambalpur.
3	2	2		3	4	4	N 37° W	9·9*			9·8*	23		·268		0·2		0	0·60	−0·60	0	0·22	−0·22	0·31	1·20	−0·89	0	Aurangabad.
			6		10		N 75° W	4·7			3·9	55		·649		1·1		1	1·40	−0·40	1·00	0·49	+0·51	1·30	1·48	−0·18	0·99	Indur.
2	2	1	5	8	4	3	S 69° W	7·2			6·0	54		·594		2·2		3	2·60	+0·40	0·60	0·98	−0·38	2·05	2·20	−0·15	0·25	Bidar.
8	4	1	2	5	2	1	N 53° E	10·3			9·1	54	+ 4	·636	?	0·2	−2·3	1	2·20	−1·20	0·80	1·05	−0·25	1·05	1·93	−0·88	0·80	Gulbarga.
3	1	5	1	7	2	5	S 66° W	9·5			9·0	45	− 8	·548	−·087	2·1	−0·6	0	1·20	−1·20	0	0·66	−0·66	0·45	1·34	−0·89	0	Raichur.
	3	5	1		2	2	S 45° E	4·2			4·1	56	0	·623	−·012	2·4	+0·2	1			0·66	0·67	−0·01	1·07	1·63	−0·56	0·49	Hyderabad (Dn.)
	2	18	5	1	1	1	S 36° E	11·8			10·4	63		·676		1·4		5	1·30	+3·70	2·43			3·19			1·54	Hanumkonda.
												75	− 1	·775	−·082	3·2	−0·7				1·55	2·00	−0·46					X.—West Coast.
6	2	4	2	1	3	6	N 6° E	8·6	11·3	−24		78	+ 3	·753	−·079	3·2	+0·1	0	0·10	−0·10	0	0·07	−0·07	0·08	0·27	−0·19	0	Bombay.
6	3	1				2	N 18° E	11·6	11·1	+ 5	11·5	72	+ 1	·703	−·109	1·3	−1·7	0	0·10	−0·10	0	0·08	−0·08	0	0·32	−0·32	0	Ratnagiri.
2	2	2		2	1	1	N 5° E	10·9				76	+ 1	·769	−·118	3·4	−0·4	0			0·01	1·04	−1·03	0·01	1·09	−1·08	0·01	Mormugao.
3	1			1			N 22° E	9·8				76	+ 2	·783	−·083	2·6	−0·8	1			0·11	0·32	−0·21	0·11	0·63	−0·52	0·11	Goa.
9	6				2		N 31° E	5·8				76	− 2	·699	−·131	1·6	−1·7	0	0·90	−0·90	0	0·55	−0·55	0	0·73	−0·73	0	Karwar.
4	5				1	5	N 30° E	10·1				75	− 4	·854	−·037	4·6	+0·1	2	7·00	−5·00	2·06	5·20	−3·14	3·62	10·42	−6·80	1·67	Cochin.
1	1			1		18	N 33° W	10·8			10·8	74	− 4	·812	−·059	4·2	−0·7	0	5·10	−5·10	0·03	4·38	−4·35	0·09	6·27	−6·18	0·02	Calicut.
7	7				1	1	N 39° E	6·0	3·7	+62		71	− 5	·776	−·087	3·5	−1·0	0	2·30	−2·30	0	1·65	−1·65	0	2·25	−2·25	0	Mangalore.
						10	N 17° W	5·9				79	0	·825	−·036	4·5	+0·2	10	7·10	+2·90	11·72	4·74	+6·98	12·65	10·03	+2·62	4·84	Trivandrum.

for that station are not utilized in calculating the provincial departures from normal.
e derived, are incomplete.

* Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 22

Stations.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
		Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded month.	Date.	Lowest pressure recorded month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
XI.—South India				+·044								95·6	−0·6	75·7	−0·2	85·6	−0·4	19·9					31·0
Pamban	37	29·898	+·040	29·861	29·973	10th	29·807	1st	·166	83·5	90·4	−0·5	78·9	−0·1	84·7	−0·3	11·5	94·8	3rd & 7th.	74·2	20th	20·6
Tinnevelly	168	29·776	+·055	29·872	29·844	10th	29·681	1st	·163	83·6	96·2	−1·8	77·0	−1·6	86·6	−1·7	19·2	104·5	2nd	73·9	4 days.	30·6
Madura	447	29·499	+·055	29·878	29·554	6th	29·405	1st	·149	84·2	97·4	−1·9	77·0	+0·6	87·2	−0·7	20·4	102·5	2nd	72·5	15th, 19th & 20th.	30·0
Periyakulam	945	28·994		29·879	29·063	6th	28·910	1st	·153	86·8	95·7		73·3		82·8		22·4	101·6	2nd	68·1	9th	33·5
Salem	940	29·017	+·031	29·896	29·079	7th	28·944	22nd	·135	83·2	99·6	−1·1	77·1	+1·3	88·4	+0·1	22·5	103·2	2nd	70·9	21st	32·3
Coimbatore	1,348	28·595	+·038	29·892	28·664	7th	28·530	1st & 22nd.	·134	79·5	97·2	−0·2	73·9	+0·5	85·6	+0·2	23·3	100·9	7th	69·8	1st	31·1
Mercara	3,781	26·272	+·038	26·205	26·323	27th	26·199	1st	·124	68·9	85·5	+1·6	61·9	−2·3	73·7	−0·4	23·6	91·0	30th	58·1	1st	32·9
Chitaldroog	2,405	27·548	+·036	29·871	27·601	7th	27·507	21st	·094	80·2	96·8	+1·0	72·3	+0·5	84·6	+0·8	24·5	99·7	30th	63·9	1st	35·8
Bangalore	3,021	26·970	+·028	29·892	27·026	7th	26·919	22nd	·107	75·9	92·3	−0·9	68·7	−0·5	80·5	−0·7	23·6	95·8	27th	62·8	21st	33·0
Hassan	3,091	26·914	+·040	29·894	26·967	27th	26·863	1st	·104	77·1	95·1	+4·1	64·3	−2·2	79·7	+1·0	30·8	97·8	27th	58·1	1st	39·7
Mysore	2,518	27·459	+·035	29·902	27·518	27th	27·410	1st	·108	77·3	96·0	+2·0	70·2	−0·1	83·1	+1·0	25·8	98·4	25th & 27th.	64·0	2nd	34·4
Negapatam	31	29·902	+·034	29·862	29·959	6th	29·813	1st	·146	84·0	91·0	−1·5	79·1	+0·1	85·1	−0·7	11·9	97·9	28th	75·0	12th	22·9
Cuddalore	12	29·923	+·043	29·864	29·991	6th	29·839	1st	·152	84·7	93·3	+0·5	77·7	+0·9	85·5	+0·7	15·6	102·2	30th	74·7	2nd	27·5
Trichinopoly	255	29·674	+·030	29·864	29·738	6th	29·597	1st	·141	83·5	98·8	−2·3	77·5	0	88·2	−1·2	21·3	103·6	1st	71·9	16th	31·7
Madras	22	29·913	+·036	29·865	29·974	7th	29·828	1st	·146	84·4	91·7	−1·4	77·8	+0·7	84·8	−0·4	12·9	97·0	1st	75·0	18th	22·0
Vellore	707	29·216		29·863	29·280	6th	29·131	1st	·149	83·3	94·1		76·0		85·0		18·1	100·4	6th	72·2	4th	28·2
Nellore	52	29·880	+·065	29·896	29·952	7th	29·797	22nd	·155	84·1	97·7	−3·2	77·3	−0·1	87·5	−1·7	20·4	104·3	30th	73·1	1st	31·2
Masulipatam	15	29·928	+·061	29·877	30·019	7th	29·840	21st	·179	85·3	93·3	−1·6	78·3	+0·8	85·8	−0·4	15·0	99·2	1st	72·1	2nd	27·1
Cuddapah	433	29·474	+·039	29·845	29·550	7th	29·399	22nd	·151	87·7	104·6	−0·6	79·6	−1·2	92·1	−0·9	25·0	103·3	23rd	71·7	18th	36·6
Kurnool	945	28·977	+·035	29·837	29·039	17th	28·910	22nd	·129	85·6	103·2	−0·4	77·7	−0·3	90·5	−0·4	25·5	106·8	30th	61·0	2nd	45·8
Bellary	1,475	28·436	+·037	29·853	28·494	7th	28·392	21st22nd & 23rd.	·102	83·1	103·1	−0·3	76·1	−1·0	89·6	−0·6	27·0	107·0	25th	61·2	1st	45·8
Cocanada	26	29·915	+·052	29·877	30·006	7th	29·817	1st	·189	83·9	93·6	−2·0	77·6	−0·7	85·6	−1·4	16·0	100·6	30th	72·5	23rd	28·1
Waltair (Vizag.)	*226*	29·708	+·061	29·876	29·803	7th	29·620	1st	·183	82·5	89·3		77·1		83·2		12·2	91·9	2nd	69·9	23rd	22·0
Gopalpur	72	29·835	+·070	29·850	29·936	7th	29·706	30th	·230	81·4	87·5	−0·2	76·5	−1·0	82·0	−0·6	11·0	92·2	2nd	69·5	1st	22·7
XII.—Hill Stations																						
Pishin											75·2*		43·8		59·8*		31·4	85·4	19th	28·0	2nd & 3rd.	57·4
Quetta	5,502	24·656	+·024	24·616	24·766	17th	24·553	19th	·213	69·0	73·1	−1·1	44·1	−2·2	58·6	−1·6	29·0	85·2	29th	29·3	2nd	55·9
Kalat										56·1	72·1	−3·9	38·6	+1·3	55·4	−1·3	33·5	86·0	30th	24·2	2nd	61·8
Chaman	4,311	25·703	+·007	25·665	25·787	17th	25·561	19th	·226	64·8	77·2	−4·4	53·5	−4·5	65·4	−4·5	23·7	90·7	29th	36·6	2nd	54·1
Leh	11,503	19·715	−·015	19·683	19·889	28th	19·443	1st	·446	32·6	48·4	−8·7	26·0	−4·9	37·1	−6·9	22·4	64·6	30th	10·4	1st	54·2
Srinagar	5,204	24·933	+·024	24·904	25·051	17th	24·739	1st	·312	48·2	62·4	−5·8	42·1	−3·3	52·2	−4·6	20·3	79·2	30th	32·0	2nd	47·2
Sonemarg	*8,764*	21·877		21·845	22·027	17th	21·640	1st	·387	28·5	44·5		23·0		33·8		21·5	55·3	29th	5·6	1st	49·7
Skardu	*7,505*	22·895		22·865	23·065	15th & 17th.	22·610	1st	·455	46·5	57·5		38·1		47·8		19·4	72·9	30th	19·1	2nd	53·8
Dras	*10,059*	20·859		20·827	21·019	17th	20·581	1st	·438	22·0	35·6		10·3		23·0		25·3	44·8	24th	−12·9	4th	57·7
Gilgit	4,890	25·190		25·163	25·336	15th	24·949	21st	·387	55·2	67·0	−5·7	50·0	−4·0	58·5	−4·9	17·0	83·3	30th	40·1	3rd	43·2
Chitral	*5,486*	25·256			25·350	17th	25·090	21st	·260	49·5	68·0		44·1		56·1		23·9	84·1	29th & 30th.	33·0	2nd	51·1
Killa Drosh	4,700?									51·6	69·4		47·8		58·6		21·6	84·7	29th	34·5	2nd	50·2
Para Chinar	6,000	24·135		24·402	24·572	17th	24·248	21st	·324	54·5	67·1		43·9		55·5		23·2	82·5	29th	27·0	2nd	55·5
Cherat	*4,256*	25·705	+·032	25·673	25·825	17th		21st	·327	59·7	70·3	−5·2	53·8	−4·1	62·1	−4·7	16·5	88·4	30th	39·0	3rd	49·4

B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any

Note 2.—The data from which divisional means of the figure columns Nos. 40,

Note 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the elevations

-continued.

itions in India, Burma, etc., in April, 1905—continued.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904, to 30th April 1905.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec. 1904 to 30th April 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
												71	−1	·791	—·013	3·7	0				1·61	1·42	+0·19					XI.—South India
3	6	6	4	2			S 56° E	8·0			8·5	83		·848		4·2		6	3·30	+2·70	2·69	2·40	+0·29	13·59	15·49	—1·90	0·78	Pamban.
5	2	1	1	1	4	10	N 21° W	3·8			3·6	73	+2	·839	+·002	4·7	−0·1	9	3·70	+5·30	5·06	3·28	+1·78	9·23	10·56	—1·33	2·19	Tinnevelly.
7	7	2	1	1	1	8	N 33° E	4·7	3·6	+31	5·4	71	0	·836	+·003	3·4	−0·6	3	3·30	−0·30	1.55	2·25	−0·70	3·96	5·34	−1·38	1·05	Madura.
3	2	1	2	1		1	N 56° E	2·5			2·7	69		·727		3·3		11	4·70	+6·30	5·02	2·69	+2·33	6·99	7·58	−0·59	1·77	Periyakulam.
3		6	1	5	7	6	S 14° W	6·6	5·0	+32	5·8	71	0	·815	+·009	4·9	+1·4	3	3·10	−0·10	2·60	1·84	+0·76	3·16	4·37	−1·21	1·72	Salem.
8	3	3	5	7	1	1	S 47° W	5·0	3·5	+43	4·6	76	−6?	·774	−·043	3·6	−0·9	2	3·50	−1·50	1·36	1·69	−0·33	1·50	3·94	−2·44	0·92	Coimbatore.
2	2			1	19	5	N 76° W	5·2	3·8	+37	4·8	71	−7	·503	—·083	2·2	−2·0	1	5·70	−4·70	0·23	2·67	−2·44	1·18	4·15	−2·97	0·17	Mercara.
	1	1	1	7	11	7	N 89° W	6·1			5·3	52	−11	·539	−·089	1·4	−1·5	0	2·50	−2·50	0	1·97	−1·97	0·20	2·48	−2·28	0	Chitaldroog.
1	1	2	8	8	6	2	S 42° W	7·0	3·5	+100	6·1	72	0	·649	0	3·0	−0·3	2	2·40	−0·40	1·29	1·26	+0·03	3·66	2·45	+1·21	0·66	Bangalore.
3	3	2	3	4	5	5	S 68° W	3·0			2·6	59	−14	·548	—·087	3·1	−1·3	0	4·80	−4·80	0·10	3·10	−3·00	0·34	3·72	−3·38	0·05	Hassan.
2	1	2	3	11	8	1	S 54° W	7·9			8·5	72	−2	·675	+·005	4·2	−0·2	4	4·30	−0·30	0·87	3·00	−2·13	0·95	3·62	−2·67	0·44	Mysore.
3	1	5	2	9	2	1	S 15° W	10·5	5·2	+102	9·2	76	+1	·896	—·012	5·8	+1·3	6	1·20	+4·80	4·26	0·56	+3·70	14·85	15·82	−0·97	2·81	Negapatam.
1		3	5	1			S 19° E	5·9			7·3	75	−6	·905	—·062?	5·8	+1·4	3	1·00	+2·00	1·67	0·83	+0·84	8·47	10·83	−2·36	1·20	Cuddalore.
	1	2		3	3		S 60° W	2·5	4·0	−38		73	+ 5	·834	+·030	3·4	−0·8	4	2·10	+1·90	2·14	2·06	+0·08	3·96	6·29	−2·33	0·92	Trichinopoly.
	2	4	20	3	1		S 4° E	6·7	7·9	−15		75	+1	·891	—·004	5·1	+0·7	2	1·10	+0·90	0·56	0·40	+0·16	6·98	7·38	−0·40	0·32	Madras.
3		1	2	2		8	N 30° W	5·0			5·0	72		·814		2·7		2	1·20	+0·80	1·39	0·71	+0·68	3·99	4·40	−0·41	1·25	Vellore.
1		13	13	2			S 20° E	7·5				71	−4	·339	−·066	4·1	0	1	0·30	+0·70	0·17	0·40	−0·23	4·82	2·77	+2·05	0·12	Nellore.
		9	13	2	1	1	S 50° W	8·7	8·8	−1	7·7	85	+4	1·031	+·052?	5·9	+1·9	0	0·50	−0·50	0	0·47	−0·47	7·82	1·66	+6·16	0	Masulipatam
2	4	13	1	6	1	2	S 37° E					59	+4	·778	+·047	3·1	+0·5	1	0·70	+0·30	0.25	0·54	−0·29	0·93	1·95	−1·02	0·22	Cuddapah.
2		7	12	3		2	S 10° E	7·6†			7·6	60	+6	·739	+·073	2·2	0	2	1·70	+0·30	0·35	0·94	−0·59	0·67	1·56	−0·89	0·13	Kurnool.
	1	1	4	4	4	10	S 69° W	5·8	5·2	+12	5·1	53	0	·606	—·023	2·5	−0·4	2	1·90	+0·10	2·03	0·74	+1·29	3·23	1·10	+2·13	1·81	Bellary.
3	1	2	2	2	4	1	S 42° W	6·2			5·2	78	+4	·912	+·012	3·1	−0·7	2	0·70	+1·30	·56	0·35	+0·21	5·90	2·10	+3·80	0·38	Cocanada.
	1		2	23	4		S 48° W	13·1				71	−4	·788	—·059	5·5	+1·8	4	0·90	+3·10	1·79	0·59	+1·20	7·39	3·04	+4·35	1·05	Waltair (Vizag.).
		1	3	16	1	2	S 53° W	15·1	14·5	+4	14·8	77	−5	·821	−·063	1·1	−2·4	2	1·10	+0·80	1·37	0·69	+0·68	4·43	2·69	+1·74	1·02	Gopalpur.
																												XII.—Hill Stations.
																		2	·90	+0·10	0·33	0·86	−0·53	10·24	8·91	+1·33	0·15	Pishin.
1		2	1	2		1	S	1·9	4·8	−60	2·0	44	−8	·228	—·054	1·9	−0·6	2	2·40	−0·40	0·38	1·07	−0·69	11·46	7·96	+3·50	0·20	Quetta.
	1		23		2		S 3° W					45		·216				1	1·10	−0·10	0·34	0·22	+0·12	8·26	3·75	+4·51	0·24	Kalat.
2	3	11	5	5	2		S 27° E	9·4			10·3	43	−10	·250	−·058	2·1	−0·3	0	1·60	−1·60	0	0·43	−0·43	7·18	5·71	+1·47	0	Chaman.
6	7	2	9	2	3	1	S 47° E	2·6				48	0	·092	—·018	5·5	0	1	0·70	+0·30	0·14	0·16	−0·02	1·85	1·23	+0·62	0·12	Leh.
2		7	6	1	1	5	S 9° E	4·1			3·7	84	0	·289	—·044	5·2	+0·7	7	6·80	+0·20	2·18	2·69	−0·51	16·14	13·03	+3·11	0·49	Srinagar.
		3	3	2	2	1	S 23° W	2·6			2·4	87		·142		4·5		13			10·88			74·60			3·70	Sonemarg.
5	4	2	4	4	6	1	S 11° W	7·1			7·2	50		·158		5·7		2	2·00	0	1·11	2·65	−1·54	4·45	7·42	−2·97	0·85	Skardu.
1	1		1			1	N 23° E	0·5			0·4	98		·125		4·0		5	8·80	−3·80	2·57	3·85	−1·28	13·68	16·98	−3·30	0·80	Dras.
1	3	1		2	4	1	S 66° W	3·0			2·7	52	+2	·223	—·021	6·9	+1·7	3	2·80	−0·20	0·89	1·15	−0·26	2·71	2·20	+0·51	0·58	Gilgit.
		2					S	2·7			2·4	71		·251		2·4		2			1·20			8·39			0·70	Chitral.
1	15			2			N 86° E					69		·269		3·5		6			1·99			4·22			0·62	Killa Drosh.
1	4			1	6	1	N 37° W	5·9			5·4	54		·227		2·1		6	8·50	−2·50	1·67	3·19	−1·52	14·98 (a)	11·30	+3·68	0·66	Para Chinar.
1	1			1		3	N 3° W	9·6			8·9	51	+3	·270	—·007	2·7	−0·5	3			0·86	2·22	−1·36	16·16	12·39	+3·77	0·45	Cherat.

the data for that station are not utilized in calculating the provincial departures from normal.
14 are derived, are incomplete.
h exceed 3,200 feet.

* Mean of 29 days.

† Mean of 26 days.

Rainfall for the period 28th January to 25th February 1905 is not available.

Table

Abstract of Observations taken at 8 A.M. at 22

Number of District.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
29	Murree	6,333	23·811	+·008	23·809	23·937	17th	23·661	21st	·276	54·7			45·3	−7·0						30·0	1st & 2nd	
	Kailang	*10,087*	20·959		20·914	21·039	15th	20·756	13th	·283	30·3	42·9	−10·1	25·7	−5·5	34·3	−7·8	17·2	57·4	30th	7·5	1st	49·9
	Poo											63·3		36·1		49·7		27·2	76·6	19th	23·0	2nd	53·6
	Simla	7,224	23·104	−·005	23·066	23·212	17th	22·915	1st	·297	53·1	60·9	−4·3	47·5	−4·7	54·2	−4·5	13·4	73·0	30th	30·3	1st	42·7
	Sarain		23·154			23·256	17th	22·953	1st	·303	50·1	60·2		37·2		48·7		23·0	72·7	30th	26·2	2nd	46·5
	Chakrata	7,022	23·277	−·013	23·237	23·405	17th	23·103	1st	·302	52·6	65·0	−5·3	46·8	−5·3	55·9	−5·4	18·2	71·5	20th	32·9	1st	41·6
25	Ranikhet	6,069	24·100	+·011	24·059	24·198	18th	23·922	1st	·276	57·5	68·5	−6·3	51·2	−5·9	59·9	−6·1	17·3	79·0	21st	36·5	1st	42·5
	Muktesar	7,600	22·828		22·786	22·924	7th	22·620	1st	·304	52·7	63·6		45·3		54·5		18·3	73·5	20th	30·9	1st	42·6
13	Yatung	10,480										48·9		31·1		40·0		17·8	60·1	30th	22·1	2nd	38·0
	Darjeeling	7,376	23·000	−·004	22·955	23·102	7th	22·806	1st	·296	49·9	58·8	−3·4	43·6	−5·3	51·2	−4·1	15·2	61·7	12th & 17th.	34·0	2nd	30·7
8	Shillong	4,920	25·165		25·117	25·273	7th	25·007	1st	·266	61·7	70·9		52·1		61·5		18·8	76·6	19th	40·0	26th	36·6
	Cherra Poonjee	4,309	25·727		25·678	25·853	7th	25·569	1st	·284	60·6	68·7		51·8		61·8		13·9	75·7	25th	48·0	2nd & 3rd	27·7
0	Mount Abu	3,945	26·075	+·022	25·025	26·137	8th	25·986	21st	·151	73·6	81·2	−4·5	65·8	−3·3	73·5	−3·9	15·4	90·2	19th	52·4	1st	37·8
2	Pachmarhi*	3,528									75·3	88·7	−3·2	65·5	−4·1	77·1	−4·0	23·2	96·7	30th	47·8	2nd	48·9
1	Wellington	6,200	24·294	+·027	24·227	24·318	27th	24·210	1st	·108	66·5	75·1	−0·8	56·3	+0·4	65·7	−0·2	18·8	78·6	21st	51·2	9th	27·4
	Ootacamund	*7,322*	23·084		23·021	23·145	27th	23·031	18th	·114	61·7	69·6		53·4		61·5		16·2	72·0	27th	48·8	7th	23·2
7	Kodaikanal	7,688	22·871		22·809	22·922	27th	22·829	18th	·093	59·1	67·0		53·6		58·5		13·4	72·5	28th	51·8	7th	20·7
	XIII.—Extra India.																						
	Trincomalee	12	29·922	+·051	29·860	29·985	27th	29·854	1st	·131	79·2	88·6	−2·4	76·3	−1·3	82·5	−1·9	12·3	95·0	23rd	73·0	6th & 15th	22·0
	Colombo	40	29·906	+·025	29·872	29·975	27th	29·827	1st	·148	81·7	87·8	−1·1	76·8	+0·8	82·3	−0·2	11·0	91·5	4th	73·5	9th	18·0
	Meshed	3,104									53·5	68·0		47·3	−0·8	57·7		20·7	80·7	17th	29·0	1st	51·7
	Ispahan(*b*)	*5,817*	24·307			24·480	12th	24·200	2nd & 23rd.	·280	53·6	73·2	+0·1	47·4	+1·7	60·3	+0·9	25·8	83·4	17th	36·2	1st	47·2
	Bushire	14	29·928	+·037	29·901	30·074	5th	29·805	22nd	·269	72·5	80·3	−1·3	68·0	+1·3	71·1	0	12·3	91·6	25th	57·2	6th	34·4
	Bahrein†	30	29·956			30·097	7th	29·805	23rd	·292	76·0	83·1		70·1		76·6		13·0	96·5	18th	57·3	7th	39·2
	Jask	13	29·900	+·018	29·870	30·026	1st	29·822	22nd	·204	76·8	83·6	−3·6	71·1	−2·2	77·4	−2·9	12·5	86·3	20th	63·2	4th	25·1
	Muscat	20	29·901	+·035	29·872	30·027	1st	29·783	23rd	·244	80·5	82·9	−2·9	78·1	−2·4	80·5	−2·7	4·8	91·3	20th	70·1	1st	21·2
	Baghdad	220	29·823	−·026	30·023	29·982	11th	29·693	2nd	·289	67·8	86·5	+1·9	57·2	+0·3	71·9	+2·6	29·3	95·8	21st	49·7	3rd	46·1
	Busrah		30·028			30·221	4th	29·900	24th	·321		86·5		66·1‡		77·3‡		20·4	95·4	25th	60·7	13th	34·7
	Aden	94	29·878	+·037	29·904	29·939	7th	29·760	15th	·239	82·7	?	?	78·1	+0·8	?	?	?	?	?	71·9	11th & 12th.	?
	Perim	201	29·748	+·060	29·882	29·834	4th & 5th.	29·693	27th	·151	82·5	88·1§	−0·4	79·1‖	+0·3	83·9‖	−0·1	9·3	91·1	28th	73·4	23th	17·7
	Kabul		24·296			24·412	17th	24·079	20th	·333	51·3	69·4	−3·1	42·0	−3·2	55·7	−2·7	27·4	89·1	23th & 30th.	19·9	1st	69·2
	Kashgar	4,255	25·525			25·722	4th	25·230	13th	·492	53·1	66·2	−5·4	41·8	−4·1	55·5	−1·8	21·4	85·5	23th	33·3	2nd	53·2
	Minicoy	7	29·969		29·902	30·024	7th	29·915	1st	·109	83·7	87·8	−1·8						91·5	20th			
	Zanzibar**	72	29·960	+·024	29·960	30·018	11th	29·914	2nd & 3rd.	·104	78·9	83·2	−1·5	76·4	−1·2	79·9	−1·3	6·8	83·4	1st	69·9	28th	19·5
	Do. Dunga	*154*	29·897		29·980	29·945	25th	29·854	19th	·092	77·0	84·9		74·1		79·5		10·8	93·0	6th	70·9	23th	22·1
	Penang (*a*)	20	29·933		29·878	29·967	20th	29·904	2nd & 4th.	·063	81·1	90·7		74·5		82·6		16·2	93·0	5th & 30th.	73·0	6 days	20·0
	Singapore (*a*)	10	29·962		29·893	30·015	7th	29·906	30th	·109	84·7	90·0		74·9		82·5		15·1	94·2	16 h	72·9	19th	21·3

(*a*) 8 hours' observations.
(*b*) Aneroid uncorrected.
** Barometric readings are 10 hrs. observations.
* Mean of 27 days.
† Mean of 26 days.

N.B.—Elevations in italics indicate barometrical determinations.
NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which

-concluded.

itions in India, Burma, etc., in April, 1905—concluded.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1904 to 30th April 1905.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec. 1904 to 30th April 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
	2	2	2				S 45° E	6·1	8·7	−30	6·6	45	− 1	·192	−·033	2·2	−1·9	5	5·90	−0·90	2·81	3·35	−0·54	29·12	16·05	+13·07	1·14	Murree.
1	2	4	6	10	5	2	S 30° W	0·7				71		·123		3·9		5			2·05	2·96	−0·91	12·07	13·56	− 1·49	0·82	Kailang.
		5	2				S 34° E									3·5		3			0·60	1·72	−1·12	9·36	14·01	− 4·65	0·15	Poo.
		2	8			3	N 4° E	5·5	2·9	+90	5·3	39	− 1	·159	−·038	2·1	−1·1	4	3·10	+0·90	0·93	1·70	−0·77	13·00	10·71	+ 2·29	0·23	Simla.
1	1	1	4	3			S 3° W	3·3			3·2	52		·186		2·3		6			1·09			34·83			0·45	Sarain.
1			1			3	N 4° W	8·7	6·1	+43	10·4	48	+ 5	·191	−·019	2·0	−0·6	5	3·90	+1·10	0·95	1·44	−0·49	27·99	12·83	+15·16	0·26	Chakrata.
2	5	1		6	2	2	S 79° E	3·2	3·0	+ 7	3·6	51	+ 3	·249	−·029	1·5	−0·8	2	2·80	−0·80	0·64	1·16	−0·52	13·63	8·77	+ 4·86	0·28	Ranikhet.
2	5	2	1	1	12	2	N 63° W	10·8			10·0	44		·173		2·8		4			1·12			17·14			0·36	Muktesar.
																		10	12·67	−2·67	3·54	4·69	−1·15	10·73	8·71	+ 2·02	0·65	Yatung.
4	2	4	2	5	4		S 1° E	7·4			6·8	70	−11	·262	−·087	4·2	−0·6	8	8·29	−0·29	3·40	4·34	−0·94	5·61	7·84	− 2·23	0·69	Darjeeling.
1			2	16	1		S 47° W	5·2			5·9	59		·320		3·0		11	8·70	+2·30	4·21	4·29	−0·08	8·36	7·71	+ 0·65	0·77	Shillong.
3	1		1	9	11		S 70° W	9·3			8·2	77		·418		5·9		15	17·00	−2·00	13·75	32·92	−19·17	21·52	49·87	−28·35	4·84	Cherra Poonjee.
6	1	4		8	4	6	W	8·5	7·7	+10	8·6	24	− 5	·197	−·067	1·2	+0·2	0	0·30	−0·30	0	0·04	−0·04	0·10	1·00	− 0·90	0	Mount Abu.
1	3	5	1	4	4	8	W	9·3	5·3	+75	9·6	27	− 2	·237	−·068	0·9	−1·0	1	0·80	+0·20	0·12	0·25	−0·13	1·69	2·17	− 0·48	0·12	Pachmarhi.*
4	2	2	1	1			N 82° E	2·2	2·9	−24		71	+ 8	·454	+·037	4·1	+0·7	8	6·20	+1·80	4·29	3·40	+0·89	12·45	12·07	+ 0·38	1·90	Wellington.
6	13	3	1				N 75° E	5·0			4·7	67		·365		5·0		7	7·10	−0·10	3·64	3·46	+0·18	6·88	6·84	+ 0·04	1·36	Ootacamund.
6	7	3	2			4	N 45° E	12·9				72		·362		3·9		10	7·00	+3·00	3·79	5·29	−1·50	11·25	17·10	− 5·85	0·84	Kodaikanal.
																												XIII.—Extra India.
				17	1		S 48° W	2·0				89	+ 8	·891	−·036	3·2	+0·1	10			9·25	1·81	+7·44	32·30	26·52	+ 5·78	2·14	Trincomalee.
1	6	11	4	4	3	1	S 32° E	6·7	5·6	+20		84	+ 6	·913	+·019	6·3	+1·4	8			6·23	12·03	−5·80	16·21	28·76	−12·55	2·35	Colombo.
												63		·315		2·8		4			0·85	1·78	−0·93	4·44	6·35	− 1·91	0·39	Meshed.
				7	5	2	S 75° W	3·8			4·9	61		·256		3·3		1			0·13	0·38	−0·25	3·77	2·34	+ 1·43	0·12	Ispahan.
4	3	4	2	1	4	4	N 12° E	10·3 ¶	9·1	+13	11·3 ¶	67	+ 5	·534	+·017	3·3	+0·9	0			0	0·53	−0·53	8·59	10·24	− 1·65	0	Bushire.
2	2	2	4	4	4	6	S 81° W	11·6			10·0	78		·700		0·7		0				0		0·93			0	Bahrein.†
	8	1		1		7	N 42° E	9·2			7·6	73	+ 7	·687	+·015	3·0	+2·0	0			0	0·03	−0·03	3·21	3·80	− 0·59	0	Jask.
2		2	1			3	N 6° E	3·4			3·5	60	+ 2	·630	−·015	2·7	+1·9	0			0	0·03	−0·03	5·31	3·40	+ 1·91	0	Muscat.
2	1	1	1		1	4	N 14° W	4·1†	4·4	− 7	5·5†	56	− 6	·380	−·022	2·7	+1·1	0			0·14	0·96	−0·82	4·06	7·75	− 3·69	0·08	Baghdad.
			5	2	2	6	N 32° W											1			0·29			2·17			0·21	Busrah.
0	10	3		2	2	2	N 67° E	9·9	14·3	+33	8·0	77	+ 3	·865	+·074	2·9	−0·5	0			0	0·38	−0·38	3·74	2·23	+1·51	0	Aden.
	27		1		2		S 88° E	16·2			16·4	73	− 3	·820	−·019	2·3	−2·0	1			1·01	0·02	+0·99	3·20	0·97	+2·23	0·94	Perim.
0	4		4	1	4	1	N 34° E					84		·347		2·3	+1·2	1			0·68	2·24	−1·56	4·42	9·65	−5·23	0·30	Kabul.
	1		1	1	3	11	N 61° W	5·2			4·7	52	+ 6	·197	−·023	4·5	−0·5	2			0·65	0·12	+0·53	4·60	0·90	+3·70	0·40	Kashgar.
			1		15		N 25° W	5·8			6·2	69	− 7	·801	−·080	4·2	−0·5	0				3·67	−3·67	5·16	11·75	−6·59	0	Minicoy.
		1	20	6		1	S 10° W	7·9			7·4	89		·874		7·9		19			30·52	10·39	+20·13	42·29	21·41	+17·88	5·21	Zanzibar.
		1	2	6			S 30° W	4·1			4·0	95		·879		8·3		23			35·27			17·30			6·10	Do. Dunga.
5	10	4	3				S 85° E	11·3								1·0		13			9·45			21·73			1·65	Penang.
5	8	8	2	4	1		S 69° E	3·7								4·3		12			9·31			36·13			2·12	Singapore.

§ Mean of 29 days. ‖ Mean of 28 days

‡ „ „ 18 „ ¶ „ 24 „

300 feet.

TABLE II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Stations in India, Burma, etc., in April, 1905.

Tabl

Abstract of Observations recorded at 10 A.M. and 4 P.M.

STATION.	Elevation of bar-cistern above sea-level, in feet.	PRESSURE.						TEMPERATURE OF AIR.										TEMPERATURE, WET-BULB.			
		Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three pre-
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	2
Port Blair	61	29·921	29·817	·104	29·870	+·058	29·861	92·4	78·0	14·4	95·1	76·1	19·0	88·3	89·9	84·2	−0·5	75·3	80·8	80·8	79
Rangoon	57	·889	·739	·150	·817	+·032	·811	98·0	74·8	23·2	103·5	67·8	35·7	88·8	93·5	84·0	−1·0	70·9	75·4	77·8	74
Diamond Island	41	·931	·817	·114	·875	+·043	·851	85·9	78·8	7·1	89·9	74·7	15·2	84·9	85·1	81·9	−1·1	74·1	77·2	77·2	76
Cocos Island‡‡	119	·858	·758	·100	·809		·860	91·7	78·9	12·8	95·9	76·0	19·9	87·1	87·6	84·3		74·6	77·4†	77·0†	76
Akyab	20	·947	·833	·114	·886	+·057	·849	88·4	72·6	15·8	91·1	62·4	28·7	83·0	86·0	80·0	−3·4		76·2	77·0	
Chittagong	87	·868	·757	·111	·804	+·061	·839	85·5	70·7	14·8	88·3	62·0	26·3	81·0	82·9	78·1	−3·2	68·7	75·0	75·4	73
Calcutta (Alipore)	21	·898	·769	·129	·833	+·082	·799	91·3	71·7	19·6	98·8	60·9	37·9	84·5	88·9	80·8	−4·2	68·5	75·4	75·9	73
Saugor Island	25	·890	·771	·119	·827	+·070	·795	88·2	76·5	11·7	90·8	66·4	24·4	84·2	85·5	81·7	−3·0	72·3	77·9	78·2	76
False Point	21	·907	·785	·122	·842	+·067	·805	87·4	75·5	11·9	89·5	62·4	27·1	85·2	83·9	80·8	−2·3	73·0	78·2	77·8	76
Hazaribagh	2,007	27·869	27·760	·109	27·811	+·046	·738	91·9	66·6	25·3	100·1	57·2	42·9	83·1	89·0	79·2	−6·0	56·5	62·5	63·4	60
Allahabad	309	29·566	29·43	·132	29·493	+·075	·751	97·7	67·4	30·3	106·2	54·9	51·3	89·0	96·3	82·1	−5·5	59·9	68·7	71·2	66
Dehra Dun	2,233	27·633	27·551	·082	27·584	+·043	·765	86·3	58·8	27·5	94·4	47·0	47·4	76·9	82·6	72·4	−5·0	51·2	59·3	60·1	56
Roorkee	899	28·950	28·845	·105	28·890	+·060	·749	91·7	60·1	31·6	102·4	45·3	57·1	82·0	90·1	75·3	−6·5	53·4	62·5	63·4	59
Meerut	736	29·112	29·005	·107	29·051	+·058	·746	94·2	62·6	31·6	103·4	49·3	54·1	84·4	92·6	77·9	−4·8	55·5	64·3	65·2	61
Shore	702	·146	·058	·088	·096	+·061	·761	93·5	63·6	29·9	108·4	49·1	59·3	83·9	91·3	78·1	−2·8	56·3	66·1	67·7	63
Ludhiana	812	·023	28·949	·074	28·980	+·062	·756	92·6	60·7	31·9	105·0	47·5	57·5	83·5	90·5	76·2	−5·6	53·9	63·6	64·7	60
Peshawar	1,110	28·800	·711	·089	·750	+·056	·853	82·6	56·8	25·8	97·8	41·3	56·5	75·8	80·6	69·3	−4·2	52·3	62·0	62·8	59
Kohat	186	29·670	29·544	·126	29·604	+·050	·747	102·9	68·5	34·4	114·2	49·2	65·0	92·6	99·6	84·9	−0·6	56·6	69·2	71·3	65
Karrachee	30	·895	·796	·099	·842	+·059	·822	89·1	71·7	17·4	102·1	63·0	39·1	84·3	84·7	79·1	−1·5	68·6	73·8	75·3	72
Jacobabad	1,431	28·466	28·355	·111	28·404	+·057	·769	96·8	67·6	29·2	106·2	48·3	57·9	87·6	94·5	81·4	−4·9	54·6	63·9	65·3	61
Jaipur	1,325	27·991	27·878	·113	27·930		·764	95·5	68·1	27·4	103·7	48·4	55·3	86·6	94·0	82·7		61·3	75·4	79·5	72
Jhansi	466	29·447	29·315	·132	29·376	+·054	·784	102·9	68·8	34·1	110·6	50·2	60·4	91·5	100·8	86·7	−2·2	56·5	67·4	67·5	63
Jamnagar	61	·880	·766	·114	·821		·827	94·1	68·9	25·2	101·1	57·9	43·2	85·2	90·1	80·5		65·6	71·1	71·0	69
Jalgaum	2,539	27·466	27·294	·112	27·353	+·044	·755	95·1	64·0	31·1	98·3	56·9	41·4	87·0	90·7	76·9	−2·3	58·9	63·4	68·5	63·6
Jolapur	1,590	28·222	28·173	·149	28·246	+·043	·735	102·7	72·3	30·4	106·4	56·6	49·8	91·8	100·9	85·3	−3·1	58·8	66·9	70·0	65·2
Kola	930	·977	·818	·159	·895	+·057	·745	103·5	70·1	33·4	109·7	51·9	57·8	92·3	102·1	86·5	−3·6	56·4	68·8	71·4	65·5
Kolaba	2,132	27·799	27·670	·129	27·729	+·021	·748	97·3	72·3	25·0	102·5	55·4	47·1	87·6	95·5	83·7	−3·6	65·0	64·6	67·4	62·3
Kandwa	1,044	28·860	28·711	·149	28·783	+·051	·756	102·3	70·4	31·9	109·2	52·1	57·1	92·2	101·3	86·7	−3·7				
Kolgpur	1,025	28·882	28·725	·157	28·801	+·073	·759	101·6	71·1	30·5	111·2	57·4	53·8	90·6	98·6	86·0	−4·6	60·1	69·0	70·7	66·6
Kurnr.'s (Sanitary Office)	1,013	·882	·725	·157	·801		·747	102·0	71·3	30·7	111·9	52·3	59·6	91·8	100·0	86·4		59·1	68·3	69·7	65·7
Hyderabad (Deccan).	1,690	·228	·091	·134	·159	+·035	·751	99·9	74·4	25·5	104·4	62·7	41·7	90·7	96·7	86·5	−1·5	67·1	71·6	71·0	69·9
Bombay	37	29·928	29·816	·112	29·871	+·059	·848	85·9	73·9	12·0	88·3	68·1	20·2	80·6	82·6	78·9	−3·2	70·7	73·8	74·9	73·1
Kerwar	44	·931	·829	·102	·882	+·067	·860	85·8	72·7	13·1	88·7	62·8	25·9	82·2	84·3	78·2	−4·8	70·2	73·5	74·6	72·8
Kiyakulam	945	29·000	28·860	·140	28·943		29·810	95·7	73·3	22·4	101·6	68·1	33·5	86·8	91·7	82·8		70·7	75·5	76·3	74·2
Kem	940	·015	·866	·149	·950	+·037	·808	99·7	77·1	22·6	103·3	70·9	32·4	89·4	96·7	86·9	+0·1	73·0	77·7	80·0	76·9
Kaldroog	2,405	27·551	27·414	·137	27·486	+·036	·755	97·1	72·3	24·8	101·3	64·0	37·3	86·7	94·9	83·4	+0·9	64·1	68·9	70·8	67·9
Kegalore	3,021	26·975	26·848	·127	26·918	+·040	·773	92·6	68·7	23·9	95·9	63·0	32·9	82·7	90·4	79·4	−0·5	64·6	69·9	68·6	67·7
Kesan	3,091	·919	·791	·128	·861	+·050	·771	95·2	64·3	30·9	97·8	58·1	39·7	85·5	91·2	78·5	+1·0	61·7	66·2	67·0	65·0
Kore	2,518	27·459	27·313	·146	27·392	+·031	·776	96·0	70·2	25·8	98·4	64·0	31·4	84·0	92·9	81·8	+0·9	66·5	71·4	70·6	69·5
Kras	22	29·922	29·806	·123	29·871	+·046	·822	91·6	77·7	13·9	94·7	75·3	19·4	88·8	86·6	83·7	−0·4		78·8	78·5	77·7
Kary	1,475	28·441	28·287	·154	28·363	+·023	·744	103·3	76·0	27·3	107·0	61·2	45·8	90·1	99·5	88·6	−0·6	63·5	73·2	76·1	70·9
Ktair	*226*	29·721	29·605	·116	29·660	+·071	·826	89·3	77·1	12·2	91·9	69·9	22·0	86·0	85·7	82·3	−1·0	72·8	76·4	77·4	75·5

† Mean of 17 days.

‡‡ Observations of 28 days.

N.B.—Elevation in italics indicates barometric determinations.

Stations in India, Burma, etc., for April, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.
													Total number of 10 hours and 16 hours winds from									Mean wind direction.	Normal mean wind direction of month.							
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
																								%	%					
·951	·938	·936	−·023	88	71	66	78	−2	4·3	4·5	4·4	−0·2		3	42	2	10	1		1	1	N 56° E	N 89° E	75	51	124*	115	1·06	0·37	Port Blair.
·703	·747	·738	−·069	81	52	48	66	−5	2·3	2·7	2·5	−0·9	3			2	18	10	1	14	12	S 30° W	S 24° W	28	57	45*	134	0	0	Rangoon.
·835	·834	·834	−·036	79	69	69	75	− 3	2·6	2·2	2·4	−1·0		1			1		1	4	53	N 48° W	N 63° W	94	69	333*	204	0	0	Diamond Island.
·828†	·810†	·838	−·039	81	67†	64†	74	0	3·1	3·4	3·3	+0·2											N 36° W		53			0	0	Cocos Island
·824	·819				72	65			2·7	1·6	2·2	−1·1			5	10	12	2	11	5	15	S 20° W	S 66° W	7	36	67*	91	1·99	1·53	Akyab.
·797	·788	·767	−·062	90	75	70	81	+ 5	4·0	3·0	3·5	−0·8	1	2	7	5	10	11	16	5	3	S 4° W	S 12° W	33	45	103*	166	8·53	1·95	Chittagong.
·768	·731	·753	−·044	85	64	54	73	+ 3	4·4	3·6	4·0	+1·4		1	2		4	18	27	4	4	S 32° W	S 30° W	68	69	143*	168	4·98	2·03	Calcutta (Alipore).
·885	·873	·846	−·091	81	75	71	79	− 1	4·8	4·6	4·7	−0·1		2		2	11	31	12		2	S 1° W	S 12° W	73	76	432	430	2·86	2·45	Saugor Island.
·868	·871	·855	−·066	89	72	75	82	− 3	4·5	5·5	5·0	+1·4		3	1	1	5	26	21	3		S 17° W	S 30° W	72	80	281*	331	2·26	0·80	False Point.
·323	·272	·328	+·001	51	29	21	36	+ 7	2·3	3·9	3·1	+0·2	3	6	4	1	2	6	7	13	18	N 70° W	N 72° W	45	46	189*	214	2·13	0·94	Hazaribagh.
·439	·435	·452	+·078	63	32	26	42	+10	1·1	1·6	1·4	−0·3		5	6	6	2	1	5	16	19	N 52° W	N 54° W	45	35	100*	127	0·18	0·17	Allahabad.
·291	·248	·282	−·029	58	31	22	39	+ 2	1·9	2·8	2·4	−0·4	2	7	3	1	4	7	18	11	7	S 69° W	N 85° W	40	28	52	55	0·20	0·10	Dehra Dun.
·315	·235	·298	−·025	62	29	16	38	+ 4	0·8	1·0	0·9	−1·0	9	2	3	2	16		4	2	22	N 42° W	N 72° W	12	22	83	79	0·01	0·01	Roorkee.
·344	·267	·328	−·080	62	29	17	38	0	1·2	1·9	1·6	−0·4	16	1	1	3	2		6	12	19	N 69° W	N 63° W	43	44	27*	60	0·07	0·07	Meerut.
·413	·372	·401	+·006	62	35	25	43	+ 2	2·3	1·7	2·0	−0·9	9	9	2	5	5	6		9	15	N 40° W	N 15° W	25	28	62	77	0	0	Lahore.
·385	·279	·327	−·078	63	29	20	39	− 4	1·3	1·7	1·5	−1·5			2	2	7			32	17	N 77° W	N 48° W	60	30	26*	58	0	0	Ludhiana.
·396	·363	·386	−·036	73	44	35	53	− 1	2·7	4·5	3·6	−0·8	14	11	11	11	3	2	1	5	2	N 42° E	N 9° E	35	25	44*	96	0·67	0·40	Peshawar.
·417	·399	·394	+·006	43	26	21	32	− 2	1·0	1·7	1·4	−1·0	7	6	1	6	10	10	8	5	7	S 10° W	S 57° E	18	13	131*	101	0·07	0·07	Jacobabad.
·707	·759	·756	−·023	85	61	65	77	+ 1	2·3	2·8	2·6	+0·9		2	2	1			23	30	2	S 75° W	S 69° W	78	81	300*	317	0	0	Kurrachee.
·308	·267	·290	−·043	40	23	17	29	− 1	1·8	2·5	2·2	−0·3		4	6	3	8	5	14	13	7	S 63° W	N 57° W	28	50	109	120	0·39	0·28	Jaipur.
·732	·838	·671		67	53	52	56		1·2	1·2	1·2		13	3	3	2	3	2	2	23	9	N 76° W		42		90*		0	0	Udaipur.
·360	·233	·292	−·047	41	25	12	25	− 1	1·2	1·2	1·2	−0·4		4	4		2	2	11	22	13	N 82° W	W	61	56	220‖	218	0	0	Deesa.
·582	·512	·598		83	48	37	61		0·5	0·8	0·7			4					13	33	10	N 87° W		82		496*		0	0	Jamnagar.
·296	·425	·419	−·137	73	23	30	50	−10	2·0	4·1	3·1	+0·2	3	8	3	2	2		14	12	10	N 76° W	N 78° W	71	36	267‖	314	0·41	0·24	Belgaum.
·358	·353	·372	−·055	41	24	18	32	− 2	1·2	4·5	2·9	−0·7	1	10	3	2	7	2	4	10	21	N 48° W	N	92	12	282*	211	0·12	0·07	Sholapur.
·385	·361	·352	+·031	37	24	18	27	+ 2	0·5	2·7	1·6	−0·5	4	4	5	4	3	1	6	10	23	N 51° W	N 51° W	43	56	130*	142	0	0	Akola.
·331	·325	·287	−·002	28	25	19	23	0	0·3	2·0	1·2	−1·1	3	11	4	2	2	2	3	12	21	N 45° W	N 33° W	53	58	219*‡	216	0	0	Buldana.
									0·6	1·3	1·0	−1·0	5	5	4	2	3		3	8	30	N 45° W	N 48° W	59	60	121*	156	0	0	Khandwa.
·446	·405	·423	+·021	50	31	22	35	+ 5	0·6	3·2	1·9	−1·3	1	5	18	4	4	6	8	7	7	S 14° E	N 66° W	13	22	134*	144	0·90	0·75	Nagpur.
·411	·357	·386		44	28	19	31		0·8	3·5	2·2		6		6		21		11		16	S		12		70*		0·96	0·60	Do. (Sanitary Commr.'s Office).
·545	·445	·540	−·024	67	38	26	46	0	2·2	4·8	3·5	+0·7	22	1	1	8	14	2	5	4	3	S 38° E	S 9° W	25	5	97*	108	0·66	0·49	Hyderabad (Deccan).
·751	·770	·770	−·071	85	71	69	78	+ 1	2·1	1·3	1·7	+0·1		1	1	1	2	3	3	23	26	N 72° W	N 60° W	72	56	203	254	0	0	Bombay.
·711	·729	·741	−·115	88	64	62	74	− 2	0·7	0·6	0·7	−1·8		2						28	30	N 65° W	N 84° W	91	78	140	115	0	0	Karwar.
·733	·700	·706		88	58	48	63		3·0	6·2	4·6		3	2	8	5	11	14	4	10	3	S 13° E		25		64*		5·02	1·77	Periyakulam.
·801	·809	·807	+·051	82	58	47	64	+ 2	4·3	6·8	5·6	+1·2	4	1	3	21	2	14	8	6	1	S 35° E	S 4° E	35	28	138*	110	2·60	1·72	Salem.
·490	·457	·504	−·031	63	38	28	45	− 4	1·2	2·8	2·0	−2·0	1	9	7	8	2	1	2	12	18	N 27° W	N 39° W	43	15	126*	161	0	0	Chitaldroog
·584	·447	·551	−·004	80	53	31	57	+ 2	2·3	4·4	3·4		3	5	7	13	3	7	8	8	6	S 79° E	S 27° W	3	38	146*	115	1·29	0·66	Bangalore.
·425	·385	·484	−·098	87	35	27	52	− 9	2·6	6·3	4·5	−1·2	3	8	13	9	5	4	4	6	8	N 31° E	N 44° E	23	12	63*	82	0·10	0·05	Hassan.
·315	·477	·587	−·002	82	53	31	57	− 2	4·6	6·5	5·6	−0·1		6	9	12	6	3	10	9	5	N 65° E	N 85° E	5	12	203*	190	0·87	0·44	Mysore.
·351	·865	·873	−·027		63	68	75	− 3	4·6	4·3	4·5	+1·0				7	33	17	3			S 34° E	S 36° E	85	83	171	182	0·56	0·32	Madras.
·312	·621	·581	+·041	49	43	33	42	+ 1	2·7	4·6	3·7	−0·7	9	6	3	5	4	3	5	13	12	N 65° W	S 63° W	28	8	121*	130	2·03	1·81	Bellary.
·833	·836	·813	−·024	80	63	68	73	+ 4	4·5	4·9	4·7	+1·3			1	2	5	35	16	1		S 7° W	S 24° W	84	83	150		1·79	1·05	Waltair.

* Corrected. ‖ Mean of 26 days. ‡ Mean of 29½ days.

Tab

Abstract of Observations recorded at 10 A.M. and 4 P.M.

Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of air.										Temperature, Wet-bulb.			
		Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three pre-
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Quetta	5,502	24·668†	24·592‡	·076	24·622	+·023	† 24·585	74·1	44·1	30·0	85·0	29·2	55·8	66·9‖	70·2	59·7	−1·2	40·6	50·3‖	51·7	47·
Leh	11,503	19·720	19·638‡	·082	19·680	0	19·647‡	49·2	26·0	23·2	64·8	10·4	54·4	39·8	46·3	36·5	−6·4	22·2	31·1	36·0	29·
Srinagar	5,204	24·944	24·867	·077	24·901	+·017	24·872	63·0	42·1	20·9	79·2	32·1	47·1	53·9	60·3	51·5	−4·2	40·1	50·7	56·2	49·(
Sarain		23·175	23·126	·049	23·141			60·9	37·2	23·7	72·6	26·2	46·4	55·8	57·0	49·7			43·7	45·2	
Simla (Ridge)	7,224	23·131	23·089	·042	23·102	+·004	23·064	61·5	47·4	14·1	73·0	30·3	42·7	56·3	58·7	55·1	−4·2	39·2	44·3	45·9	43·1
Chakrata	7,022	·300	·260	·040	·268	−·001	·228	65·9	46·9	19·0	74·5	32·9	41·6	59·3	61·2	57·0	−4·8	39·9	47·3	48·2	45·1
Ranikhet	6,069	24·124	24·059	·065	24·084	+·015	24·043	69·4	51·1	18·3	78·9	36·7	42·2	63·2	65·4	60·9	−5·7	44·2	50·0	51·1	48·4
Muktesar	7,600	22·856	22·797	·059	22·819		22·777	64·3	45·4	18·9	73·5	30·9	42·6	56·0	60·0	55·5		38·7	43·7	46·7	43·0
Katmandu	4,388	25·654	25·513	·111	25·597	+·048¶	25·551	78·0	48·4	29·6	85·2	38·1	47·1	69·1	72·9	63·8	¶ −3·3	§§ 42·8	56·7	57·5	52·3
Darjeeling	7,376	23·000	22·959	·041	22·978	−·009	22·933	58·8	43·7	15·1	64·8	34·0	30·8	54·2	55·5	51·8	−4·1	41·2	49·3	51·4	47·3
Mount Abu	3,945	26·096	26·014	·082	26·049	+·027	26·000	81·9	65·9	16·0	90·2	54·6	35·6	76·5	79·8	74·5	−3·5	51·8	55·2	56·7	54·6
Pachmarhi††	3,528		Not recorded					89·6	65·5	24·1	98·2	47·8	50·4	80·4	87·3	78·2	−3·5	52·5	57·9	60·1	56·8
Chikalda	3,642	26·381	26·272	·109	26·321	+·018	26·265	90·3	68·3	22·0	96·9	51·8	45·1	81·3	88·3	79·9	−3·2	53·8	58·9	61·2	58·0
Kodaikanal	7,688	22·890	22·819	·071	22·854		22·790	67·3	53·6	13·7	72·5	51·8	20·7	63·3	61·0	60·5		48·7	56·1	56·8	53·9
Ootacamund	*7,329*	23·097	23·033	·064	23·063		·999	69·7	53·4	16·3	71·8	49·0	22·8	66·3	64·5	62·2		50·7	57·3	57·5	55·2
Dodabetta	8,539P	22·086	22·026	·060	22·054		21·991	61·1	49·6	11·5	62·7	45·7	17·0	59·4	57·5	56·0			54·4	54·0	
Aden	94	29·888	29·771	·117	29·821	+·031	29·846	P	78·1	P	P	74·7	P	85·0	87·0	P	P	P	79·4	74·4	P
Perim	201	·755	·642	·113	·690	+·046	·823	88·4	79·1‡	9·3	91·1	73·4	17·7	84·5	85·7	82·0‡	0	70·8	75·0	75·0	73·6
Minicoy	7	·990	·923	·067	·961		·894	88·0			91·7			85·9	85·5				77·0	76·6	
Zanzibar	72	·973	·871	·102	·926	+·029	·926	83·0	76·3	6·7	88·8	69·9	18·9		81·5	77·9	−1·5	73·9		76·9	
Port Victoria (Seychelles).	15	·987	·890	·097	·942	¶ +·036	·880	86·4	79·0	7·4	88·4	76·4	12·0	84·0	85·0	81·4	¶ +2·0	74·2	77·3	77·7	76·4
Mauritius (Pamplemousses).	181				·867	+·034	·994				84·4	65·7	18·7			75·3	0				71·6

N.B.—Elevations in italics indicate barometric determinations.

* Corrected. † Mean of 26 days. ‡ Mean of 29 days.
§ Mean of 25 days. ‖ Mean of 27 days. ¶ Departures from old normals.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

-concluded.

Stations in India, Burma, etc., for April, 1905—concluded.

Vapour Tension.				Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.
													Total number of 10 hours and 16 hours winds from																
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
																								%	%					
·200‖	·198	·201	−·050	76	28‖	27	44	− 4	1·5	4·2	2·9	−0·4	15	7	1		3	4	6	12	9	N 79° W	N 78° W	35	35	45‖	84	0·38	0·20	Quetta.
·108	·129	·110	−·004	63	45‡	43	50 **	+ 5	5·2	6·0	5·6	−0·9		1	8	8	4	11	13	11	4	S 26° W	S 63° W	25	27	61	74	0·14	0·12	Leh.
·342	·423	·311	−·019	85	81	78	81	+ 3	4·5	6·0	5·3	+0·3	5	4		2	9	3	6	7	24	N 69° W	N 18° W	35	19	95*	115	2·18	0·49	Srinagar.
·166	·182				38	41			3·5	4·5	4·0		21		4	4	1	9	14	6	1	S 30° W		32		60*		1·09	0·45	Sarain.
·172	·184	·165	−·046	51	38	38	42	− 1	3·1	4·3	3·7	−0·5	2	27	2	1	2	18	1	1	6	N 9° W	N 81° W	22	10	131 *	149	0·93	0·23	Simla (Ridge).
·208	·208	·191	−·014	56	42	38	45	+ 3	2·5†	3·7	3·1	−0·5	9	10	1		7	33				S 12° E	S 54° W	47	23	238	180	0·95	0·26	Chakrata.
·232	·234	·224	−·026	60	40	37	46	+ 3	1·3	3·8	2·6	−0·6	7	3	5	1	1		13	19	11	N 82° W	S 84° W	52	41	90*	91	0·64	0·28	Ranikhet.
·165	·188	·182		56 §§	37	37	43		2·8	5·4	4·1		2	1	2	1	3		12	34	5	S 84° W		70		225*		1·12	0·36	Muktesar.
·326	·305	·289	−·071	84	46	39	56	− 2	2·2	4·0	3·1	−0·9	3	2	6	13	3	2	2	23	6	N 63° W	N 87° W	18	42	33	36	3·70	1·19	Katmandu.
·308	·341	·289	−·030	82	71	76	76	0	6·0	7·6	6·8	+0·6	4		4		1	1	21	18	4	S 81° W	S 75° W	68	32	170*	206	3·40	0·69	Darjeeling.
·193	·199	·199	−·046	35	21	19	24	− 2	1·5	2·0	1·8	0		2	7	1	4	2	22	12	10	S 76° W	S 87° W	44	56	205*	211	0	0	Mount Abu.
·227	·207	·221	−·050	41	21	16	25	− 2	0·8	1·8	1·3	−1·2		3	2		3	3	8	15	20	N 76° W	N 63° W	58	44	‡‡ 212*	144	0·12	0·12	Pachmarhi,††
·244	·229	·234	−·044	36	22	17	24	− 2	1·1	3·1	2·1	−0·6	12	11	6		2	1	10	4	14	N 45° W	N 46° W	37	35	195*	197	0	0	Chikalda.
·382	·423	·369		73	66	79	73		4·6	7·4	6·0		1	22	13	10	6	3			3	N 39° E		57		315		3·79	0·84	Kodaikanal. ‖‖
·380	·404	·381		84	59	67	71		4·7	7·6	6·2		2	9	13	23	5	4	1	1	2	N 71° E		59		109*		3·61	1·36	Ootacamund.
·373	·384				74	81			6·0	7·2	6·6			7	25	17	10	1				N 68° E		75		372		2·97	0·85	Dodabetta.
·926	·681	P	P	P	77	53	P	P	1·5	0·8	1·2	−0·9 ¶	2	1	12	9	16	5	13	1	1	S 49° E	N 87° E	38	67	192*	370	0	0	Aden.
·745	·729	·748	−·125	65‡	63	59	66	−12	1·3	0·5	0·9	−0·8	1			1	31	24	3			S 23° E	S 88° E	87	63	389*	432	1·01	0·94	Perim.
·810	·795				65	65			3·9	3·7	3·8			27						3	30	N 27° W		90		147*		0	0	Minicoy.
	·867			89		81				6·9		¶	1	2	1		10	14	2			S 19° E	S 5° E	70	81	180*	170	30·52	5·21	Zanzibar.
·851	·856	·857	−·006	79	73	71	77	− 3	5·5	5·9	5·7	+0·6	12	7	7	6	3	2		6	17	N 14° W	S 63° E	33	6	124	?	3·89	1·20	Port Victoria (Seychelles).
		·710	+·006				81	0			6·2	+0·5										S 70° E	S 70° E			256	252	2·07	0·33	Mauritius (Pamplemousses)

** Mean of three previous columns.

†† Observations of 27 days.

‖‖ Wind variable 2.

‡‡ Mean of 26½ days.

§§ Mean of 18 days.

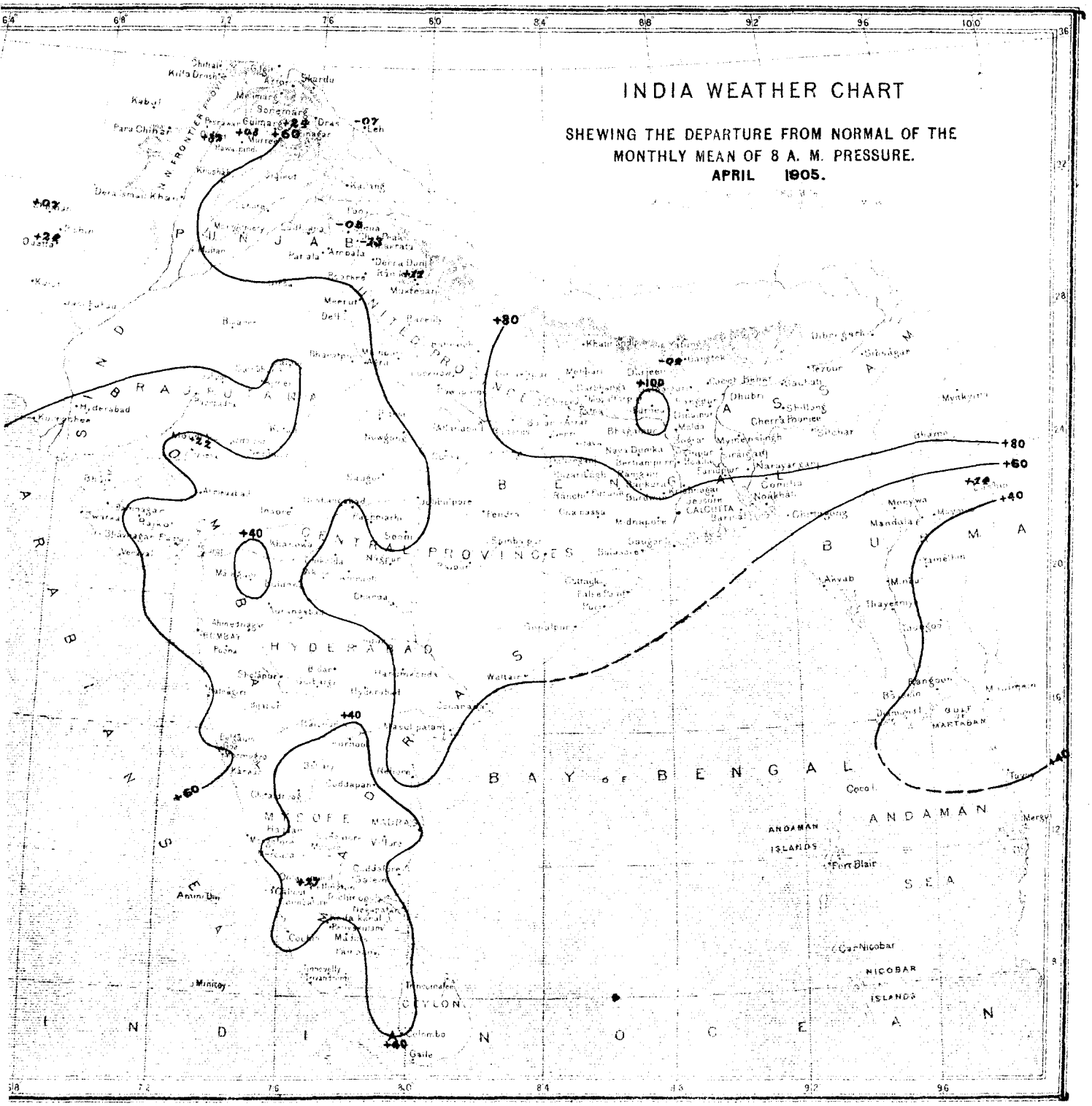
G. I. C. P. O.—No. 500 Meteor.—16-10-1905—385.

9, W., I.—Jan. 06.—5,600
LITHO. BY S. S. MUNDLE.
Zinco. S. I. O., Calcutta.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric ressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the ıore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of ambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are dicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the onth is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one feather added to the wind arrow.
,, ,,	2 to 5	,, ,, ,,	...	two feathers ,, ,, ,, ,,
,, ,,	5 to 10	,, ,, ,,	...	three ,, ,, ,, ,, ,,
,, ,,	10 to 20	,, ,, ,,	...	four ,, ,, ,, ,, ,,
	over 20	,, ,, ,,	...	five ,, ,, ,, ,, ,,



LITHO. BY S. B. MUNDLE

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal nounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020′ or two hundredths of an inch, &c. ntinuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted es that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continus and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative partures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

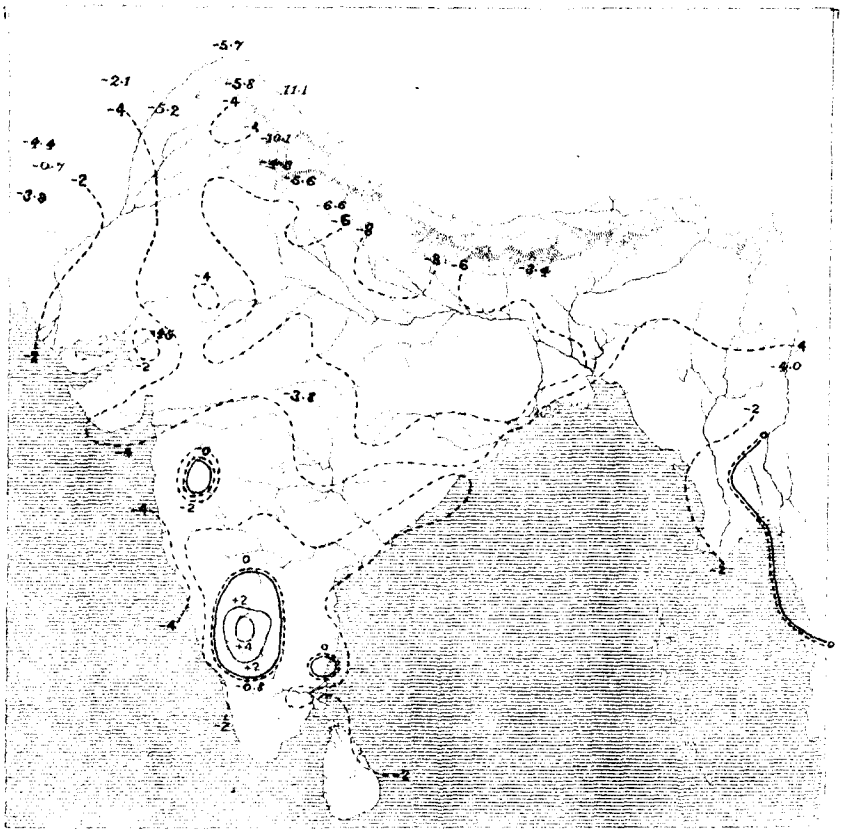


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.

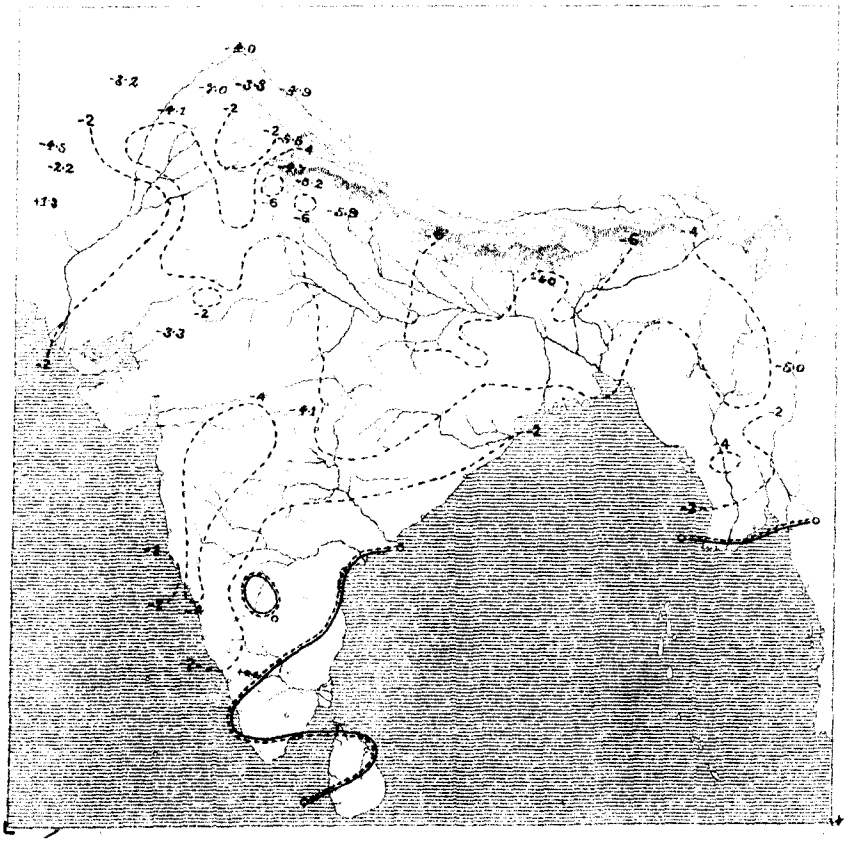


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

LITHO. BY S. B. MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 A. M.

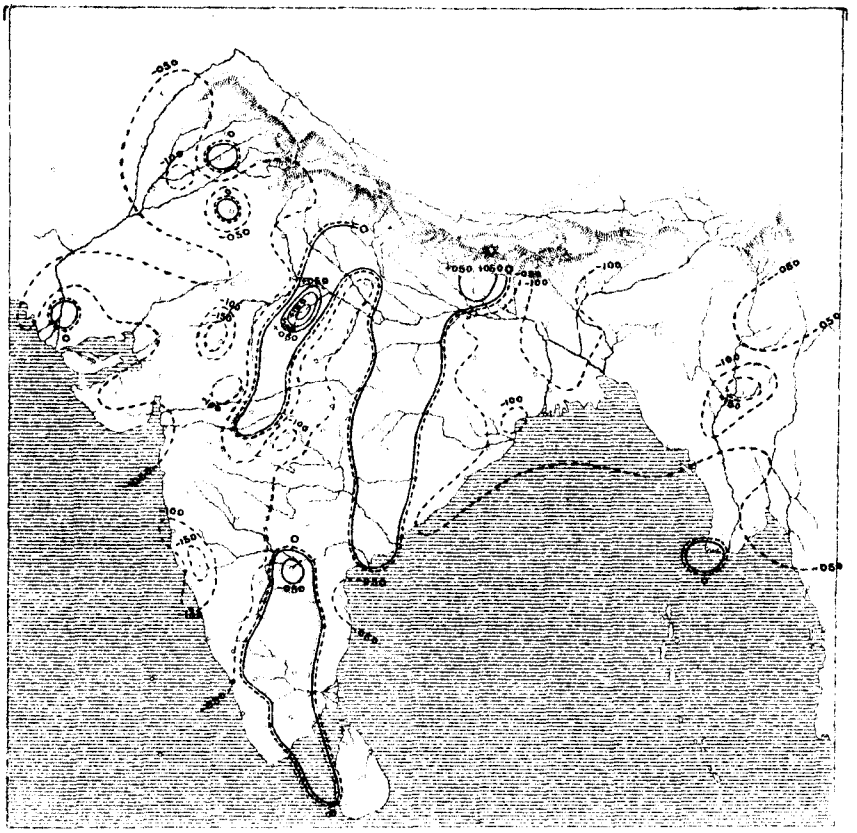


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 A. M.

LITHO. BY S. G. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF CLOUD
AMOUNT AT 8 A. M.

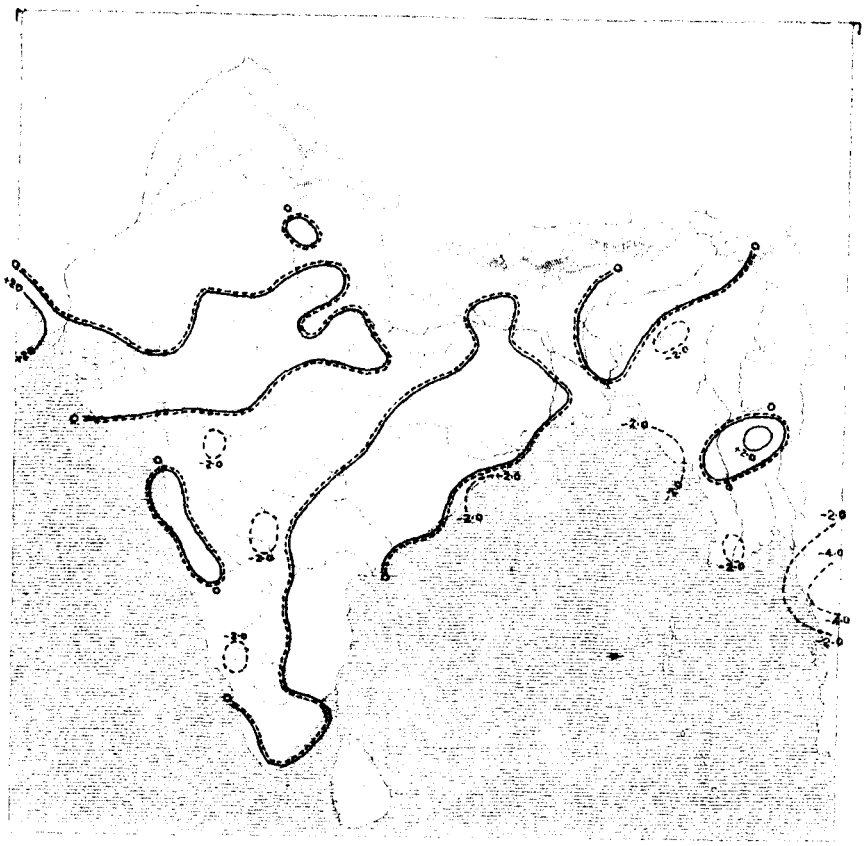
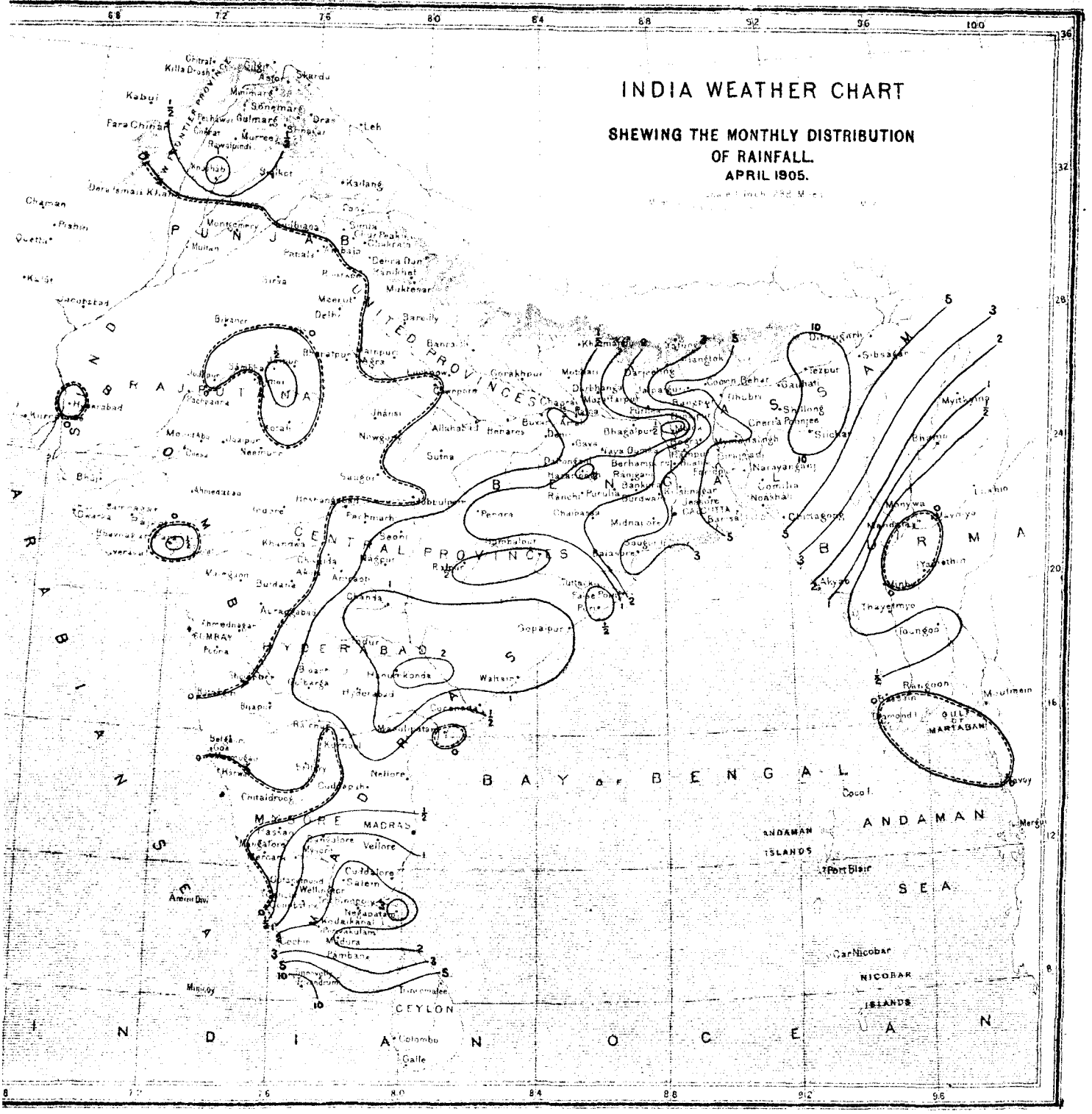


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE
MONTH ON WHICH RAINFALL EQUALLED OR
EXCEEDED 0·10 INCH.

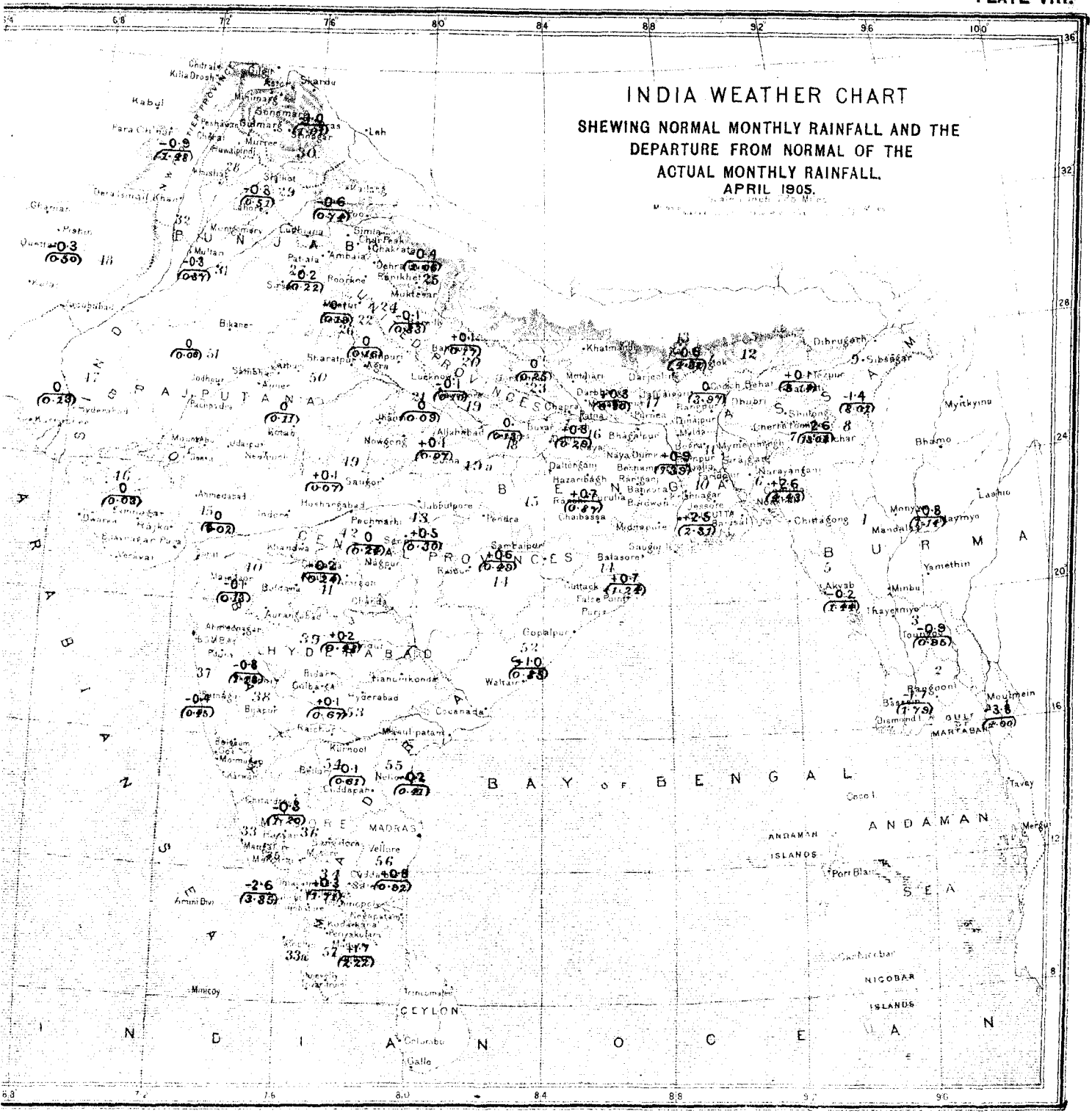
LITHO. BY S. B. MUNDLE.



W., I.—Jan. 05.—7,600.

Zinco. S. P. O., Calcutta.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data sed in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet n elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from hose where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S. B. MUNDLE

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall: the numbers above ese give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province
33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, MAY, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of May 1905, is based on observations taken ily at 8 A.M. at 230 stations, and on additional observa-ons taken at 10 A.M. and 4 P.M. at 64 stations. In the infall summary the rainfall data of the meteorological observatories, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the preparation of the review are utilized and brief notes on Solar and Magnetic disturbances are supplied by the observatories.

Summary of the chief features of the weather in India during the month of May, 1905.

The weather was somewhat more settled than usual er the greater part of India. In north-east India, how-er, thunder showers were of almost daily occurrence d in the south of the Peninsula the month's rainfall ghtly exceeded the normal.

At the commencement of the month under review the ean temperature was generally lower than the average er north-east India and the coasts of the Peninsula, and as higher than usual over the greater part of the interior the country. These general conditions continued till e 11th and the following table gives comparative data r all divisions for the 1st and the 11th in illustration :—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of	
	1st May 1905.	11th May 1905.
	°	°
rma	+1·6	+2·9
sam	+0·6	−3·8
ngal	−0·5	−4·3
issa	−1·1	−6·5
har	−2·1	−5·2
ota Nagpur	−0·4	−9·6

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of	
	1st May 1905.	11th May 1905.
	°	°
United Provinces of Agra and Oudh	−0·4	−3·6
Punjab	+1·5	+4·8
North-west Frontier Province	−0·3	+7·2
Baluchistan	+6·5	+5·4
Sind	+1·7	+4·3
Rajputana	+0·7	+8·4
Gujarat East	−1·8	+2·5
Central India	+2·0	+2·0
Central Provinces	+1·8	−0·4
Berar	+1·9	+4·5
West Coast	−1·4	+0·1
Bombay Deccan	+1·3	+3·6
Mysore	+3·2	+4·1
Madras Coast	+0·1	−2·1
Madras Deccan	+2·5	+1·8
South India	+0·9	+1·4

During these eleven days the extent of the departures from normal varied somewhat with the occurrence of rain. Thus on the 7th and 8th when the showers were heavier more extensive than usual in the north-east, the mean temperature was very low in that area. This is shown below :—

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
7th May	Berhampore	−11·4
	Bogra	−11·1
	Jalpaiguri	− 9·8
	Mymensingh	− 9·1
	Purnea	− 8·9
	Dinajpur	− 8·8
	Patna	− 8·8
8th May	Dinajpur	− 7·6
	Gorakhpur	− 7·3
	Purnea	− 6·9
	Bogra	− 6·6

Similarly showers occurred in the extreme north-west on the 1st and 2nd and the excess of temperature in that region was reduced or disappeared, while, on the contrary, between the 9th and the 11th, when the weather was uninterruptedly fine in the north-west, the heat there was relatively very great. The following gives comparative data for the north-west divisions for these three days :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	9th May.	10th May.	11th May.
	°	°	°
Punjab	+ 5·6	+ 6·8	+ 4·8
North-west Frontier Province	+ 6·8	+ 7·6	+ 7·2
Baluchistan	+ 7·9	+ 4·2	+ 5·4
Sind	+ 3·7	+ 3·5	+ 4·3
Rajputana	+ 7·2	+ 8·4	+ 8·4
Gujarat East	+ 1·8	+ 2·4	+ 2·5
Central India	+ 4·5	+ 5·1	+ 2·0

Between the 12th and the 17th showers occurred over the north-west Himalayas and neighbouring districts, and the east of the Peninsula, and the principal feature of the weather was the low temperatures prevailing over the eastern half of the Peninsula, north-east India and the submontane districts of northern India, the temperature remaining excessive over the Bombay Presidency, Rajputana, Central India (west) and neighbouring regions. The following gives comparative data for those stations at which the mean temperature was 10° or more below the normal :—

Date.	Station.	Mean temperature.		
		Actual of date.	Normal of date.	Departure from normal, of date.
		°	°	°
12th May	Patna	77·4	88·2	−10·8
	Gaya	81·1	91·4	−10·3
	Allahabad	82·4	92·6	−10·2
	Ranchi	77·3	87·3	−10·0
13th „	Chaibassa	76·9	92·3	−15·4
	Cuttack	76·5	90·4	−13·9
	Ranchi	74·3	87·4	−13·1
	Balasore	77·2	88·0	−10·8
	Calcutta	75·7	85·7	−10·0
14th „	Ranchi	77·1	87·5	−10·4
16th „	Nellore	78·2	94·3	−16·1
	Cuddapah	84·0	95·6	−11·6
	Masulipatam	80·1	91·1	−11·0
	Hyderabad Deccan	81·3	91·6	−10·3

On the 17th a brisk decrease of temperature occurred over the Indus Valley and thence spread eastward over northern India, while the area of excessive temperature was transferred southward to the head of the Peninsula. This distribution continued till the 22nd, and the following gives comparative data for all divisions for the 20th, to illustrate the general conditions prevailing during this period :—

Province or division.	Departure from normal of		
	Mean maximum temperature 20th May.	Mean minimum temperature, 20th May.	Mean temperature, 20th May.
	°	°	°
Burma	+ 3·5	+ 2·5	+ 3·0
Assam	− 0·6	+ 2·2	+ 0·3
Bengal	+ 0·6	+ 3·4	+ 2·0
Orissa	+ 0·5	+ 2·0	+ 1·3
Bihar	+ 1·5	+ 1·5	+ 1·5
Chota Nagpur	+ 2·7	+ 0·7	+ 1·7
United Provinces of Agra and Oudh	+ 2·0	− 5·4	− 1·7
Punjab	− 4·4	− 7·2	− 5·8

Province or division.	Departure from normal of Mean maximum temperature, 20th May.	Mean minimum temperature, 20th May.	Mean temperature, 20th May.
	°	°	°
North-west Frontier Province	−7·3	−9·5	−8·4
Baluchistan	−11·9	−13·1	−12·5
Sind	+6·3	−1·5	+2·4
Rajputana	−0·2	−6·2	−3·2
Gujarat, East	+4·0	+0·6	+2·3
Central India	+2·5	−1·2	+0·7
Central Provinces	+2·3	+0·2	+1·3
Berar	+4·4	+5·2	+4·8
West Coast	−2·6	−1·6	−2·1
Bombay Deccan	+2·3	+2·9	+2·6
Mysore	−4·7	−1·4	−3·1
Madras Coast	−1·0	+0·3	−0·4
Madras Deccan	−0·5	−2·3	−1·4
South India	−2·3	+0·8	−0·8

On the 20th mean temperature exceeded the average over north-east India and Burma (except Tenasserim), but on the 21st and 22nd a storm which formed over the Andaman Sea and thence passed northward to the Arakan coast occasioned general rain over Burma and reduced the temperature of that province to below the normal. The principal falls of rain in 24 hours occasioned by this storm were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Henzada	Lemyethna	20th May	5·50
Pyapon	Dedaye	" "	4·50
Ma-ubin	Yandoon	21st "	8·90
Ma-ubin	Ma-ubin	" "	5·30
Kyaukpyu	Myebon	" "	5·05
Henzada	Zalu	" "	5·00
Rangoon Town	Rangoon	" "	4·68
Henzada	Henzada	" "	4·35
Henzada	Okpo	" "	4·15
Pakokku	Shwegondaing	22nd "	7·00
Upper Chindwin	Mingin	" "	7·00
Pakokku	Minywa	" "	6·55
Hanthawaddy	Hmawbi	" "	4·90
Lower Chindwin	Kani	" "	4·59
Chin Hills (Pakokku)	Kanpetlet	" "	4·25
Pakokku	Mawle	" "	4·05
Chin Hills (Pakokku)	Kanpetlet	23rd "	12·10
Upper Chindwin	Kindat	" "	7·32
Pakokku	Gangaw	" "	4·92
Pegu	Nyaunglebin	" "	4·69
Pakokku	Kan	" "	4·65

This heavy rainfall occasioned a brisk fall of temperature, and the following gives comparative data for Burma from the 19th to the 23rd:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of 19th May.	20th May.	21st May.	22nd May.	23rd May.
	°	°	°	°	°
Burma	+2·5	+3·0	+0·8	−2·4	−4·1

On the 23rd, 24th and 25th temperature was rising briskly over northern India, where the weather was fine, and on the last date the mean temperature was higher than usual in all parts of the Indian area, except the coasts of the Peninsula. The following gives comparative data for all divisions for the 25th:—

Province or division.	Departure from normal of Mean maximum temperature, 25th May.	Mean minimum temperature, 25th May.	Mean temperature, 25th May.
	°	°	°
Burma	+1·4	+1·5	+1·5
Assam	+4·2	+0·9	+2·6
Bengal	+2·0	+1·6	+1·8
Orissa	+1·9	+3·3	+2·6
Bihar	+4·5	+1·3	+2·9
Chota Nagpur	+6·2	+0·1	+3·2
United Provinces of Agra and Oudh	+5·7	−0·9	+2·4
Punjab	+6·5	+4·2	+5·4
North-west Frontier Province	+3·5	+3·0	+3·3
Baluchistan	+2·0	+1·8	+1·9
Sind	+1·7	+1·0	+1·4
Rajputana	+6·9	+5·5	+6·2
Gujarat East	+3·4	0	+1·7
Central India	+5·1	+3·0	+4·1
Central Provinces	+4·2	+3·2	+3·7
Berar	+6·2	+6·3	+6·3
West Coast	−1·3	−0·2	−0·8
Bombay Deccan	+6·5	+2·7	+4·6
Mysore	+1·7	−0·3	+0·7
Madras Coast	−5·6	−2·7	−4·2
Madras Deccan	+3·5	+0·5	+2·0
South India	+0·2	−1·8	−0·8

On the 26th showers and a brisk fall of temperature were reported from north-east India, and from that date to the close of the month the general temperature conditions were, on the whole, similar to those which prevailed during the first eleven days of the month, *viz.*, lower temperatures than usual over north-east India and parts of the coasts of the Peninsula and higher temperatures than usual over the whole of the interior of the country.

Solar and Magnetic Disturbances.

The following notes on solar and magnetic disturbances have been supplied by the observatories:—

Kodaikanal Observatory:—Solar Observations—May, 1905.

There were two days (12th and 20th) during the month on which no Solar Observations were possible, and two other days (13th and 21st) were not fine enough for the study of prominences.

Spots.—Twenty-seven new spot-groups were observed, which is the same number as for April, but they were, on the average, slightly longer-lived, since the mean daily number for May was 4·0, as against 3·7 for April. In contrast with previous months of this year the distribution between the two hemispheres was very unequal. No less than 20 groups were in the northern and only 7 in the southern hemisphere. The distribution in latitude was normal.

The most important groups of the month were numbers 536, 541, 544 and 547. Group 536 appeared on the east limb on the last day of April, and was the only large spot visible during the earlier part of May. The group consisted of a round regular spot as leader with a considerable train of smaller followers. On the 5th and 6th it was the only spot visible. On the 6th, when the leader was on the central meridian, the C line was brilliantly reversed in the umbra. It was surrounded by a large area of faculæ, and prominences of considerable size were seen near it both at the east and the west limbs. Group 541 belonged to the class of spots which shows rapid growth and equally rapid decay. It was first seen on the 7th as a group of small dots not far from the centre of the disc. Next day it wass een as a double spot of regular outline; on the 9th it had begun to break up, and thereafter it was seen only as a train of small spots. The position of group 544 was marked by flocculi on the 7th, but the spot itself did not become visible till the following day. Its growth was less rapid than that of 541. The C line was brilliantly reversed in the umbra of the chief spot, on the 10th, when the group was crossing the central meridian. Group 547 came round the east limb on the 11th of May. On that and on the previous day intensely bright jet-shaped prominences, showing displacements in the C line, were seen on the limb near the spot. This spot group was the largest of the month. It consisted of a leader and of a rear spot, both of round regular form, connected by a train of smaller spots. The whole group extended over 16° of longitude. The leader was the principal spot and before the group reached the western limb all the other spots had disappeared.

Prominences.—A large number of conspicuous prominences were observed during the month. There were 50 of or over 1^m in height, of which 7 were above 2^m. The most striking display was on the 1st, when there was a twin prominence near the south point of the sun with two stems about 3° apart at the base but coalescing farther up. When first seen at 8h. 28m., it was about $2\frac{1}{2}^m$, high but when last photographed at 10h. 31^m, its top had reached a height of at least $4\frac{1}{2}$m. (126,000 miles). On the same day a large cloud was seen at position angle 10°, which at one time was apparently quite detached from the limb and about $2\frac{1}{2}^m$ above it. It changed very rapidly, and could, with difficulty, be traced in the latest photograph. On the 2nd nearly 50° of the west limb was covered with short prominences. Six prominences were observed showing motion in the line of sight—all within the spot zones. In the prominence that preceded spot 547 the displacement in the C line indicated a velocity, away from the observer, of nearly 200 miles per second.

There was no great magnetic disturbance during the month, but on the 7th there was a considerable fall in the H. F. between 14h. and 16h., and at that time group 536 was a little past the central meridian.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay:—
Note on the Colaba Magnetic Record, May 1905.

During the month the traces showed 12 calm days and 19 days of small disturbances.

The selected quiet days of the month were the 5th, 11th, 15th, 21st and 26th.

The mean observed absolute values of the several elements as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follows:—

Declination	0° 12′ 39″ East.
Horizontal Force	·37408 C. G. S. unit.
Dip	21° 54′·8.
Horizontal Force range	·00046 C. G. S. unit.
Horizontal Force Summed range	·00318 C. G. S. unit.
Declination	4′·41
Declination summed range	18′·11

Note:—(Summed range means sum without regard to signs of 24 ordinates of diurnal inequality)

Only one small seismic disturbance was recorded during the month on the 23rd.

Magnetic Disturbances, May, 1905.

May, 1905.		May, 1905.		May, 1905.	
1	S.	11	C.	21	C.
2	S.	12	S.	22	C.
3	S.	13	S.	23	S.
4	C.	14	C.	24	S.
5	C.	15	C.	25	S.
6	C.	16	C.	26	C.
7	C.	17	S.	27	S
8	S.	18	S.	28	S.
9	S.	19	S	29	S.
10	C.	20	S.	30	S.
				31	S.

The magnitudes of the disturbances are determined from Horizontal Force traces. C=Calm; S=Small; M=Moderate; G=Great; V. G.=Very great. Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Government Observatory, Bombay.

List of displacements recorded by the Seismograph at the Alipore Observatory during May, 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum Amplitude in m. m.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M.	
3-5-05	12-13·3		12-18·3	12-35·6	0·50	0-22·3	Doubtful.
5-5-05	one displacement after 5-37 lasted for a few minutes, beginning and end cannot be determined.						
11-5-05	17-25·5	17-37·1	17-38·2	17-56·0	1·50	0-30·5	
23-5-05	7-20·3		7-22·3	7-46·8	1·50	0-26·5	
31-5-05	18-35·0	18-42·6	18-43·1	19- 8·5	2·50	0-33·5	

The local times of the commencement.

Date.	H. M. S.
May 3, 1905	18- 6·5
„ 5, „	After 11-30·0
„ 11, „	23-18·8
„ 23, „	13-13·6
June 1, „	0-28·3

G. W. KÜCHLER,
Asst. Meteo. Reporter to the Govt. of India.

Royal Alfred Observatory, Mauritius.—No observations were possible on the 5th, 8th, 9th, 24th and 25th of May. On all other days groups of sun-spots were observed, and in addition detached spots were noted between the 1st and 4th and the 10th and 20th:—The number of groups of spot was as follows:—

1	Group	was	observed	on	2nd, 3rd, 4th, 6th, 22nd, 23rd, 26th, 29th and 30th.
2	Groups	were	„	„	1st, 7th, 20th, 21st, 27th, 28th and 31st.
3	„	„	„	„	10th, 16th, 17th, 18th and 19th
4	„	„	„	„	11th, 13th and 15th.
5	„	„	„	„	12th and 14th.

MAGNETIC DISTURBANCES.

On May 19th between 0h. and 14h. frequent small fluctuations in Horizontal Force occurred. On the 27th an accentuated diurnal movement, with occasional very small waves superposed, was recorded.

T. F. CLAXTON,
Director, Royal Alfred Observatory.

Weather in the Indian Monsoon region.

The general conditions prevailing over the Trades monsoon area were in many respects interesting. In the south-east Trades region, with the exception of a large excess of rain at the Seychelles, the mean conditions of May, 1905 were very nearly normal. The following gives data:—

May, 1905.	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	+·026″	−·006″	−·005″
Actual mean wind direction.	S 67° E	S 12°E	S 37°E
Normal mean wind direction	S 65° E	S 5°E	S 39°E
Actual mean wind velocity (miles per diem).	231	200	174
Normal mean wind velocity (miles per diem).	246	194	173
Rainfall departure .	+0·29″	−0·40″	+5·37″

At Mauritius the mean pressure of the month slightly exceeded the normal, but both at Zanzibar and at the Seychelles the departures from the normal were trifling and quite unimportant. The mean actual wind direction was a few degrees more easterly than the normal direction at Mauritius and Zanzibar, but there was no other variation, while the mean wind velocity was approximately normal. At Mauritius and Zanzibar the month's rainfall was normal while at the Seychelles it was more than twice the usual amount.

The pressure conditions, on the mean of the month showed that the barometric gradient between Mauritius and the Equator was slightly steeper than usual, but at Zanzibar and the Seychelles on the one hand, and at Bombay and Colombo, on the other, the departures of pressure from normal were so trifling that presumably over the intervening regions the general conditions were normal or nearly so.

Apparently, however, monsoon conditions were less developed over the south-west and centre of the Arabian Sea than is ordinarily the case. This is shown by the following reports as to the weather experienced by the mail steamers during their passages across the Arabian Sea:—

The *Arcadia* left Aden on the 14th May and experienced up to Long. 50°E. light south-easterly winds; thence to Long. 60°E., which was reached on the 17th, moderate south-westerly winds and a slight southerly swell; thence to Long. 64°E. gentle westerly winds and a long southerly swell and to arrival at Bombay, on the morning of the 19th, gentle to moderate north-westerly winds and cloudy weather.

The *Persia* left Aden on the 21st and experienced up to Long. 53°E. light easterly winds and fine weather; thence to Long. 63°E. moderate to light south-westerly winds and moderate to slight south-west swell, and thence to arrival at Bombay, on the morning of the 26th, light variable winds, slight southerly swell and fine weather.

The *Peninsular* left Aden on the 28th and experienced up to Long. 54°E. light easterly and south-easterly winds and fine weather; thence to Long 68°E. moderate to gentle south-westerly winds, a moderate south-west sea and swell and fine weather, and thence to arrival at Bombay, on the morning of the 2nd June, light north-westerly winds and fair weather.

The preceding extracts show that the advance of monsoon conditions over the Arabian Sea was somewhat delayed in May, 1905, and that even at the close of the month the winds were only moderate or gentle over the centre of the Arabian Sea, while off Bombay, on the 2nd of June, they were still north-westerly.

In Egypt the mean pressure of the month was above the normal everywhere but particularly in the Sudan. Depressions were recorded on the 4th, 8th, 14th, 21st, 24th and 30th. These depressions generally passed to the eastward, and the returns from Beirut, Baghdad, the Persian stations and Afghanistan show that depressions, travelling eastward, were recorded over different portions of the area stretching between the Levant and north-west India. Over western Siberia the barometer fell markedly between the 11th and the 13th, the 18th and the 21st, the 24th to the 26th and on the 31st, but these changes do not appear to have affected the pressure conditions or the weather over the Indian region.

Pressure over the Trades-monsoon area, as a whole, was above the normal from the 1st to the 15th, below from the 16th to the 24th, and above from the 25th to the 31st. During the whole of the early part of the month the mean pressure of the Indian land area exceeded the normal while over the north of the Equatorial Belt the barometer was somewhat lower than usual, so that during that period the barometric gradient between the Equatorial regions and the Indian area was less steep than is ordinarily the case.

Depressions and cyclonic storms.

The weather was, on the whole, quieter and less disturbed than usual over northern India during the month of May, 1905. The usual low pressure area of the hot weather was shown over the extreme north-west of India and this depression was transferred northward and southward over the Punjab and Sind and at times intensified into a disturbance occasioning showers and dust and thunderstorms.

Between the 17th and 19th a low pressure area appeared over western Bengal, where, however, it exercised but little influence on the weather.

The only important barometric depression or storm of the month was that of the 21st and 22nd on the Burma coast.

The reports of the 19th showed that the barometer had fallen ·117″ at Port Blair, where the wind had shifted from south-west to west-north-west with heavyish rain. Pressure was also giving way on the Tenasserim and Burma coasts, where calms and light easterly winds were reported with heavyish rain in places. A depression was hence probably forming over the Andaman Sea at this time. On the 20th the barometer was still falling, though slowly, around the Andaman Sea and the wind was rising at Diamond Island. Heavyish rain continued at Tavoy and Port Blair and the depression was probably slowly concentrating on this day. On the 21st the depression appeared off the south Burman coast, the centre lying apparently at about 70 miles north-north-west of Diamond Island. The barometer had recovered slightly at Port Blair, while it had fallen ·18″ at Diamond Island, where the wind was blowing strongly from south-west. Heavy rain had fallen at Rangoon and moderate rain over Burma generally. The storm travelled to north during the day, and by 3 A.M., on the 22nd the centre had apparently crossed the Arakan coast near Akyab. The barometer had risen rapidly over Lower Burma and fallen rapidly at Akyab and general moderately heavy rain had been received over Burma. The storm apparently broke up among the hills of the interior of Burma during the 22nd, and the reports of the 23rd showed a rapid recovery of pressure all over Burma.

Pressure.

With a few unimportant exceptions—mainly over the Peninsula—the mean pressure of the month of May exceeded the normal at all stations by amounts which averaged ·019″. This is the tenth month in succession for which

he mean monthly pressure of the whole Indian area has nore or less exceeded the normal. This is shown below:—

AREA.	PRESSURE DEPARTURE OF									
	May 1905.	Apl. 1905.	Mar. 1905.	Feb. 1905.	Jan. 1905.	Dec. 1904.	Nov. 1904.	Oct. 1904.	Sep. 1904.	Aug. 1904.
	"	"	"	"	"	"	"	"	"	"
Indian Land Area.	+·019	+·059	+·015	+·043	+·019	+·027	+·038	+·005	+·017	+·002

The chart of actual mean pressure of the month of May 905 (Plate I) shows that pressure was high over the west nd south-west of the Peninsula, west Ceylon, the south nd south-east of the Bay, the Tenasserim coast, and the Brahmaputra Valley. From these areas the mean pressure radually decreased and was lowest over the south-west of he Punjab. The mean pressure of the month exceeded the ormal except over Berar and the east of Gujarat, the entre of the Peninsula and locally at Mysore, and Multan. The excess was greatest over north-east India and the orth-east coast of the Peninsula and amounted to more han ·040" at the following stations :—

STATION.	Departure from normal of mean 8 A.M. pressure of May 1905.
	"
gra	+·066
inajpur	+·054
rnea	+·053
rayanganj	+·053
risal	+·051
ymensingh	+·050
palpur	+·050
ubri	+·048
amo	+·047
paiguri	+·045
rhampore	+·045
sulipatam	+·045
ttack	+·044
se Point	+·044
rdwan	+·044
sagar	+·041
canada	+·041

Pressure was in as marked excess over Persia, Asiatic urkey and Arabia as over north-west India, but in the rth of the south-east Trades region the excess disppeared and was replaced by a trifling deficiency at the Seychelles and Zanzibar. The following gives data of the extra-Indian stations :—

STATION.	Departure from normal of mean 8 A.M. pressure of May 1905.
	"
Trincomalee	+·024
Colombo	0
Bushire	+·060
Jask	0
Muscat	+·030
Baghdad	+·025
Aden	+·027
Perim	+·028
Zanzibar	—·006
Seychelles	—·005
Mauritius	+·026

Relatively to the geographical mean, pressure was in excess over north-east India, the north of the Gangetic Plain, and the east coast of the Peninsula, while it was generally normal or in defect elsewhere. The principal anomalies were as follows :—

POSITIVE ANOMALIES.		NEGATIVE ANOMALIES.	
STATION.	Pressure anomaly.	STATION.	Pressure anomaly.
	"		"
Bogra	+·047	Malegaon	—·035
Dinajpur	+·035	Bijapur	—·027
Purnea	+·034	Khandwa	—·024
Narayanganj	+·034	Multan	—·024
Barisal	+·032	Mysore	—·023
Mymensingh	+·031	Hoshangabad	—·022
Gopalpur	+·031	Trivandrum	—·022
Dhubri	+·029	Bellary	—·021
Bhamo	+·028	Kurnool	—·021
Jalpaiguri	+·026		
Berhampore	+·026		
Masulipatam	+·026		

The mean pressure of the month exceeded the normal at all the hill stations. The excess was generally greater at the northern than at the central and southern stations and in the extreme north-west was generally greater at the level of the hills than at the level of the plains stations, so

that the vertical pressure gradients were slighter than the average. This is shown below :—

HILL STATION.	Departure from normal pressure, May 1905.	PLAIN STATION.	Departure from normal pressure, May 1905.	Departure of pressure difference.
	"		"	"
Chaman	+·017	Jacobabad	+·009	—·008
Leh	+·065	Lahore	+·009	—·056
Murree	+·034	Peshawar	+·014	—·020
Simla	+·036	Ludhiana	+·014	—·022
Chakrata	+·026	Roorkee	+·035	+·009
Ranikhet	+·027	Bareilly	+·030	+·003
Darjeeling	+·026	Dhubri	+·048	+·022
Lashio	+·019	Bhamo	+·047	+·028
Mount Abu	+·025	Deesa	+·006	—·019
Wellington	+·009	Coimbatore	+·010	+·001

The chief abnormal features of the pressure distribution of the month were as follows :—

(1) Pressure was generally normal or in trifling excess over western and more or less in excess over eastern India and Burma.

(2) The departures from normal were considerable in the north-east and the departure from normal of the geographical mean of the whole country was +·019."

(3) Pressure was more or less in excess over t countries to the westward of India, but in the north of t south-east Trades region the excess disappeared and w replaced by a slight deficiency.

(4) At the hill stations pressure was in excess of t normal and in parts of north-west India, the vertical pre sure gradients were normal or slighter than usual.

The following table gives the mean pressure departur and anomalies for the eleven meteorological provinces :—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A M. pressure of May 1905.	Pressure anomaly, May 1905.
	"	"
Burma Coast and Bay Islands	+·018	—·001
Burma Inland	+·024	+·005
Assam	+·040	+·021
Bengal and Orissa	+·044	+·025
Gangetic Plain and Chota Nagpur	+·029	+·010
Upper Sub-Himalayas	+·019	0
Indus Valley and North-West Rajputana	+·009	—·010
East Rajputana, Central India, and Gujarat	+·013	—·006
Deccan	+·005	—·014
West Coast	+·005	—·014
South India	+·014	—·005

Temperature.

The relatively low temperatures which prevailed over the greater part of the Indian land area from about the 20th of January to the close of April 1905, disappeared over a large part of the country in May. Heavier rain than usual kept temperature low over north-east India, and on both coasts of the Peninsula the mean temperature was lower than the average, but over north-west India, the central parts of the country and the interior of the Peninsula the low temperatures of the previous four months had disappeared and been replaced by an excess.

The mean maximum or day temperature of the month was below the normal over the Arakan coast, north-east India, the Gangetic Plain, the east of the Central Provinces and the coast districts of the Peninsula. The deficiency was greatest over Bengal and was considerable over the mid-Madras coast. The departures from normal exceeded —3° at the following stations :—

STATION.	MEAN MAXIMUM TEMPERATURE.		
	Actual, May 1905.	Normal, May.	Departure from normal, May 1905.
	°	°	
Purnea	89·8	94·8	—5·0
Patna	95·6	100·2	—4·6
Burdwan	93·9	98·4	—4·5
Berhampore	92·0	96·5	—4·5
Bogra	88·1	92·5	—4·4
Gorakhpur	96·8	101·0	—4·2

STATION.	MEAN MAXIMUM TEMPERATURE. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°	°
Dinajpur	88·2	91·7	−3·5
Jessore	91·3	94·8	−3·5
Masulipatam	96·9	100·1	−3·2
Nellore	102·9	106·0	−3·1
Cocanada	97·6	100·7	−3·1

The mean maximum temperature exceeded the normal over north-west India, the central parts of the country and the interior of the Peninsula, and the departures from normal were more than +4° at the following considerable number of stations:—

PROVINCE OR DIVISION.	STATION.	MEAN MAXIMUM TEMPERATURE. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
		°	°	°
NORTH-WEST INDIA	Deesa	112·5	106·7	+5·8
	Pachpadra	113·2	107·8	+5·4
	Ahmedabad	111·9	107·1	+4·8
	Jacobabad	116·4	111·6	+4·8
	Bikaner	111·6	107·1	+4·5
	Sambhar	109·6	105·1	+4·5
	Multan	110·8	106·6	+4·2
	Sialkot	107·2	103·1	+4·1
CENTRAL PARTS OF INDIA.	Khandwa	111·0	106·5	+4·5
	Indore	107·1	102·8	+4·3
PENINSULA	Ahmednagar	106·3	99·4	+6·9
	Malegaon	108·9	104·0	+4·9

The mean maximum temperature was also in excess of the normal over the interior of Burma and the south Burman and Tenasserim coast districts. The largest departures from normal in this area were as follows:—

PROVINCE.	STATION.	MEAN MAXIMUM TEMPERATURE. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
		°	°	°
BURMA	Toungoo	100·0	95·7	+4·3
	Moulmein	93·0	89·3	+3·7
	Tavoy	91·8	88·4	+3·4
	Yamethin	98·5	95·3	+3·2

At most of the Himalayan hill stations the mean maximum temperature was below the normal, but at Kabul, Quetta, Mount Abu and Pachmarhi it was in greater or less excess. The following shows the principal departures from normal at the hill stations:—

HILL STATION.	MEAN MAXIMUM TEMPERATURE. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°	°
Gilgit	82·3	85·4	−3·1
Kailang	58·8	61·9	−3·1
Leh	61·8	64·0	−2·2
Chaman	92·1	94·3	−2·2
Chakrata	72·8	74·3	−1·5
Cherat	88·3	89·6	−1·3
Pachmarhi	99·8	95·1	+4·7
Mount Abu	92·5	88·2	+4·3
Kabul	84·9	82·6	+2·3
Quetta	85·1	83·5	+1·6

The highest day temperatures of the month were generally recorded during the second or third weeks, and the following table shows the highest readings registered in the different divisions during the month, together with the highest readings previously recorded:—

PROVINCE OR DIVISION.	Station.	Highest maximum temperature recorded in May, 1905.	Date on which recorded.	Highest maximum temperature recorded in May previous to 1905.	Year in which recorded.
		°		°	
BURMA	Minbu	109·1	9th	109·1	1903
ASSAM	Silchar	96·1	23rd	101·8	1886
BENGAL	Bankura	109·6	24th	117·1	1894
ORISSA	Cuttack	108·5	24th	118·0	1872
BIHAR	Dehri	112·5	25th	116·3	1897
CHOTA NAGPUR	Daltonganj	115·1	26th	116·1	1897
UNITED PROVINCES.	Jhansi	116·4	26th	118·0	1869
PUNJAB	Khushab	118·8	10th	119·1	1892
NORTH-WEST FRONTIER PROVINCE.	D. I. Khan	114·2	28th	119·5	1892
SIND	Jacobabad	124·0	13th	123·0	1888, 95, 98, 1901 and 1904.
RAJPUTANA	Pachpadra	120·5	14th	123·1	1886
GUJARAT (EAST)	Deesa	118·6	15th	118·6	1886
CENTRAL INDIA	Nowgong	114·5	26th	116·5	1881 and 1883.
CENTRAL PROVINCES.	Nagpur	114·7	9th & 30th	117·7	1883

PROVINCE OR DIVISION.	STATION.	Highest maximum temperature recorded in May, 1905.	Date on which recorded.	Highest maximum temperature recorded in May previous to 1905.	Year in which recorded.
		°		°	
BERAR	Akola	114·0	10th, 21st & 26th.	116·4	1901
	Amraoti	114·0	10th & 26th.	115·5	1897 and 1901.
WEST COAST	Cochin	93·3	8th & 9th.	99·5	1879
BOMBAY DECCAN	Malegaon	112·3	12th & 13th.	111·8	1904
MYSORE	Chitaldroog	101·2	1st & 8th.	103·0	1897
MADRAS COAST	Cocanada	110·0	22nd	113·5	1896
MADRAS DECCAN	Aurangabad	113·6	25th	113·5	1898
SOUTH INDIA	Salem	104·7	5th	108·4	1879

The preceding data show that at Minbu, Jacobabad, Deesa and Malegaon the highest temperatures registered were as high, or higher, than any previously recorded.

The absolutely highest maxima were, as is usual, recorded in Upper Sind, where, at Jacobabad, the thermometer rose to 124° on the 13th. This reading is the highest on record in May at this station.

The departures of the mean minimum temperature of the month from normal exhibited a generally similar distribution to that of the day temperature.

The mean minimum or night temperature was generally in excess of the normal over Burma, Assam, East Bengal, north-west India, the central parts of the country and the interior of the Peninsula, while it was generally lower than usual over Bengal, the Gangetic Plain and the coast districts of the Peninsula. The following shows the principal departures from normal :—

POSITVE DEPARTURES.		NEGATIVE DEPARTURES.	
STATION.	Departures of minimum temperature from normal.	STATION.	Departures of minimum temperature from normal.
	°		°
Ajmer	+6·4	Chaibassa	−3·1
Lahore	+5·4	Bahraich	−2·8
Bikaner	+4·9	Ranchi	−2·6
Sialkot	+4·6	Gorakhpur	−2·5
Multan	+4·4	Patna	−2·5
Amraoti	+4·1	Sambalpur	−2·3
		Trivandrum	−2·3
		Cocanada	−2·2
		Gopalpur	−2·1
		Benares	−2·1
		Darbhanga	−2·1

At the hill stations the departures from normal were generally small and unimportant, but at Mount Abu there was a large excess.

The mean temperature of the month exceeded the normal over Burma, over north-west and central India and over the interior of the Peninsula and was below the normal over north-east India, the Gangetic Plain and the coast districts of the Peninsula. The principal departures from normal were as follows :—

POSITIVE DEPARTURES.		NEGATIVE DEPARTURES.	
STATION.	Departure of mean temperature from normal.	STATION.	Departure of mean temperature from normal.
	°		°
Ajmer	+5·4	Patna	−3·6
Bikaner	+4·7	Gorakhpur	−3·4
Sialkot	+4·4	Burdwan	−3·2
Pachpadra	+4·4	Berhampore	−2·9
Multan	+4·3	Purnea	−2·8
Jacobabad	+4·2	Chaibassa	−2·8
Deesa	+4·0	Bogra	−2·7
		Cocanada	−2·7
		Dinajpur	−2·6
		Ranchi	−2·6

At most of the hill stations the mean temperature was approximately normal, but at Mount Abu, Pachmarhi, Kalat, Gilgit and Kailang the departures from normal were considerable. This is shown below :—

HILL STATION.	MEAN TEMPERATURE.		
	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°	°
Mount Abu	84·6	79·6	+5·0
Pachmarhi	88·1	85·1	+3·0
Kalat	66·5	64·3	+2·2
Gilgit	71·0	73·6	−2·6
Kailang	48·0	50·1	−2·1

The following gives data for the extra-Indian stations :—

STATION.	MEAN TEMPERATURE. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°	°
Trincomalee	84·4	85·9	−1·5
Colombo	82·5	83·3	−0·8
Kabul	69·2	67·9	+1·3
Kashgar	67·4	69·5	−2·1
Ispahan	67·8	69·2	−1·4
Bushire	81·3	82·2	−0·9
Jask	85·4	85·5	−0·1
Muscat	93·4	88·7	+4·7
Baghdad	81·5	79·9	+1·6
Aden	85·0	86·0	−1·0
Perim	86·3	86·0	+0·3
Zanzibar	78·1	77·8	+0·3
Seychelles	80·7	79·5	+1·2
Mauritius	71·9	72·1	−0·2

The departures from normal were generally unimportant, but at Kashgar the deficiency and at Muscat and Baghdad the excess were considerable.

The following summarises the chief departures of the temperature conditions of the month from the normal.

(1) The mean day, the mean night and the mean temperature of the month were generally above the normal over Burma.

(2) The mean day, the mean night and consequently the mean temperature were generally below the normal over north-east India, the Gangetic Plain and the coast districts of the Peninsula.

(3) The largest negative departures from normal were recorded over Bengal.

(4) The mean day, the mean night and consequently also the mean temperature were above the normal over north-west India, the central parts of the country and the interior of the Peninsula.

(5) The greatest excess was reported from the western desert.

The following table gives temperature departure data of the month for the eleven meteorological provinces :—

METEOROLOGICAL PROVINCE.	DEPARTURE FORM NORMAL OF Mean maximum temperature, May, 1905.	Mean minimum temperature, May, 1905.	Mean temperature, May, 1905.
	°	°	°
Burma Coast and Bay Islands	+ 1·5	+0·6	+1·1
Burma Inland	+ 1·6	+0·7	+1·1
Assam	— 0·6	+0·2	—0·2
Bengal and Orissa	— 2·6	—0·7	—1·7
Gangetic Plain and Chota Nagpur	— 2·5	—1·9	—2·2
Upper Sub-Himalayas	+ 0·9	+2·1	+1·5
Indus Valley and North-West Rajputana.	+ 3·0	+2·3	+2·7
East Rajputana, Central India and Gujarat.	+ 2·6	+2·1	+2·4
Deccan	+ 2·0	+1·6	+1·8
West Coast	— 0·8	—0·5	—0·7
South India	— 0·8	—0·3	—0·5

The following table gives comparative temperature data for the month for the 57 meteorological provinces or divisions of India :—

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE. Mean maximum.	Mean minimum.	Mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	DEPARTURE FROM NORMAL OF MONTH OF Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
BURMA	Tenasserim	90·9	78·4	84·7	12·5	23·4	+2·5	+1·5	+1·0
	Lower Burma (Deltaic)	91·4	78·4	84·9	13·0	25·9	+0·7	+0·7	0
	Central do.	99·9	77·3	88·6	22·6	34·6	+2·8	+0·1	+2·7
	Upper do.	96·6	76·3	86·5	20·3	34·2	+1·6	+0·6	+1·0
	Arakan	90·1	78·1	84·1	12·0	21·7	−0·5	−0·1	−0·4
BENGAL AND ASSAM	Eastern Bengal	88·7	74·9	81·8	13·8	27·0	−1·1	+0·3	−1·4
	Assam (Surma)	88·9	73·6	81·3	15·3	29·8	+0·2	+1·1	−0·9
	Do. (Hills)	72·9	58·6	65·8	14·3	32·2	...	...	...
	Do. (Brahmaputra)	85·5	72·0	78·8	13·5	27·2	−1·0	−0·3	−0·7
	Deltaic Bengal	92·5	77·3	84·9	15·3	33·9	−2·3	−0·8	−1·5
	Central do.	92·6	75·3	84·0	17·3	35·7	−4·5	−1·4	−3·1
	North do.	87·2	72·5	79·9	14·7	30·5	−2·3	−1·1	−1·2
	Bengal Hills	61·0	46·4	53·7	14·6	26·6	−0·7	−0·7	0
	Orissa	93·4	79·2	86·3	14·2	31·4	−2·1	−0·9	−1·2
	Chota Nagpur	101·1	75·7	88·4	25·3	42·5	−2·2	−2·3	+0·1
	South Bihar	100·1	76·9	88·5	23·1	42·0	−3·5	−2·1	−1·4
	North do.	93·1	74·1	83·7	19·0	37·7	−3·8	−1·3	−2·5

Province.	Division.	Actual Temperature.					Departure from normal of month of		
		Mean maximum.	Mean minimum.	Mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
United Provinces of Agra and Oudh.	United Provinces (East)	104·0	77·5	90·8	26·5	43·7	−2·3	−1·8	−0·5
	Oudh (South)	103·0	76·4	89·7	26·6	45·5	−2·0	−1·4	−0·6
	Do. (North)	98·8?	75·1	87·0?	23·7?	43·6	−4·2?	−2·8	−1·4?
	United Provinces (Central)	107·4	81·5	94·5	25·0	41·9	+1·0	+1·8	−0·8
	Do. (West)	105·4	79·9	92·7	25·6	40·8	+0·3	+1·2	−0·9
	Do. (Submontane, East).	96·8	74·8	85·8	22·0	38·6	−4·2	−2·5	−1·7
	Do. (Submontane, West).	99·2	73·7	86·5	25·6	41·7	−0·9	−0·2	−0·7
	Do. (Hills)	75·2	58·7	67·0	16·5	31·1	−0·4	+1·3	−1·7
Punjab	Punjab (South-East)	105·0	81·9	93·5	23·1	38·9	+0·3	+1·7	−1·4
	Do. (South)	106·2	79·2	92·7	27·0	45·5	+1·2	+2·6	−1·4
	Do. (Central)	107·4	78·0	92·7	29·4	47·7	+1·7	+5·4	−3·7
	Do. (Submontane)	104·9	77·2	91·1	27·7	45·7	+2·2	+3·3	−1·1
	Do. (Hills)	70·8	47·9	59·4	22·9	41·6	−1·5	−0·3	−1·2
	Do. (West)	108·8	80·2	94·5	28·6	50·1	+2·2	+2·4	−0·2
N.-W. F. Province	N.-W. F. Province	102·8	74·4	88·6	28·4	48·6	+1·4	+1·9	−0·5
Bombay and Malabar Coast Districts (Madras).	Malabar	88·1	77·5	82·8	10·6	19·0	−1·1	−0·7	−0·4
	Madras (South Central)	97·0	75·7	86·4	21·3	34·0	−0·1	−1·1	−1·2
	Coorg	81·5	63·9	72·7	17·6	33·4	+1·2	−1·0	+2·2
	Mysore	92·4	69·8	81·1	22·6	34·0	+0·5	+0·8	−0·3
	Konkan	89·2	80·7	85·0	8·5	14·1	−0·4	−0·2	−0·2
	Bombay Deccan	101·9	74·5	88·2	27·5	36·2	+2·6	+1·6	+1·0
	Hyderabad (North)	105·2	79·3	92·3	25·9	38·2	...	...	...
	Khandesh	108·9	77·8	93·4	31·1	37·7	+4·9	+2·7	+2·2
Central Provinces and Berar.	Berar	111·3	84·0	97·7	27·4	35·1	+3·6	+3·4	+0·2
	Central Provinces (West)	110·9	83·0	97·0	28·0	38·7	+3·1	+1·9	+1·2
	Do. (Central)	107·5	80·7	94·1	26·8	42·6	+1·5	+1·6	−0·1
	Do. (East)	104·4	79·4	91·9	25·0	41·0	−1·3	−1·2	−0·1
Bombay (North)	Gujarat (East)	107·1	80·0	93·6	27·1	38·2	+3·1	+1·6	+1·5
	Kathiawar and Cutch	99·2	77·8	88·6	21·4	29·8	+1·8	+0·2	+1·6
	Sind	107·3	79·8	93·6	27·5	43·9	+3·4	+1·4	+2·0
	Baluchistan Hills	87·9	54·5	71·2	33·4	56·6	+0·2	+0·7	−0·5
Rajputana and Central India.	Central India (East)	107·0	80·3	93·6	26·7	40·7	+2·3	+1·9	+0·
	Rajputana (East), Central India (West)	109·1	84·2	96·6	24·9	41·0	+3·9	+4·4	−0·5
	Do. (West)	111·8	84·3	98·0	27·5	46·4	+5·0	+4·1	+0·9
Madras	East Coast (North)	92·3	79·4	85·9	12·8	30·4	−2·2	−2·2	0
	Hyderabad (South)	104·6	80·2	92·5	24·4	37·0	+0·8	+1·2	−0·4
	Madras (Central)	105·0	81·1	93·1	23·9	35·5	+0·5	+0·4	+0·1
	East Coast (Central)	99·9	80·7	90·3	19·2	38·2	−3·2	−1·1	−2·1
	Do. (South)	97·6	79·2	88·4	18·4	32·8	−1·1	−0·6	−0·5
	Madras (South)	96·5	79·3	88·0	17·2	26·0	−0·7	−0·6	−0·1

The data of the preceding table show that the mean maximum temperature of the month exceeded 105° over the central division of the United Provinces (107°·4), the west division of the United Provinces (105°·4), the south (106°·2), central (107°·4) and west (108°·8) divisions of the Punjab, North Hyderabad (105°·2) Khandesh (108°·9), Berar (111°·3), the west (110°·9) and central (107°·5) divisions of the Central Provinces, Gujarat, East (107°·1), Sind (107°·3), the east of Central India (107°·0), eastern Rajputana and the west of Central India (109°·1) and western Rajputana (111°·8). The highest average day temperatures were hence reported from the western divisions of the Central Provinces and the west of Rajputana. The highest mean temperature recorded was 98° in western Rajputana, while the lowest, on the plains, was 78°·8 in the Brahmaputra Valley. The mean daily range of temperature was somewhat smaller than usual.

In the following paragraphs is given a brief account of the more important changes of temperature:—

During the first eleven days of the month the general distribution of temperature, relatively to the normal, was as follows. The mean temperature was lower than usual over north-east India and over the coast districts of the Peninsula, while it was generally high elsewhere.

The following gives comparative data of temperature for all divisions for each alternate day from the 1st to the 11th :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	1st May.	3rd May.	5th May.	7th May.	9th May.	11th May.
	°	°	°	°	°	°
Burma . . .	+1·6	+2·2	+3·3	+2·4	+3·8	+2·9
Assam . . .	+0·6	+1·4	−0·9	−5·7	−7·2	−3·8
Bengal . . .	−0·5	−2·1	−3·5	−7·0	−6·3	−4·3
Orissa . . .	−1·1	+1·9	−1·0	−3·2	+0·4	−6·5
Bihar . . .	−2·1	−1·5	−3·0	−6·7	−4·8	−5·2
Chota Nagpur . .	−0·4	+0·3	+0·3	−2·3	−1·2	−9·6
United Provinces of Agra and Oudh.	−0·4	+0·6	+1·2	+0·3	−0·8	−3·6
Punjab . . .	+1·5	+1·6	+5·7	+5·4	+5·6	+4·8
North-west Frontier Province.	−0·3	+1·8	+4·1	+3·7	+6·8	+7·2
Baluchistan . .	+6·5	+0·9	+3·8	+2·8	+7·9	+5·4
Sind	+1·7	+1·3	+3·1	+4·2	+3·7	+4·3
Rajputana . . .	+0·7	+3·4	+6·8	+8·0	+7·2	+8·4
Gujarat, East . .	−1·8	+0·1	+1·1	+1·4	+1·8	+2·5
Central India . .	+2·0	+2·1	+4·1	+4·0	+4·5	+2·0
Central Provinces .	+1·8	+2·4	+3·2	+3·4	+4·2	−0·4
Berar	+1·9	+1·7	+3·6	+4·5	+3·8	+4·5
West Coast . . .	−1·4	−0·9	−0·8	−0·1	−0·1	+0·1
Bombay Deccan . .	+1·3	+1·5	+2·7	+3·2	+4·7	+3·6
Mysore . . .	+3·2	+3·0	+2·4	+2·4	+3·1	+4·1
Madras Coast . .	+0·1	+0·3	−1·0	−1·7	−1·0	−2·1
Madras Deccan . .	+2·5	+2·2	+0·5	+0·7	+1·8	+1·8
South India . . .	+0·9	+0·7	+1·1	+0·8	+1·5	+1·4

While the above distribution held generally over India throughout these eleven days the amount of the departures from normal varied somewhat from day to day. Thus on the 1st and 2nd showers of rain occurred in Kashmir, and the mean temperature fell to below the normal in the extreme north-west. Subsequently temperature rose very quickly in this region, and was more than 12° above the normal either by day or night at the following places on the following dates:—

DATE.	STATION.	DEPARTURE FROM NORMAL OF	
		Maximum temperature of date.	Minimum temperature of date.
		°	°
1ST MAY . . .	Quetta . . .	+4·2	+13·9
	Jacobabad . . .	+1·1	+12·5
5TH „ . . .	Saugor . . .	+3·3	+12·1
6TH MAY . . .	Sialkot . . .	+10·7	+13·6
	Ludhiana . . .	+6·7	+12·7
7TH „ . . .	Sambhar . . .	+6·5	+12·4
10TH „ . . .	Khushab . . .	+15·4	+ 4·4
	Multan . . .	+9·6	+13·0
	Ajmer . . .	+7·2	+12·3
11TH „ . . .	Ajmer . . .	+9·1	+13·6
	Lahore . . .	+0·6	+12·4
	Multan . . .	+11·6	+12·2

On the other hand, when the rainfall became heavy in the north-east, the temperature fell in that region, and on the 7th and 8th the maximum temperature was more than 10° below the normal at the following places:—

DATE.	STATION.	MAXIMUM TEMPERATURE		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
7TH MAY . .	Bogra . .	77·8	93·1	−15·3
	Purnea . .	79·7	94·9	−15·2
	Berhampore .	81·2	96·2	−15·0
	Jalpaiguri . .	73·9	88·7	−14·8
	Mymensingh .	75·7	89·4	−13·7
	Patna . .	86·5	99·7	−13·2
	Dinajpur . .	80·8	92·3	−11·5
	Dhubri . .	75·1	86·0	−10·9
8TH „ . .	Gorakhpur .	88·2	100·3	−12·1
	Purnea . .	82·7	94·7	−12·0
	Lucknow . .	94·3	104·6	−10·3

On the 12th conditions changed somewhat and the high temperature area contracted, while at the same time the low temperature areas over north-east, India and the east of the Peninsula extended westward and by the 16th the high temperature area was confined to the west and south of the Punjab, Rajputana, the Bombay Presidency and the adjacent parts of the Central Provinces and of Central India, while in practically all other parts of the Indian land area, except the Assam Valley, the mean temperature was lower than usual. The following gives data for all divisions for these five days and exhibits the withdrawal of

the high temperature area to north-west India and the simultaneous extension of the low temperature area:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	12th May.	13th May.	14th May.	15th May.	16th May.
	°	°	°	°	°
Burma	+1·6	−1·1	+0·6	−3·4	−1·1
Assam	−0·9	−0·6	0	+3·5	+4·6
Bengal	−4·6	−5·9	−4·4	−2·8	−0·5
Orissa	−7·2	−10·9	−5·0	−3·7	−1·5
Bihar	−8·2	−6·1	−2·5	−1·5	+0·3
Chota Nagpur	−9·7	−12·4	−7·1	−6·5	−5·8
United Provinces of Agra and Oudh.	−5·1	−3·3	−1·8	−1·9	−1·1
Punjab	+4·1	+3·9	+2·2	−0·4	−0·2
North-west Frontier Province.	+8·8	+7·3	+2·4	−1·9	−0·9
Baluchistan	+6·3	+9·2	+3·6	−6·5	−11·9
Sind	+5·2	+6·9	+7·2	+4·3	+5·6
Rajputana	+5·0	+4·7	+5·0	+5·5	+6·8
Gujarat, East	+2·7	+2·9	+4·3	+3·8	+4·5
Central India	+0·5	+0·7	+1·9	+2·6	+1·9
Central Provinces	−1·5	−0·6	−0·5	−2·3	−3·9
Berar	+2·7	+5·0	+5·0	+3·4	−1·0
West Coast	−0·7	−0·6	−0·9	−1·0	−1·1
Bombay Deccan	+3·3	+2·8	+2·1	+3·3	+1·1
Mysore	−0·1	−0·6	−3·6	−1·1	−2·3
Madras Coast	−2·9	−2·9	−3·7	−3·9	−6·3
Madras Deccan	−3·6	−0·7	−1·0	−2·9	−6·2
South India	−0·4	−7·5	−4·9	−0·7	−1·3

A sudden and extensive fall of temperature occurred over the Indus Valley on the 17th and over the North-west Frontier Province on the 18th, and low temperatures were experienced over Baluchistan and north-west and northern India until the 23rd. This is shown below:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF						
	17th May.	18th May.	19th May.	20th May.	21st May.	22 d May.	23rd May.
	°	°	°	°	°	°	°
Bengal	+1·3	+1·9	+1·4	+2·0	+1·7	+2·1	+2·4
Orissa	−1·0	+0·1	+0·7	+1·3	+1·7	−0·6	+4·

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF						
	17th May.	18th May.	19th May.	20th May.	21st May.	22nd May.	23rd May.
	°	°	°	°	°	°	°
Bihar	+2·9	+3·6	+3·6	+1·5	+0·9	+0·5	+0·8
Chota Nagpur	−2·7	−0·4	+1·9	+1·7	+0·6	−1·7	−1·4
United Provinces of Agra and Oudh.	−0·6	+0·6	−0·9	−1·7	−3·7	−4·7	−3·7
Punjab	−0·9	−0·1	−3·6	−5·8	−5·6	−3·7	−0·7
North-west Frontier Province.	−3·0	−4·3	−9·3	−8·4	−3·8	−4·9	−0·9
Baluchistan	−13·6	−15·8	−16·5	−12·5	−8·5	−2·0	+3·1
Sind	−0·9	+1·6	−2·7	+2·4	−1·7	+0·7	+1·1
Rajputana	+3·4	+2·2	+0·6	−3·2	−4·1	−3·8	+0·2
Gujarat, East	+3·0	+3·1	+2·1	+2·3	+1·3	+3·0	
Central India	+1·2	+2·1	+1·4	+0·7	−2·0	−3·2	−1·9

On the 21st a storm appeared over the east of the Bay, occasioning rain over Burma, and the mean temperature was low over the eastern Peninsula until the 24th. The following gives data for Burma:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	21st May.	22nd May.	23rd May.	24th May.
	°	°	°	°
Burma	+0·8	−2·4	−4·1	−0·7

On the 24th temperature was rising fast over north-western and western India, where the mean temperature had been considerably below the normal, and from the 25th to the close of the month the distribution, which prevailed during the first ten days of the month, was re-established, *viz.*, relatively low temperatures over north-east India and on the coasts of the Peninsula and relatively high temperatures elsewhere. The following gives data for

each alternate day from the 25th to the end of the month for all divisions :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	25th May.	27th May.	29th May.	31st May.
	°	°	°	°
Burma	+1·5	+2·9	+1·9	−1·8
Assam	+2·6	−3·4	−5·6	+1·8
Bengal	+1·8	−2·8	−2·3	−1·9
Orissa	+2·6	−2·5	−1·0	−1·0
Bihar	+2·9	−8·7	−4·3	−5·0
Chota Nagpur	+3·2	−2·4	−0·2	−1·5
United Provinces of Agra and Oudh.	+2·4	+0·2	−0·5	−0·6
Punjab	+5·4	+4·7	+5·5	+5·6
North-west Frontier Province	+3·3	+2·2	+3·7	+4·7

PROVINCE OR DIVISION.	DEPARTURE FORM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	25th May.	27th May.	29th May.	31st May.
	°	°	°	°
Baluchistan	+1·9	+3·2	−0·7	+1·8
Sind	+1·4	+2·9	+1·0	+0·6
Rajputana	+6·2	+6·6	+5·2	+4·0
Gujarat, East	+1·7	+1·0	+0·9	−0·4
Central India	+4·1	+1·9	+2·5	+2·0
Central Provinces	+3·7	+3·6	+2·9	+1·8
Berar	+6·3	+2·2	+4·2	+2·3
West Coast	−0·8	+0·8	+0·5	+1·2
Bombay Deccan	+4·6	+2·7	+2·3	+1·1
Mysore	+0·7	+1·0	+0·9	+0·1
Madras Coast	−4·2	+0·2	+0·7	−5·1
Madras Deccan	+2·0	+2·5	+1·9	+1·3
South India	−0·8	+2·4	+0·9	−3·8

Winds.

The winds are ordinarily unsteady during this month—more particularly over Southern India and the south of the Bay and of the Arabian Sea, but westerly winds continue to blow over the Gangetic plain, easterly winds in Assam and strong southerly winds across the Bay coasts. In Central India and the Deccan the wind directions range between north-west and west.

In May, 1905, the winds were lighter than usual on the Burma coast. The mean direction was N89°W, at Diamond Island instead of the normal S72°W, and at Akyab the mean was S5°W instead of the normal S24°W.

At Calcutta and Saugor Island the mean direction was more southerly and easterly than the average and at False Point more southerly, while at Chittagong the direction was unusually westerly. The velocity was generally lower than usual. The following gives data:—

STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°			
Calcutta	S 4 E	S 9 W	150	168	−18
Saugor Island	S 5 E	S 6 W	446	406	+40
False Point	S 10 W	S 21 W	313	329	−16
Chittagong	S 42 W	S 1	113	154	−41

At Allahabad the wind was north-easterly and steadier than the normal. This is shown below:—

STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.			MEAN STEADINESS.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°						
Allahabad	N 43 E	N 6 W	153	163	−10	43	24	+19

In the upper Sub-Himalayas the directions were very variable, the principal feature being the increased easting at Roorkee and Meerut. The following gives data for these two stations:—

STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.			MEAN STEADINESS.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°						
Roorkee	S 26 E	S 54 W	135	89	+46	26	11	+15
Meerut	N 71 E	N 57 W	34	62	−28	13	21	−8

Wind blew from the normal directions, but with increased velocity at Peshawar and Kurrachee, while at Jacobabad the mean direction was S70°W instead of S33°E.

At Jaipur the wind was more southerly than the average, while at Deesa the mean direction was about normal.

The following gives comparative data of the mean air movement and steadiness over northern India, Burma and the Bay Islands for the month :—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, May, 1905.	Normal percentage, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
Bay Islands	21	43	−22	212	178	+34
Burma	45	45	0	133	127	+ 6
Bengal	60	61	− 1	236	243	− 7
Chota Nagpur	11	16	− 5	216	221	− 5
Orissa	87	75	+12	313	329	−16
United Provinces of Agra and Oudh.	29	20	+ 9	89	92	− 3
Punjab	18	14	+ 4	69	70	− 1
North-west Frontier Province.	31	28	+ 3	52	110	−58
Rajputana	66	60	+ 6	214	237	−23
Sind	54	47	+ 7	248	260	−12

The above shows that the steadiness, except in the north-east, generally exceeded the average, while the mean velocity was low, except in the extreme east.

Over the Deccan the wind at several stations was a few degrees more northerly than the average, while the velocity varied irregularly from the normal The following gives data for these stations:—

STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°			
Sholapur	N 37 W	N 48 W	316	271	+45
Akola	N 44 W	N 49 W	209	230	−21
Buldana	N 48 W	N 51 W	299	293	+ 6
Khandwa	N 38 W	N 63 W	159	247	−88
Nagpur	N 27 W	N 48 W	152	192	−40

Along the West Coast the departures from the normal were irregular. At Bombay the wind was somewhat more southerly and lighter than usual, while at Karwar it blew from the normal direction, but was stronger than the average. The following gives data:—

STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°			
Bombay	S 81 W	N 83 W	189	242	−53
Karwar	N 68 W	N 66 W	151	137	+14

Over southern India the winds were generally less steady than the average, but blew from about the normal directions.

The following gives comparative data of the mean air movement and steadiness over the Peninsular divisions :—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, May, 1905.	Normal percentage, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
Central Provinces	46	58	−12	156	220	−64
Berar	68	70	− 2	254	262	− 8
Bombay Deccan	69	59	+10	325	347	−22
Madras Deccan	37	58	−21	154	204	−50
West Coast	84	76	+ 8	170	190	−20
Mysore	41	67	−26	156	177	−21
Madras Coast	77	67	+10	203	218	−15
South India	16	52	−36	128	98	+30

The above shows that the velocity was low, except in the extreme south.

At Quetta the wind was lighter and less steady than the average, but blew from the normal direction. This is shown below :—

HILL STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.			MEAN STEADINESS.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°						
Quetta	N 76 W	N 69 W	34	79	−45	34	45	−11

At the Himalayan stations the velocity was generally below and the steadiness above the average, while the mean wind directions were very irregular.

At the central hill stations the mean wind conditions were about normal. The following gives data:—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.			Mean steadiness.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	°	°						
Mount Abu . .	S 62 W	S 66 W	253	259	— 6	80	70	+10
Pachmarhi . .	N 53 W	N 66 W	209	180	+29	74	58	+16
Chikalda . .	N 21 W	N 33 W	203	242	—39	68	67	+ 1

At the southern hill stations the mean winds were north-easterly and east-north-easterly, and at Ootacamund and Dodabetta the steadiness was fairly high. This is shown below:—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	•	•			
Kodaikanal . .	N 45 E	N 42 E	34	32	+ 2
Ootacamund . .	N 73 E	N 60 E	64	42	+22
Dodabetta . .	N 63 E	N 49 E	74	58	+16

At Aden the wind was more southerly and lighter and less steady than the average, while at Perim it was more southerly and stronger and steadier than usual. The following gives data:—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.			Mean steadiness.		
	Actual, May 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual May, 1905.	Normal May.	Departure from normal, May, 1905.
	°							
Aden	S 20 E	S 59 E	207	269	—62	37	43	— 6
Perim	S 26 E	N 86 E	375	329	+46	85	29	+56

In the south-east Trade winds region the mean conditions were approximately normal, though at the Seychelles the Trades were less steady than usual and at Mauritius less strong than usual. The following gives data for these stations:—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.			Mean steadiness.		
	Actual, May, 1905.	Normal, May.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	•	•						
Zanzibar . .	S 12 E	S 5 E	200	194	+ 6	94	85	+ 9
Seychelles . .	S 37 E	S 39 E	174	173	+ 1	34	56	—22
Mauritius . .	S 67 E	S 65 E	231	246	—15	...	...	...

Humidity and Cloud.

The absolute humidity, on the mean of the month, was lower than usual in four areas, *viz.*:—

(1) The western desert and parts of the South and Central Punjab,

(2) Bengal, Orissa, the Circars and the east and north of the Central Provinces,

(3) Inland Burma and the south Burma coast and

(4) the south of the Peninsula and Ceylon,

The largest departures from normal in these areas were as follows:—

Area.	Station.	Absolute humidity. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
		"	"	"
First area	Neemuch	·528	·638	—·110
	Bikaner	·553	·641	—·088
	Jaipur	·448	·536	—·088
	Ajmer	·521	·569	—·048
	Ambala	·551	·596	—·045
	Hyderabad (Sind)	·661	·691	—·030
	Deesa	·690	·699	—·009
Second area	Saugor	·349	·486	—·137
	Balasore	·857	·971	—·114
	Waltair	·852	·931	—·079
	Gopalpur	·919	·986	—·067
	Saugor Island	·951	1·009	—·058
	False Point	·963	1·015	—·052
	Bogra	·801	·851	—·050
Third area	Minbu	·799	·842	—·043
	Mandalay	·812	·845	—·033
	Tavoy	·863	·894	—·031
	Rangoon	·891	·918	—·027
	Bassein	·919	·935	—·016
	Yamethin	·808	·823	—·015
Fourth area	Tinnevelly	·761	·794	—·033
	Cochin	·888	·897	—·009
	Trincomalee	·913	·918	—·005
	Trivandrum	·867	·871	—·004

In all other parts of the country the absolute humidity, on the mean of the month, exceeded the normal—more particularly over the upper Indus Valley and parts of the Gangetic Plain and of Madras. The following shows the largest departures from normal:—

Station.	Absolute humidity. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"
Kurnool	·798	·671	+·127
Masulipatam	1·168	1·045	+·123
Ahmednagar	·789	·679	+·110
Bareilly	·697	·590	+·107
Darbhanga	·887	·792	+·095
Sutna	·513	·428	+·085
Allahabad	·670	·588	+·082
Dera Ismail Khan	·690	·611	+·079
Cuddapah	·818	·739	+·079
Amraoti	·618	·542	+·076
Khandwa	·622	·549	+·073
Raipur	·581	·512	+·069
Cocanada	·985	·921	+·064
Salem	·871	·812	+·059
Peshawar	·536	·921	+·056
Bahraich	·815	·760	+·055
Jacobabad	·637	·583	+·054
Roorkee	·535	·482	+·053
Akola	·572	·519	+·053

The departures of the mean relative humidity from the normal showed a generally similar distribution. Over the greater part of north-west India, except the Kathiawar coast, the mean relative humidity was generally below the normal, and as the mean temperature was in excess of the average, the departures from normal of the mean relative humidity were more marked than those of the mean absolute humidity. The following gives data:—

Station.	Absolute humidity. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Relative humidity. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"	%	%	
Saugor	·349	·486	—·137	24	36	—12
Bikaner	·553	·641	—·088	34	46	—12
Montgomery		?	?	24	36	—12
Jaipur	·448	·536	—·088	30	40	—10
Neemuch	·528	·638	—·110	40	50	—10
Hyderabad (S)	·661	·691	—·030	50	57	— 7
Ambala	·551	·596	—·045	44	49	— 5
Rawalpindi	·453	·472	—·019	39	44	— 5

The mean relative humidity was also below the normal over Burma where also the mean temperature was above the average:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"	%	%	
Minbu	·799	·842	—·043	68	77	—9
Moulmein	·876	·887	—·011	81	88	—7
Rangoon	·891	·918	—·027	82	88	—6
Toungoo	·933	·923	+·010	77	83	—6
Yamethin	·808	·823	—·015	71	77	—6
Bassein	·919	·935	—·016	81	86	—5
Mandalay	·812	·845	—·033	68	71	—3
Tavoy	·863	·894	—·031	85	88	—3
Mergui	·898	·891	+·007	86	88	—2
Akyab	·986	·967	+·019	83	84	—1
Diamond Island	·915	·906	+·009	78	79?	—1?

Relative humidity, on the mean of the month, was also below the normal at the stations on the south-west Bengal, Orissa and Circars coasts, but owing to the temperature conditions the departures frm normal were comparatively small. The following gives data:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"	%	%	
alasore	·857	·971	—·114	73	79	—6
opalpur	·919	·986	—·067	80	84	—4
Valtair	·852	·931	—·079	71	75	—4
alse Point	·963	1·015	—·052	81	83	—2
ssore	·923	·972	—·049	82	84	—2

Elsewhere the mean relative humidity was generally bout normal or in excess of the normal. The excess was ost strongly marked over the north Gangetic Plain, west engal, the south and east of the Central Provinces and ie Madras Coast where the absolute humidity exceeded ie normal and the mean temperature was lower than sual. The following gives data:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"	%	%	
Chanda	·772	?	?	52	36	+16
Darbhanga	·887	·792	+·095	85	71	+14
Masulipatam	1·168	1·045	+·123	89	76	+13
Bareilly	·697	·590	+·107	60	48	+12
Allahabad	·670	·588	+·082	53	42	+ 1
Mainpuri	·684	·567	+·117	52	42	+10
Kurnool	·798	·671	+·127	62	52	+10
Sutna	·513	·428	+·085	38	29	+ 9
Bhuj	·870	·770	+·100	72	63	+ 9
Cocanada	·985	·921	+·064	79	70	+ 9
Gaya	·814	·778	+·036	66	58	+ 8
Bahraich	·815	·760	+·055	68	60	+ 8
Purnea	·815	·813	+·002	83	76	+ 7
Burdwan	·886	?	?	82	75	+ 7
Dehra Dun	·512	·467	+·045	53	46	+ 7
Trincomalee	·913	·918	—·005	85	78	+ 7
Raipur	·581	·512	+·069	41	35	+ 6
Hazaribagh	·557	·534	+·023	52	46	+ 6

In many respects the distribution of the departures from normal of the mean relative humidity in May was similar to that in April, but the comparative dryness of the air over the south-west of the Peninsula shown in April had, to a great extent, disappeared in May.

The mean 8 A.M. relative humidity of the month was less than 35% and 86% or more at the following stations which hence outline the regions of greatest and least dampness on the mean of the month:—

STATION.	Mean relative humidity less than 35 %.	STATION.	Mean relative humidity over 85 %.
Bikaner	34	Sibsagar	91
Nagpur	34	Sirajganj	91
Aurangabad	34	Masulipatam	89
Khushab	32	Gauhati	88
Jodhpur	32	Dhubri	87
Malegaon	32	Tezpur	87
Jubbulpore	32	Narayanganj	87
Jaipur	30	Malda	87
Montgomery	24	Rangpur	87
Kotah	23	Cooch Behar	87
		Mergui	86
		Faridpur	86
		Veraval	86
		Dwarka	86

At the hill stations the departures of the mean 8 A.M. humidity from the normal were somewhat irregular. At Mount Abu and Pachmarhi there was a considerable deficiency and at Ranikhet and Cherat a considerable excess:—

HILL STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"	%	%	
Cherat . . .	·397	·294	+·103	46	34	+12
Ranikhet . .	·410	·354	+·056	62	50	+12
Wellington . .	·469	·434	+·035	68	60	+ 8
Gilgit . . .	·337	·311	+·026	51	44	+ 7
Chakrata . .	·304	·280	+·024	53	47	+ 6
Mount Abu . .	·280	·360	—·080	24	40	—16
Pachmarhi . .	·272	·407	—·135	23	37	—14
Lashio . . .	·660	·670	—·010	79	84	— 5

At Aden the absolute humidity, on the mean of the month, exceeded the normal, the mean temperature was lower than usual and the mean relative humidity in considerable excess, while at Perim both were in defect.

The following gives data for these two stations:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"	%	%	
Aden . . .	·957	·875	+·082	77	70	+7
Perim . . .	·882	·966	—·084	68	76	—8

In the south-east Trades region the humidity conditions were about normal. This is shown below:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
	"	"	"	%	%	
Seychelles . .	·855	·846	+·009	79	80	—1
Mauritius . .	·637	·625	+·012	81	79	+2

Summarising the mean humidity conditions of the month the data show:—

(1) That the mean relative humidity was lower than usual over the greater part of north-west India—more particularly over the western desert.

(2) It was lower than usual on the Orissa and Circars Coast.

(3) And was lower than usual over Burma and Assam.

(4) It was higher than usual in all other parts of the Indian land area, more particularly over the north Gangetic Plain and west Bengal, the south of the Central Provinces and the Madras Coast.

The following gives actual and departure data of the nine meteorological provinces:—

METEOROLOGICAL PROVINCE.	MEAN ABSOLUTE HUMIDITY.		MEAN RELATIVE HUMIDITY.	
	Average actual, May, 1905.	Departure from normal, May, 1905.	Average actual, May 1905.	Departure from normal, May, 1905.
	"	"	%	
Burma Coast and Bay Islands .	·894	—·019	78	—4
Bengal and Orissa . . .	·935	—·015	79	0
Gangetic Plain and Chota Nagpur	·585	+·079	47	+7
Upper Sub-Himalayas . .	·487	+·034	39	0
Indus Valley and North-West Rajputana.	·660	+·046	50	0
East Rajputana, Central India and Gujarat.	·450	—·057	30	—8
Deccan	·392	—·022	36	+1
West Coast	·896	+·019	78	+2
South India	·730	+·033	66	+3

The mean 8 A.M. cloud amount of the month exceeded the normal over:—

(1) part of the Indus Valley,

(2) west Bengal, the Gangetic Plain and adjoining parts of Central India and of the Central Provinces,

(3) part of north-east India and of Upper Burma and

(4) on both coasts and part of the interior of the Peninsula.

The departures from normal exceeded 1·0 at the following stations:—

AREA.	STATION.	MEAN CLOUD AMOUNT.		
		Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
SECOND AREA .	Sutna	3·6	1·0	+2·6
	Nowgong . . .	3·0	1·4	+1·6
	Mainpuri . . .	2·8	1·3	+1·5
THIRD AREA .	Dinajpur . . .	7·1	5·9	+1·2

AREA.	STATION.	MEAN CLOUD AMOUNT. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
FOURTH AREA	Hyderabad (D)	5·5	3·5	+2·0
	Goa	6·4	4·0	+2·4
	Mysore	7·4	5·0	+2·4
	Calicut	7·3	5·4	+1·9
	Madura	5·8	4·0	+1·8
	Ratnagiri	5·2	3·5	+1·7
	Belgaum	5·3	3·7	+1·6
	Mormugao	6·2	4·6	+1·6
	Karwar	5·3	3·9	+1·4
	Salem	5·5	4·2	+1·3
	Waltair	7·1	5·9	+1·2

In all other parts of the Indian land area the sky was clearer than usual of cloud and the departures from normal exceeded —2·0 at the following considerable number of stations:—

STATION.	MEAN CLOUD AMOUNT. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
Akyab	3·8	6·9	—3·1
Purnea	1·4	4·4	—3·0
Barisal	3·4	6·3	—2·9
Gopalpur	2·5	5·4	—2·9
Savoy	3·9	6·8	—2·9
Sirsa	0·5	2·9	—2·4
Shayetmyo	2·8	5·1	—2·3
Delhi	0·2	2·4	—2·2
Bhavnagar Para	1·5	3·7	—2·2
Pachpadra	0·4	2·5	—2·1

At the hill stations the departures of the mean cloud amount of the month from the normal were somewhat irregular, but, at the majority, the sky was somewhat clearer than usual. This is shown below:—

HILL STATION.	MEAN CLOUD AMOUNT. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
Darjeeling	5·6	4·0	+1·6
Shillong	3·2	1·9	+1·3
Darjeeling	7·8	6·4	+1·4
Srinagar	4·2	3·4	+0·8
Gilgit	4·2	4·1	+0·1
Lashio	4·9	6·8	—1·9
Pachmarhi	1·0	2·0	—1·0
Cherat	1·3	2·2	—0·9
Murree	2·1	2·8	—0·7
Leh	4·0	4·7	—0·7
Chaman	0·1	0·6	—0·5
Mount Abu	0·3	0·8	—0·5
Simla	2·4	2·8	—0·4
Ranikhet	1·9	2·3	—0·4
Quetta	0·6	1·0	—0·4

The mean cloud amount of the month was more than 7·0 and less than 0·5 at the following stations, which consequently outline the regions of greatest and least cloudiness on the mean of the month:—

STATION.	Mean cloud amount more than 7·0.	STATION.	Mean cloud amount less than 0·5.
Sibsagar	8·5	Pachpadra	0·4
Dhubri	7·5	Udaipur	0·4
Gauhati	7·4	Bareilly	0·3
Mysore	7·4	Bikaner	0·3
Calicut	7·3	Malegaon	0·3
Myitkyina	7·2	Delhi	0·2
Trivandrum	7·2	Hyderabad (Sind)	0·2
Dinajpur	7·1	Agra	0·2
Waltair	7·1	Kotah	0·1
		Multan	0

At Aden and Perim the mean cloud amount of the month was slightly less than usual. The following gives data:—

STATION.	MEAN CLOUD AMOUNT. Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.
Aden	1·4	1·9	—0·5
Perim	0	1·6	—1·5

In the south-east Trades region the mean cloud amount slightly exceeded the normal. This is shown below:—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, May 1905.	Normal, May.	Departure from normal, May, 1905.
Seychelles	5·3	5·1	+0·2
Mauritius	6·7	5·2	+1·5

Summarising the above data the observations show that—

(1) The mean cloud amount of the month at 8 A.M. was in slight excess over the Gangetic Plain and adjoining regions, over part of north-east India and over part of Upper Burma.

(2) Was in slight to considerable excess on both coasts of the Peninsula.

(3) That in most other parts of the Indian land area the mean cloud amount was less than usual, and that in parts of north-west India and of Burma the sky was much clearer than usual.

The following gives actual and departure data for the nine meteorological provinces:—

METEOROLOGICAL PROVINCE.	MEAN CLOUD AMOUNT.	
	Average actual, May, 1905.	Departure from normal, May, 1905.
Burma Coast and Bay Islands	5·8	−0·8
Bengal and Orissa	5·1	−0·1
Gangetic Plain and Chota Nagpur	2·8	0
Upper Sub-Himalayas	1·3	−0·8
Indus Valley and North-West Rajputana	1·5	−0·6
East Rajputana, Central India, and Gujarat	1·1	−0·8
Deccan	2·2	−0·5
West Coast	2·6	−0·3
South India	5·5	+0·6

Rainfall.

The rainfall of the month of May is usually small in amount and of little economic importance over by far the greater part of the country, including the Punjab, Rajputana, the United Provinces, Central India, Berar, the Central Provinces, the north Deccan and north Bombay. Moderate to heavy rain is usually received in three areas:—

1st.—Bengal and Assam.

2nd.—Lower Burma and Tenasserim.

3rd.—Southern India, more especially Malabar.

The rainfall in the first of these areas is due to thunder-showers, which are heaviest and most frequent in East Bengal, Assam and the northern districts of North Bengal. In the second and third areas the rainfall, in the earlier part of the month, is usually due to thunder-showers, and in the latter part to temporary advances of the humid winds of the south-west monsoon.

The total rainfall of the month of May, 1905, was normal or in excess over the north-east of the Indian area, including Bengal and the adjoining parts of Burma on the one hand, and of Orissa, Ganjam and the east and centre of the Central Provinces on the other. It was also normal or in excess over parts of the south-west and south of the Peninsula. Elsewhere it was normal or in defect.

The actual distribution of rain as shown by the meteorological observatories is given in Plate VII. There was no rain over the western desert, north Bombay and part of the Bombay Deccan and the Central Punjab and very little over part of Madras. From these areas of light rain the fall increased and amounted to 14·00″ at Cochin, to 20·65″ at Mymensingh and to 21·96″ at Tavoy.

The chief periods of rain were—

The 6th to the 10th, when thunder-showers were received over north-east India.

The 12th to the 14th, when local rain was received over north-west India and Burma.

The 12th to the 19th, when thunderstorms gave rain to considerable parts of the Peninsula.

The 21st to the 23rd, when a cyclonic storm gave rain to Burma.

The 26th to the 31st, when heavy rain fell over Burma and north-east India.

The following table gives comparative rainfall data for 55 of the 57 rainfall divisions of India :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, May, 1905.	Average normal, May.	Average actual, May, 1905.	Average normal, May.	Departure from normal, May, 1905.
				Inches.	Inches.	Inches.
URMA	Tenasserim	14·7	18·7	19·48	23·03	−3·55
	Lower Burma (Deltaic)	11·7	14·8	11·75	11·94	−0·19
	Central do.	6·8	9·4	5·78	6·68	−0·90
	Upper do.	8·3	8·2	6·57	5·86	+0·71
	Arakan	9·5	12·0	13·52	12·45	+1·07
ENGAL AND ASSAM	Eastern Bengal	11·0	10·8	10·38	10·42	−0·04
	Assam (Surma)	12·6	16·1	10·39	17·64	−7·25
	Do. (Hills)	15·2	15·2	12·52	15·10	−2·58
	Do. (Brahmaputra)	11·7	14·5	9·20	12·08	−2·88
	Deltaic Bengal	7·9	8·0	7·52	6·15	+1·37
	Central do.	7·9	6·2	7·44	4·56	+2·88
	North do.	12·4	11·7	13·81	11·35	+2·46
	Bengal Hills	14·3	13·6	8·76	8·66	+0·10
	Orissa	6·3	5·0	4·29	3·69	+0·60
	Chota Nagpur	4·2	3·7	2·30	2·18	+0·12
	Bihar (South)	2·7	2·1	1·98	1·41	+0·57
	Do. (North)	5·1	4·1	4·08	3·02	+1·06
ITED PROVINCES OF AGRA AND OUDH.	United Provinces (East)	1·0	0·9	0·49	0·48	+0·01
	Oudh (South)	0·6	1·1	0·34	0·52	−0·18
	Do. (North)	1·7	1·7	0·77	0·96	−0·19
	United Provinces (Central)	0·4	0·9	0·11	0·36	−0·25
	Do. do. (West)	0·4	1·2	0·22	0·46	−0·24
	Do. do. (East Submontane)	2·9	1·9	1·21	1·18	+0·03
	Do. do. (West do.)	1·6	1·8	0·58	0·83	−0·25
	Do. do. (Hill)	5·1	4·3	2·48	2·04	+0·44
JNJAB	Punjab (South-East)	0·7	1·4	0·32	0·56	−0·24
	Do. (South)	0·4	1·1	0·14	0·48	−0·34
	Do. (Central)	0·6	1·5	0·16	0·65	−0·49
	Do. (Submontane)	1·1	1·8	0·41	0·84	−0·43
	Do. (Hills)	4·4	4·1	2·08	2·18	−0·10
	Do. (West)	0·4	0·9	0·16	0·42	−0·26
.-W.F. PROVINCE	North-west Frontier Province	2·1	2·0	0·88	0·87	+0·01
OMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Malabar	10·9	7·9	7·98	7·08	+0·90
	Travancore	14·0	...	10·22	...	...
	Madras (South, Central)	5·6	5·6	4·08	3·74	+0·34
	Coorg	11·7	...	6·27	...	...
	Mysore	7·3	5·7	4·93	3·67	+1·26
	Konkan	1·4	1·8	0·04	1·47	−0·83
	Bombay Deccan	4·1	3·1	2·08	1·71	+0·37
	Khandesh	0·6	1·1	0·27	0·63	−0·36
NTRAL PROVINCES AND BERAR.	Berar	0·7	0·9	0·23	0·42	−0·19
	Central Provinces (West)	0·7	0·9	0·24	0·43	−0·19
	Do. (Central)	1·2	1·0	0·54	0·49	+0·05
	Do. (East)	2·2	1·7	1·04	0·80	+0·24
OMBAY (NORTH)	Gujarat East	0	0·4	0	0·22	−0·22
	Kathiawar and Cutch	0	0·4	0	0·23	−0·23
	Sind	0	0·3	0	0·10	−0·10
	Baluchistan Hills	0·2	0·6	0·10	0·20	−0·10
JPUTANA AND CENTRAL INDIA.	Central India (East)	0·4	0·7	0·13	0·32	−0·19
	Rajputana (East), Central India (West)	0·1	1·1	0·06	0·43	−0·37
	Do. (West)	0	0·7	0·01	0·31	−0·30
ADRAS	East Coast (North)	4·2	3·3	3·05	2·15	+0·90
	Madras (Central)	2·6	2·9	1·47	1·66	−0·19
	East Coast (Central)	1·4	1·6	0·56	1·28	−0·72
	Do. (South)	3·0	2·8	2·21	2·19	+0·02
	Madras (South)	4·6	2·7	3·02	1·71	+1·31

The preceding data show that the rainfall of the month was in defect of the normal in 30 divisions, exactly normal in one division and in excess in 23 divisions. The excess amounted to more than 40% in the divisions for which comparative data are given below:—

Division.	Rainfall.			
	Average actual, May, 1905.	Average normal, May.	Departure from normal, May, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Central Bengal	7·44	4·56	+2·88	+63
East Coast, North	3·05	2·15	+0·90	+42
Madras, South	3·02	1·71	+1·31	+77

The deficiency was greatest and amounted to over 50% in the following divisions:—

Division.	Rainfall.			
	Average actual, May, 1905.	Average normal, May.	Departure from normal, May, 1905.	Percentage departure from normal.
	Inch.	Inches.	Inch.	
United Provinces, Central	0·11	0·36	—0·25	— 69
„ „ West	0·22	0·46	—0·24	— 52
South Punjab	0·14	0·48	—0·34	— 71
Central Punjab	0·16	0·65	—0·49	— 75
Punjab Submontane	0·41	0·84	—0·43	— 51
West Punjab	0·16	0·42	—0·26	— 62
Konkan	0·64	1·47	—0·83	— 56
Khandesh	0·27	0·63	—0·36	— 57
Gujarat, East	0	0·22	—0·22	—100
Kathiawar and Cutch	0	0·23	—0·23	—100
Sind	0	0·10	—0·10	—100
Central India, East	0·13	0·32	—0·19	— 59
Rajputana (East), Central India (West).	0·06	0·43	—0·37	— 86
West Rajputana.	0·01	0·31	—0·30	— 97
East Coast, Central	0·56	1·28	—0·72	— 56

The departure of the general rainfall of the whole country from normal, excluding the hill divisions, as determined from the fifth figure column of the table on page 149 was —0·11".

In Tenasserim the weather was fine for the first week, showery from the 8th to the 17th, after which fairly general rain set in and continued till the close of the month. The heaviest falls, exceeding 5 inches in 24 hours, were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Tavoy	Launglon	19th May	7·13
	Do.	29th „	5·37
Amherst	Amherst	30th „	6·10
Thaton	Thaton	„ „	5·50

In Lower Burma the weather was fine till the 11th when scattered rain commenced and continued till the 31st. The heaviest rain was on the 21st and the following falls exceeding 4 inches in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Pyapon	Dedaye	20th May	4·50
Ma-ubin	Yandoon	21st „	8·90
	Ma-ubin	„ „	5·30
Rangoon Town	Rangoon	„ „	4·68
Hanthawaddy	Hmawbi	22nd „	4·90
Pegu	Nyaunglebin	23rd „	4·69

In Central and Upper Burma showery periods occurred between the 12th and the 15th, the 21st and 24th and the 29th and the 31st. The rainfall was generally heaviest during the cyclonic period between the 21st and 23rd, and the following falls exceeding 4 inches in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Henzada	Lemyethna	20th May	5·50
	Zalun	21st „	5·00
	Henzada	„ „	4·35
	Okpo	„ „	4·15
Pakokku	Shwegondaing	22nd „	7·00
Upper Chindwin	Mingin	„ „	7·00
Pakokku	Minywa	„ „	6·55

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
LOWER CHINDWIN	Kani	22nd May	4·59
CHIN HILLS (PAKOKKU)	Kanpetlet	,, ,,	4·25
PAKOKKU	Mawle	,, ,,	4·05
CHIN HILLS (PAKOKKU)	Kanpetlet	23rd ,,	12·10
UPPER CHINDWIN	Kindat	,, ,,	7·32
PAKOKKU	Gangaw	,, ,,	4·92
	Kan	,, ,,	4·65
SHWEBO	Sheinmaga	31st ,,	5·55

In Arakan similar conditions prevailed and falls exceeding 5 inches in 24 hours were recorded at the following places on the following dates during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
YAUKPYU	Myebon	21st May	5·05
	Do.	31st ,,	10·59
KYAB	Pabru	,, ,,	5·85

The general rain of the whole province was normal.

The Surma Valley of Assam received fairly general rain between the 1st and the 14th and between the 25th and the 31st, but the weather was generally fine during the middle of the month. The rain was not generally heavy and the only falls exceeding 4 inches in 24 hours during the month are shown below:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
SYLHET	Sephinjuri Bil	28th May	5·90
	Samanbagh	29th ,,	4·58

In the Brahmaputra Valley there were three rainy periods, *viz.*, between the 4th and the 10th, the 17th and the 19th and the 25th to the 29th. The only heavy rainfall was in the Goalpara district, where the following amounts exceeding 4 inches in 24 hours were registered during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
GOALPARA	Marnai	18th May	4·35
	Dhubri	26th ,,	4·40

On the hills the weather was more or less showery during the month, but there were few heavy falls. At Cherra Poonjee the total fall for the month was 40·93″, the normal being 51·53″, and the only heavy fall was 13·07″ on the 8th. In all the three divisions of Assam the rainfall of the month was in defect of the average.

In Bengal proper there were three periods of fairly general rain, *viz.*, between the 2nd and 4th, the 9th and the 13th and the 26th and the 31st. At other times the weather was generally fine with passing showers, but in North and East Bengal the rainy periods were somewhat more prolonged. The rainfall of the month was normal or in excess, the excess having been greatest in Central Bengal, and falls exceeding 5 inches in 24 hours were registered at the following places on the following dates during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
MYMENSINGH	Diwanganj	6th May	7·74
NOAKHALI	Hatya	13th ,,	6·33
JALPAIGURI	Alipur Duars	18th ,,	7·70
COOCH BEHAR	Fulbari	,, ,,	6·02
	Cooch Behar	,, ,,	5·73
MYMENSINGH	Mymensingh	27th ,,	5·58
BOGRA	Nowkhilla	28th ,,	7·00
MYMENSINGH	Mymensingh	,, ,,	6·82
DINAJPUR	Nawabganj	31st ,,	8·87
MURSHIDABAD	Akriganj	,, ,,	7·40
BOGRA	Panchbibi	,, ,,	7·03
RANGPUR	Peerganj	,, ,,	7·00
DINAJPUR	Balughat	,, ,,	6·70
	Gangarampur	,, ,,	5·50
MURSHIDABAD	Kandi	,, ,,	5·08

In Orissa there were only two showery periods, *viz.*, between the 10th and the 13th and at the close of the month, and there were no heavy falls, but the total for the month slightly exceeded the average.

In west Bengal the weather was very showery on the 3rd, 6th, 8th and 9th, 26th and 27th and 30th and 31st,

and the total rainfall considerably exceeded the normal in Bihar, though it was about the average in Chota Nagpur. Moderately heavy rain was received over Monghyr, Purnea, and Malda, and the following amounts exceeding 4″ in 24 hours were recorded during the month :—

DISTRICT.	Station.	Date	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
MALDA	Gomastapur	28th May	4·77
	Gajol	29th „	7·65
MONGHYR	Begusarai	„ „	4·38
SONTHAL PARGANAS	Rajmahal	„ „	4·04

Over the plains of the United Provinces scattered rain from thunderstorms was received on the 7th and 8th, the 15th to 17th and the 30th, while in the submontane and hill divisions the showery periods lasted from the 6th to the 10th, the 14th to the 17th and the 26th to the 30th. The total rainfall was normal or in slight excess in the eastern and hill divisions, but was short of the normal elsewhere—more particularly in the central and west divisions. The rainfall was locally heavy at a few stations, and exceeded 2″ in 24 hours at the following places on the following dates during the month :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
FYZABAD	Bikapur	12th May	2·90
SULTANPUR	Kadipur	„ „	2·45
GHAZIPUR	Sayadpur Bhitari	„ „	2·32
AZAMGARH	Deogaon	„ „	2·09

There was very little rain in the Punjab except on and near the hills, and the only period during which there was anything approaching general rain was between the 13th and 15th. The only falls exceeding 1″ in 24 hours were recorded on the hills and were as follows :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
KANGRA	Kulu	7th May	1·63
	Nurpur	17th „	1·93
	Saraj	„ „	1·50
	Nagar	„ „	1·41
	Kulu	„ „	1·14

In the North-west Frontier Province there was local rain on the 1st and 2nd, between the 13th and 17th and on the 29th. The total rainfall of the month was normal, and the following falls exceeding 1″ in 24 hours were recorded during the showery period about the middle of the month : —

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
PESHAWAR	Landikotal	14th May	1·14
	Nowshera	15th „	1·88
	Peshawar	„ „	1·48
HAZARA	Haripur	16th „	1·08

Baluchistan received scattered showers on the 1st, 2nd, 8th and 13th, but the total fall was only half the small normal fall. Rain was received in Kashmir between the 1st and the 7th, the 13th and 17th and on the 28th and 29th. The amounts were moderately heavy during the rainy period about the middle of the month, and, as far as can be judged, the total rainfall of the month exceeded the average.

Western Rajputana had no rain and the eastern states only a few light showers. In Central India the weather was similar to that in eastern Rajputana.

Only showers were received over the Central Provinces. These showers were very light and scattered over Berar and the west division of the Central Provinces, but were somewhat heavier and more general in the central and east divisions, where the total rainfall of the month slightly exceeded the average. Amounts of over 2″ in 24 hours were reported from the two following places on the following dates during the month :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
FEUDATORY STATES	Bolangir	14th May	2·13
CHANDA	Sironcha	15th „	2·60

The Kanara district of the Konkan and the Karnatic and South Deccan divisions experienced very showery weather during the first three weeks of the month, and in the two latter divisions the total rainfall of the month slightly exceeded the average. The daily falls were not

generally heavy, but exceeded 2″ at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
KOLHAPUR, ETC.	Gadhinglaj	15th May	2·25
	Sangli	16th ,,	2·03
NORTH KANARA	Bhatkal	19th ,,	2·12
RATNAGIRI	Rajapur	20th ,,	2·06

In Khandesh the rainfall was very light and less than half the average, and on the north Konkan coast and in Gujarat, Kathiawar and Sind there was actually or practically no rain throughout the month.

In Mysore the weather was very showery, more particularly about the middle of the month, and the total for the month considerably exceeded the normal. Falls of over 5″ were registered at the following places on the following dates :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
ADUR	Tarikere	17th May	3·10
ASSAN	Hole Narsipur	19th ,,	2·98
ANGALORE	Closepet	,, ,,	2·59

On the Malabar Coast of Madras the weather was showery throughout the month, while in South and South-central Madras the weather was fine during the first week, showery between the 8th and the 19th, on the 24th and 25th, and at the close of the month. In all three divisions but particularly in South Madras the total rainfall exceeded the normal. Falls exceeding 3″ in 24 hours were recorded at the following considerable number of stations :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
ADURA	Periyakulam	11th May	3·33
ALABAR	Irikkur	,, ,,	3·29
	Badagara	,, ,,	3·02
	Do.	15th ,,	3·73
	Quilandi	,, ,,	3·13
COIMBATORE	Kodumudi	16th May	3·20
SOUTH CANARA	Karkal	17th ,,	3·97
	Mulki	,, ,,	3·90
MALABAR	Mannarghat	,, ,,	3·50
	Badagara	19th ,,	6·16
	Tellicherry	,, ,,	4·35
SOUTH CANARA	Hosdrug	,, ,,	3·13
TINNEVELLY	Srivaikuntam	31st ,,	3·80
MADURA	Usilampatti	,, ,,	3·25
	Paramagudi	,, ,,	3·10

In Central Madras there were fairly general and heavy showers on the 17th and 18th, and only very light and scattered showers at other times, but the total fall for the month was about normal.

The East Coast divisions had rainy periods between the 10th and the 18th, and again at the close of the month. The total rainfall of the month was in excess in the north division, normal in the south division and in large defect in the central division. Falls of over 3″ in 24 hours were recorded at the following places on the following dates :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
GANJAM	Narasannapeta	13th May	4·05
VIZAGAPATAM	Gunupur	,, ,,	3·50
	Konada	,, ,,	3·15
GUNTUR	Chinna, Ganjam	15th ,,	3·70
TRICHINOPOLY	Kilappaluvur	30th ,,	3·60
VIZAGAPATAM	Bobbili	,, ,,	3·27
SOUTH ARCOT	Vriddhachalam	,, ,,	3·04

The following shows the rainfall of the month at the extra-Indian observatories :—

STATION.	RAINFALL.			
	Actual, May, 1905.	Normal, May.	Departure from normal, May, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee	1·29	2·46	—1·17	— 48
Colombo	13·57	11·12	+2·45	+ 22
Minicoy	6·57	6·40	+0·17	+ 3
Kabul	0·33	0·54	—0·21	— 39
Kashgar	1·77	0·88	+0·89	+101
Meshed	0·82	0·74	+0·08	+ 11
Ispahan	0·17	0·11	+0·06	+ 55
Bushire	0·24	0	+0·24	.....
Jask	0	0	0	0
Muscat	0	0	0	0
Baghdad	0·03	0·24	—0·21	— 88
Aden	0	0·19	—0·19	—100
Perim	0	0·37	—0·37	—100
Zanzibar	10·20	10·62	—0·42	— 4
Seychelles	9·88	4·51	+5·37	+119
Mauritius	3·37	3·08	+0·29	+ 9

In Arabia, the Gulf region and Asiatic Turkey there was actually or practically no rain, while in North Persia, Afghanistan and Kashgar rain was received and in some places was heavier than usual. At the Seychelles the rainfall largely exceeded the normal, while at the remaining stations in the south-east Trades region the month's fall was about average.

The following summarises the rainfall information :— There was little or no rain during the month over the Western Desert, North Bombay, the Central Punjab and part of Madras, but from these areas the amount increased and was considerable at Cochin, Tavoy and in Assam. The month's rainfall exceeded the normal over north-east India, including Bengal and the adjoining areas of Upper Burma, Orissa, Ganjam and the east of the Central Provinces. It was also heavier than usual over parts of the south-west and south of the Peninsula. Elsewhere it was generally in defect. The rainfall was irregularly distributed over the countries to the west and north-west of India, while in the south-east Trades region the month's rainfall was heavy at the Seychelles and normal at Mauritius and Zanzibar. The following gives comparative rainfall data of the eleven meteorological provinces or divisions :—

METEOROLOGICAL PROVINCE.	RAINFALL.			
	Mean actual for May, 1905.	Mean normal for May.	Departure from normal, May, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands	11·77	14·66	—2·66*	—18
Burma Inland	5·88	5·41	+0·10*	+ 2
Assam	9·10	13·30	—4·20	—32
Bengal and Orissa	8·71	7·33	+1·38	+19
Gangetic Plain and Chota Nagpur	1·64	1·63	0	0
Upper Sub-Himalayas	0·43	0·91	—0·45*	—49
Indus Valley and North-west Rajputana.	0·22	0·42	—0·20	—48
East Rajputana, Central India and Gujarat.	0·05	0·38	—0·33	—87
Deccan	0·86	0·89	—0·13*	—15
West Coast	5·39	5·14	+0·25	+ 5
South India	2·64	2·25	+0·39	+17

* A reference to Table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

Snowfall.

The following reports as to the snowfall of May have been received :—

I.—AFGHAN MOUNTAIN DISTRICTS.

(1) *Kurram :*—Fresh snow fell on the higher ranges of the Sufed Koh on the 18th May.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Astor :*—Snow fell on the 18th.

(2) *Srinagar :*—During May heavy fresh snow fell over the Himalayas east of Kashmir.

(3) *Dras :*—The mountains round Dras had 2 feet of snow on them at the close of May.

(4) *Kargil :*—Fresh snow fell at high altitudes and the Barzil Pass had five feet of snow at the close of the month.

(5) *Gurais :*—Snow fell during May on the surrounding mountains to a depth of about 1 foot.

(6) *Leh :*—Snow fell in Leh on the 21st May to a depth of ¼ inch.

The snowline was about 14,500 to 15,000 feet at the end of May.

(7) *Kailang*:—Snow fell as follows:—

April	6th	1 inch.
„	13th	4 inches.
„	14th	6 „
May	7th	2 „

(8) *Simla Bashahr Division*:—There was not much snow during May, except perhaps at very high altitudes. The Haranghati (12,400 feet) was crossed on May 17th, but there was very little fresh snow, though the severe winter had resulted in an unusual accumulation of snow everywhere.

(8a) *Simla Bashahr Division II*:—

	inch.
Snow fell on 7th descending to 11,000 feet depth	½
8th, „ „ „ „	1
15th, „ „ „ „	½
16th, „ „ „ „	1
17th, „ „ „ „	1

The passes were all open at the end of May.

(9) *Pangi District*:—Chamba Division. The weather was very unsettled between the 14th and 17th and snow fell all the time on the Sach Pass (14,400 feet) and other high hills, measuring about 4 feet. On the Sach Pass the snow at the close of May was estimated at 18 feet deep. Huge accumulations of snow, 15 to 40 feet deep (or more), still exist in the bottom of deep nullas near the river banks and the snowline this season is much lower than usual.

(10) *Kulu*:—During May light falls of snow occurred on the high peaks, but the fall never descended below 11,000 feet.

The following shows the depth of snow on the various passes:—

Tehsil Kulu	feet.	Tehsil Seoraj.	feet.
Rotang	10	Sirikhand	10
Hamta	9	Hingan	1
Chandarkhani	5	Dundku	1
Barsai	1	Tikkar	1
Puja Dhar	1	Gargarasan	3
Luhri Achri	6	Supakun	1
Bhuboo	1	Plach	1
Sairi	1	Tirath	2

The snowfall of the month of May, 1905, was greater than that of May last year.

III.—UNITED PROVINCES HIMALAYAS.

(1) *Almora*:—The snowfall during May on the Lipu and Limpa Passes was as follows:—

Darma Malla—	feet.	inch.	Byans—	feet.	inch.
2nd May	0	6	2nd May	0	3
4th „	0	6	4th „	0	6
5th „	0		5th „	0	6
6th „	0	9	6th „	0	6
9th „	0	9	9th „	0	3
10th „	0	6	10th „	0	6
11th „	0	6	11th „	0	6
14th „	0	6	14th „	0	6
16th „	0	6	16th „	0	6
28th „	1	0	28th „	0	9
29th „	0	6	29th „	0	3
TOTAL	6	9	TOTAL	5	0

The accumulated snow was said to be 14 to 16 feet deep.

Malla Johar.

	feet.	inch.
2nd May	0	6
7th „	1	0
9th „	0	6
14th „	1	0
16th „	0	6
TOTAL	3	6

Danpur Malla.

	feet.	inch.
4th to 7th May	1	0
10th to 13th	0	3
TOTAL	1	3

Darma Nirwe Pass.

	feet.	inch.
2nd May	0	6
4th „	0	6
5th „	0	9
6th „	0	9
9th „	0	9
10th „	0	6
11th „	0	6
14th „	0	6
16th „	0	6
28th „	1	0
29th „	0	6
TOTAL	6	9

The snow accumulation on the following passes on the 31st May was as given below:—

	feet.	inch.
Unt Dhura	18	0
Ralam Dhura	15	6
Millam Dhura	12	0
Pindari Peak	1	3
Kapini „	1	3
Kaunela „	1	3
Nirwe Pass	17	0
Limpa „	16	0
Lipu „	14	0

The snowfall was heavier than usual.

Crop Report.

Madras:—At the close of May the standing crops were generally fair, but some in Bellary had been damaged by locusts and some in Chingleput and Tanjore required more rain, while those in North Arcot and Coimbatore had benefited by the recent rain. Harvests continued with poor to fair outturn. The condition of the cattle was generally good.

Bombay:—The preparation of lands for autumn cultivation was generally in progress during May. The sowing of autumn crops had commenced in parts of Sukkur, Larkana, the upper Sind frontier, Ratnagiri, Poona, the Karnatic and Kanara.

Bengal:—Prospects continued favourable during the month and there was no want of fodder or water.

United Provinces:—The preparation of fields for autumn crops was in active progress.

Punjab:—At the close of May, except for melons in Meanwali, the condition of the standing crops was generally good. The outturn of spring crops was, on the whole, average. Cattle were in good condition.

North-West Frontier Province:—Harvesting of spring crops was completed by the end of the month, and the outturn was excellent, except in parts of Dera Ismail Khan and Peshawar, where the crops suffered from drought and hail, respectively.

Burma:—Dry weather paddy had suffered in Mandalay for want of irrigation, and crops had been destroyed by floods in parts of Pakokku, Katha, Bhamo and Upper Chindwin; elsewhere the standing crops were in good condition.

Central Provinces:—Fields were being prepared for autumn sowings, and sowings of rice had started in parts of Bilaspur at the close of the month.

Assam:—The prospects of early rice were good in Goalpara and the Garo Hills and were generally fair in other places. The prospects of jute were good.

Mysore:—The standing crops were in good condition. The prospects of the season were fair.

Coorg:—Ploughing for rice was being retarded for want of rain.

Hyderabad:—Preparation of land for autumn crops continued, but sowings, which had commenced in two taluqs of the Malgandah districts, had, at the end of the month, been suspended for want of rain.

Rajputana:—In Karauli cotton and sugarcane were flourishing. Harvesting was in progress in five States. The condition of agricultural stock was satisfactory and fodder sufficient.

Central India:—Agricultural operations had been completed in Bundelkhand and were in progress in Indore, Bhopal, Baghelkhand, Malwa and Bhopawar.

Kashmir Jummoo:—The condition of the standing crops was fair.

Nepal:—The condition of Indian corn at the close of the month was good.

W. L. DALLAS.

Table I.—Abstract of Observations taken at 8 A.M. at 230 Stations in India, Burma, etc., in May, 1905.

Tab

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	I.—Burma Coast and Bay Islands.			+·018								92·0	+1·5	78·0	+0·6	85·0	+1·1	14·0					24
	Car Nicobar . .	25	29·815		29·767	29·889	9th	29·664	20th	·225	81·6	89·3		77·4		83·4		11·9	92·2	12th	75·1	12th & 19th.	1
1	Port Blair . .	61	29·811	+·019	29·803	29·913	15th	29·622	21st	·391	82·9	91·4	+2·4	82·7	?	87·1	?	8·7	96·1	3rd	78·4	20th	1
	Mergui . .	96	29·808	+·023	29·834	29·888	9th & 13th.	29·646	21st	242	81·1	90·3	+1·2	75·7	+1·9	83·0	+1·6	14·6	97·9	6th	73·4	8th & 23rd	2
	Tavoy . . .	26	29·877	+·011	29·834	29·967	4th	29·6 4	21st	·303	81·3	91·8	+3·4	75·6?	+0·4?	83·7?	+1·9?	16·2?	98·0	12th	71·1?	7th & 16th.	2
	Moulmein . .	94	29·779	+·016	29·811	29·887	13th	29·526	21st	·361	81·7	93·0	+3·7	76·9	+1·1	85·0	+2·4	16·1	99·4	7th & 10th.	71·3	31st	2
	Rangoon . .	57	29·806	+·018	29·801	29 924	4th	29·509	21st	·415	82·6	93·1	+1·2	78·1	+0·8	85·6	+1·0	15·0	103·1	1st	73·4	31st	2
2	Bassein. . .	27	29·826	+·025	29·790	29·916	13th	29·501	21st	·415	83·2	93·0	+1·5	77·7	+0·7	85·4	+1·1	15·3	101·2	9th	73·9	15th & 23rd.	2
	Diamond Island .	41	29·812	+·014	29 787	29·950	4th	29·461	21st	·489	83·9	88·0	−0·6	79·4	+0·6	83·7	0	8·6	92·4	12th	71·7	23rd	2
5	Akyab . . .	20	29·807	+·014	29·769	29·853	9th	29·456	22nd	·397	83·8	90·1	−0·5	78·1	−0·1	84·1	−0·3	12·0	94·9	10th	73·2	14th	2
3	Toungoo . .	183	29·660	+·018	29·783	29·789	13th	29·416	21st	·373	85·2	100·0	+4·3	76·0	−0·7	88·0	+1·8	24·0	108·3	4th, 7th & 8th.	72·1	12th	3
	II.—Burma Inland.			+·024								97·0	+1·6	76·7	+0·7	86·9	+1·1	20·4					34
3	Thayetmyo .	121	29·791	+·016	29·762	29·836	13th	29·415	22nd	·421	86·5	99·7	+1·3	78·6	+0·9	89·2	+1·1	21·1	108·5	9th	75·5	13th & 21th 14th	3
4	Minbu . .	*165*	29·641	+·018	29·752	29·765	13th	29·358	22nd	·407	84·7	99·0	+1·5	79·2	+1·5	89·1	+1·5	19·8	109·1	9th	75·1	15th	3
	Yamethin . .	657	29·157	+·012	29·761	29·290	14th	28·911	22nd	·376	83·1	98·5	+3·2	77·3	+1·1	87·9	+2·2	21·2	105·3	5 days	72·2	14th	3
	Monywa . .	*280*	29·572		29·791	29·710	13th	29·332	22nd	·378	83·7	98·0		77·4		87·7		20·6	106·2	5th	72·7	7th & 14th.	3
	Mandalay . .	250	29·510	+·026	29·767	29·715	9th	29·344	22nd	·371	85·6	101·1	+2·1	79·9	+0·9	90·5	+1·5	21·2	108·6	9th	74·3	30th & 31st	3
	Myitkyina . .	458	29·371		29·791	29·188	13th	29·174	23rd	·311	77·6	89·6		72·6		81·1		17·0	100·9	21st	66·1	1st	3
	Bhamo . .	*381*	29·455	+·047	29·793	29·587	13th	29·259	23rd	·328	77·9	93·4	−0·3	71·6	−1·1	82·5	−0·7	21·8	99·5	5th	64·1	1st	3
4(a)	Maymyo . .	3,545	26·444		26·390	26·544	9th	26·232	22nd	·312	74·0	83 8		64·8		74·3		19·0	91·9	9th	59·6	1st	3
	Lashio . . .	*2,751*	27·072	+·019	27·018	27·193	13th	26·912	22nd	·281	73·9	88·7	+0·4	66·3	−0·5	77·5	−0·1	22·4	96·5	9th	60·0	3rd	3
	III.—Assam.			+·040								86·1	−0·6	72·3	+0·2	79·2	−0·2	13·8					27
7	Silchar . . .	104	29·730	+·032	29·787	29·880	9th	29·462	22nd	·418	78·5	88·9	+0·2	73·6	+1·1	81·3	+0·7	15·3	96·1	23rd	66·3	9th	2
	Sibsagar . .	333	29·512	+·041	29·806	29·703	9th	29·287	23rd	·416	76 1	84·7	−1·2	72·0	+0·3	78·4	−0·5	12·7	92·2	16th	67·0	7th, 10th & 11th	5
	Dhubri . . .	115	29·704	+·048	29·773	29·848	9th	29·470	22nd	·378	76·8	85·2	−0·7	72·3*	−0·9*	78·7*	−0·8*	12·9	93·2	17th, 18th & 24th.	67·2	12th	2
	Gauhati. . .	195	29·644		29·800	29·815	9th	29·398	22nd	·417	76·3	86·6		72·3		79·5		14·3	94·5	17th	66·0	11th	2
	Tezpur . .	252	29·582		29·795	29·750	9th	29·348	22nd	·402	76·1	86·1		72·4		79·3		13·7	93·6	17th	66·9	11th	2
	Dibrugarh . .	353	29·491		29·807	29·657	9th	29·259	23rd	·398	76·1	84·9		71·2		78·1		13·7	94·7	16th	65·0	10th & 11th.	2
	IV.—Bengal and Orissa.			+·044								90·8	−2·6	75·6	−0·7	83·3	−1·7	15·2					31
6	Chittagong . .	87	29·733	+·030	29·768	29·879	9th	29·445	22nd	·434	81·7	88·1	−0·5	75·8	+0·4	82·0	−0·1	12·3	91·5	22nd	70·1	9th	2
	Noakhali . .	43	29·768		29·758	29·952	9th	29·508	22nd	·444	82·3	83·0		76·2		82·1		11·8	92·7	23rd & 24th.	65·9	10th	2
	Comilla . .	36	29·777		29·761	29·911	5th	29·517	22nd	·394	80·9	90·2		74·9		82·6		15·3	95·3	24th	69·3	5 days	2
	Sirajganj . .	49	29·759		29·758	29·892	13th	29·522	22nd	·370	78·2	87·8		73·6		80·7		14·2	98·3	24th	68·2	6th, 7th & 9th.	3
	Narayanganj. .	26	29·784	+·053	29·759	29·914	4th	29·535	22nd	·379	81·1	89·9	−1·4	75·9	+0·1	82·9	−0·7	14·0	95·1	24th	69·8	7th.	2
	Barisal . .	12	29·795	+·051	29·753	30·013	9th	29·542	22nd	·471	82·6	89·7	−2·2	73·8	?	81·8	?	15·9	95·3	24th	66·1	4th	2
	Mymensingh .	63	29·759	+·050	29·773	29·914	6th	29·511	22nd	·403	78·8	87·2	−1·4	74·1	+0·3	80·6	−0·6	13·1	95·2	23rd & 24th.	67·6	8th & 9th.	2
	Faridpur . .	46	29·756		29·752	29·891	6th	29·529	22nd	·362	80·8	89·0		75·0		82·0		14·0	96·8	24th	67·4	4th	2
10	Jessore . .	33	29·743	+·033	29·723	29·892	13th	29·522	22nd	·370	82·5	91·3	−3·5	76·4	−0·4	83·8	−2·0	14·9	102·5	24th	68·2	2nd	3
	Calcutta . .	21	29 746	+·038	29·713	29·904	13th	29·544	22nd	·360	83·0	91·9	−2·6	76·8	−0·6	84·4	−1·6	15·1	100·5	24th	67 4	10th	3
	Saugor Island .	25	29·733	+·024	29·702	29·919	9th	29·523	22nd	·396	84·3	90·9	−0·9	79·7	−1·3	85·3	−1·1	11·2	96·9	23rd	68·5	10th	2

* Mean of 30 days.

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the ret

Note 2.—The data from which divisional means of the figure colu

The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the observations of which exceed 3,200 feet.

I.

Stations in India, Burma, etc., in May 1905.

Wind Direction. Number of winds from: N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud-amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May 1905.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
		1			14			S 42° W	4·6			4·6	83	—4	·918	—·007	5·5	- 1·6				11·77	14·66	—2·66					I.—Burma Coast and Bay Islands.
2	1	1	5	1	9	7	4	S 65° W	7·6	7·3	+ 4		88		·947		8·6		13			9·69			9·69			2·48	Car Nicobar.
	2	1	6				1	S 71° E	3·0	2·1	+43	2·7	85	—2	·954	—·012	7·3	+0·4	13			11·11	17·09	- 5·98	11·11	17·09	—5·98	2·80	Port Blair.
				1				S 45° W	2·3				86	—2	·898	—·007	4·6	—1·7	18	18·00	0	13·80	19·26	- 5·46	13·80	19·26	- 5·46	2·40	Mergui.
		3	6	5	4	1		S 16° E	4·1	3·1	+32	4·6	85	—3	·863	—·031	3·9	—2·9	17	17·70	—0·70	21·96	26·05	- 4·09	21·96	26·05	- 4·09	4·77	Tavoy.
	3	5		4		3		S 63° E	13·0	3·9	+233	10·9	81	—7	·876	—·011	6·4	- 0·9	14	17·40	—3·40	13·19	19·40	- 6 21	13·19	19·40	- 6·21	4·06	Moulmein.
2	1	3	7	5	2	3	8	S 24° W	6·9	5·0	+38		82	—6	·891	—·027	5·8	- 1·2	8	14·00	—6·00	10·34	11·22	- 0·88	10·34	11·22	- 0·88	3·82	Rangoon.
	3	2	2	2	7	1	12	N 78° W	9·3	4·5	+107	9·3	81	—5	·919	- ·016	4·8	- 1·2	12	12·10	- 0·10	9·88	10·30	—0·42	9·88	10·30	- 0·42	1·75	Bassein.
	14	5	8				3	N 77° E	4·1	7·0	—41	3·9	78	—12	·915	+ ·009	5·2	—2·0	11	11·18	—0·18	8·74	10·43	—1·69	8·74	10·43	—1·69	2 55	Diamond Island.
1			18	6	2			S 30° E	7·5	3·5	+114	7·4	83	—1	·986	+ ·019	3·8	—3·1	7	11·50	—4·50	14·67	11·88	+2·79	14·67	11·88	+2·79	2·87	Akyab.
													77	—6	·933	+ ·010	5·0	—1·9	7	10·10	—3·10	4·32	6·28	—1 96	4·32	6·28	—1·96	1·13	Toungoo.
													73	—3	·811	- ·011	4·5	- 0·7				5·88	5·41	+ 0·10					II.—Burma Inland.
1	1			21	1	4	3	S 18° W	5·5	7·3	—24		71	—1	·892	+ ·049	2·8	—2·3	6	6·99	- 0·99	4·29	4·13	+ 0·16	4·29	4·13	+ 0·16	1·42	Thayetmyo.
			12	3	5	6	4	S 18° W	6·3			7·5	68	—9	·799	- ·043	2·7	—1·7	6	6·40	—0·40	4·30	6·01	—1·71	4·30	6·01	—1·71	1·33	Minbu.
			12	8			1	S 26° E	2·1			2·2	71	—6	·808	—·015	4·5	+ 0·7	7	8 10	- 1·10	3·52	6·76	—3·24	3·52	6·76	- 3·24	0·93	Yamethin.
			2	6	3	5	7	S 66° W	2·1				71		·823		3·7		7	7·20	- 0·20	8·62	3·54	+5·08	8·62	3·54	+5·08	2·82	Monywa.
1	1	1		9	4			S 6° W	4·6				68	—3	·812	—·033	4·7	—0·2	8	6·60	+1·40	7·96	5·55	+2·41	7·96	5 55	+ 2·41	5 53	Mandalay.
3	11	10	1	1	1	1		N 65° E	3·8			3·8	80		·763		7·2		12			8·12			8·12			2·24	Myitkyina.
1	9	2			1	2	7	N 4° E	3·9			4·6	82	+2	·779	—·012	5·8	+0·2	10	10·40	- 0·40	4·35	6· 6	—2·11	4·35	6·46	—2·11	1·05	Bhamo.
	1	4		6	4	2		S 1° W	2·9				78		·617		5·5		11	12·80	—1·80	6·84	0·39	—3·55	6·84	10 40	—3·56	1·41	Maymyo.
			1	2	1			S	3·8				79	—5	·660	—·010	4·9	- 1·9	8			3·40	6 13	—2·73	3·40	6·13	—2·73	0 73	Lashio.
													87	—1	·798	+ ·004	7·0	0				9·10	13·30	—4·20					III.—Assam.
								Calm	0·4	3·4	—88	0·7	85	—1	·839	+ ·011	6·3	—1·0	9	16·50	—7·50	6·79	17·24	—10·45	6·79	17·24	—10·45	2·68	Silchar.
2	8		3					N 53° E	2·4	2·9	—17	2·2	91	—1	·812	—·012	8·5	+0·4	11	15·90	—4·90	7·13	12·62	- 5·49	7·13	12·62	—5·49	1·45	Sibsagar.
	4	10	3	1	2			S 85° E	4 8	7·0	—31	5·7	87	0	·814	+ ·013	7·5	+0·5	12	15·70	—3·70	15·42	15·43	—0·01	15·42	15·43	- 0·01	4·40	Dhubri.
7	5		1	1	2		1	N 14° E	1·3			1·5	86		·797		7·4		11	14·20	—3·20	10·25	9·76	+0·49	10·25	9·76	+0·49	1·79	Gauhati.
1	3	13				1		N 78° E	3·6			3·8	87		·787		6·4		11	14·10	—3·10	8·52	10·12	—1·60	8·52	10·12	- 1·60	1·82	Tezpur.
5	12	6	1		1	1	3	N 38° E	1·6			1·5	84		·737		5·6		10	15·20	—5·20	6·46	14·60	—8·14	6·46	14·60	—8·14	1·33	Dibrugarh.
													83	+1	·878	—·030	4·8	—0·5				8·71	7·33	+ 1·38					IV.—Bengal and Orissa
	8	1	14	4		1		S 63° E	5·1	6·4	—20	4·7	83	+1	·901	—·007	4·5	—1·6	11	10·55	+0·45	5·52	10·31	—4·79	5·52	10·31	- 4·79	1·46	Chittagong
	2	6	8	8	3	1	2	S 35° E	4·1			4·7	82		·906		4·9		11	10·45	+0·55	11·90	10·06	+1·84	11·90	10·06	+ 1·84	2·93	Noakhali.
	3	4	11	10		1		S 39° E	5·1			4·3	85		·905		4·8		10	11·89	- 1·89	7·68	11·01	- 3·33	7·68	11·01	- 3·33	1·46	Comilla.
1	5	5	1	2	2	1		N 87° E	1·4			1·4	91		·901		5·4		13	10·16	+ 2·84	13·34	7·95	+ 5·39	13·34	7·95	+ 5·39	4·30	Sirajganj.
1	6	8	10	2	2	2	2	S 73° E	5·9	6·2	- 5	5·0	87	+2	·934	+ ·005	6·8	+0·5	12	11·53	+0·47	11·40	9·44	+1·96	11·40	9·44	+ 1·96	1·66	Narayanganj.
	2	1	5	14	2	1		S 13° E	3·5			3·0	83	+1	·926	- ·012	3·4	—2·9	10	9·84	+0·16	7·38	9·19	—1·81	7·38	9·19	- 1·81	1·85	Barisal.
	1	11	9	1	2			S 65° E	3·5			3·0	85	0	·836	—·004	6·1	—0·1	16	13·48	+2·52	20·65	12·96	+7·69	20·65	12·96	+ 7·69	6·82	Mymensingh.
2		4	7	9	2	1	2	S 23° E	4·2			3·6	86		·905		4·8		11	10·72	+0·26	9·32	8·30	+1·03	9·33	8·30	+ 1·03	1·80	Faridpur.
1	1	2	6	13	1			S 21° E	3·3	4·9	—33	3·3	82	—2	·923	—·049	5·4	—0·5	7	9·74	—2·74	7·43	7·94	- 0·51	7·43	7·94	—0·51	1·74	Jessore.
1		4	5	12	8	1		S 3° E	6·3	7·1	—11		82	+3	·930	—·014	4·4	—0·6	8	7·46	+0·54	10·01	5·68	+4·33	10·01	5·68	+ 4·33	3·63	Calcutta.
1	3	1	4	18	4			S 8° E	18·5	15·3	+21		81	0	·951	—·058	5·4	—1·6	6	6·71	—0·71	5·70	5·09	+0·61	5·70	5·09	+ 0·61	2·22	Saugor Island.

y station, the data for that station are not utilized in calculating the provincial departures from normal.
40, 42, and 44 are derived, are incomplete,

Tab

Abstract of Observations taken at 8 A.M. at 230 Stati

Number of District.	Station.	Elevation of bar-ometer above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
10	Krishnagar	47	29·723		29·719	29·882	13th	29·519	22nd	·363	81·4	92·7		76·4		84·6		16·3	103·6	24th	67·0	4th	
	Midnapore	149	29·603		29·699	29·762	13th	29·429	22nd	·333	83·7	95·8		77·0		86·4		18·8	106·4	24th	69·3	10th	
11	Bankura	313	29·432		29·695	29·598	13th	29·256	22nd	·342	83·2	98·0		77·4		87·7		20·6	109·6	24th	69·7	12th	
	Raniganj	334	29·430		29·717	29·600	13th	29·258	22nd	·342	80·6	95·9		75·2		85·6		20·7	107·5	24th & 25th.	68·4	12th	
	Burdwan	99	29·665	+·044	29·712	29·839	13th	29·467	22nd	·372	81·5	93·9	−4·5	76·0	−1·8	85·0	−3·2	17·9	105·4	24th	67·8	9th	
	Naya Dumka	489	29·266		29·715	29·429	13th	29·077	22nd	·362	79·8	93·4		74·3		83·9		19·1	105·5	19th & 24th.	67·9	4th	
	Berhampore	67	29·707	+·045	29·724	29·869	13th	29·500	22nd	·369	80·2	92·0	−4·5	75·3	−1·3	83·6	−2·9	16·7	102·3	24th	66·7	6th	
	Rampur Boalia	70	29·711		29·731	29·868	13th	29·506	22nd	·362	80·1	90·0		74·5		82·2		15·6	101·0	24th	67·1	6th	
	Malda	72	29·692		29·716	29·847	13th	29·490	22nd	·357	79·4	89·6		76·5		83·1		13·1	100·1	19th & 24th.	68·6	4th	
	Bogra	61	29·729	+·066	29·743	29·864	13th	29·500	22nd	·364	77·7	88·1	−4·4	73·5	−1·0	80·8	−2·7	14·6	97·2	24th	67·2	7th	
12	Dinajpur	123	29·669	+·054	29·719	29·815	14th	29·459	22nd	·356	77·9	88·2	−3·5	72·6	−1·7	80·4	−2·6	15·6	98·8	24th	66·5	10th	
	Rangpur	123	29·697		29·777	29·845	10th	29·473	22nd	·372	78·4	86·4		72·1		79·3		14·3	94·2	18th, 23rd & 24th.	62·8	10th	
	Jalpaiguri	284	29·525	+·045	29·769	29·663	9th	29·290	23rd	·373	77·8	87·3	−1·0	71·9	−0·4	79·6	−0·7	15·4	94·4	17th	64·6	10th	
	Cooch Behar	156	29·663		29·776	29·818	9th	29·434	22nd	·384	77·7	86·7		73·3		80·0		13·4	94·4	17th	66·1	10th	
17	Purnea	125	29·660	+·053	29·741	29·818	10th & 13th.	29·464	22nd	·354	78·8	89·8	−5·0	73·7	−0·5	81·8	−2·8	16·1	102·3	24th	67·1	6th	
14	Balasore	50	29·711	+·036	29·703	29·872	9th	29·534	22nd	·338	84·1	95·3	−2·3	76·8	−1·9	86·1	−2·1	18·5	107·5	20th	69·9	10th	
	False Point	21	29·760	+·044	29·722	29·889	4th	29·566	22nd	·323	84·6	89·7	−1·3	80·0	+0·3	84·9	−0·5	9·7	98·5	23rd	69·1	10th	
	Cuttack	80	29·690	+·044	29·713	29·821	12th	29·516	22nd	·305	84·0	96·9	−2·7	79·0	−1·1	89·0	−1·9	19·9	108·5	24th	70·2	12th & 13th.	
	Puri	24	29·759		29·721	29·922	12th	29·563	22nd	·359	83·7	89·6		80·9		85·3		8·7	93·7	23rd	73·6	11th	
	V.—Gangetic Plain and Chota Nagpur.			+·029								99·7	−2·5	76·1	−1·9	87·9	−2·2	23·6					
15	Hazaribagh	2,007	27·730	+·012	29·663	27·870	13th	27·621	22nd	·249	82·7	97·8	−1·4	74·2	−1·3	86·0	−1·4	23·5	108·1	26th	66·3	12th	
	Ranchi	2,128	27·630	+·023	29·684	27·776	13th	27·516	30th	·260	81·7	97·0	−2·6	73·4	−2·6	85·2	−2·6	23·6	105·2	25th & 26th.	64·9	12th	
	Daltonganj	730	28·981*		29·660*	29·108	13th	28·858	26th	·250	85·4	107·0		77·5		92·3		29·5	115·1	26th	69·5	23rd	
	Purulia	*816*	28·927		29·686	29·097	13th	28·773	22nd	·324	83·8	100·4		76·3		88·4		24·1	109·7	25th	67·4	12th	
	Chaibassa	*760*	28·971	+·031	29·679	29·132	13th	28·827	22nd	·305	83·1	102·6	−2·5	76·9	−3·1	89·8	−2·8	25·7	111·4	25th	69·0	12th	
16	Gaya	375	29·336	+·023	29·662	29·504	13th	29·188	23rd	·316	86·1	102·6	−2·3	77·9	−1·6	90·2	−2·0	24·7	111·5	25th	69·3	12th	
	Dehri	351	29·355		29·657	29·512	13th	29·214	23rd	·298	85·7	103·3		78·6		91·0		24·7	112·5	25th	70·0	12th	
	Patna	183	29·546	+·031	29·682	29·718	13th	29·385	23rd	·333	81·2	95·6	−4·6	75·2	−2·5	85·4	−3·6	20·4	106·5	25th	64·8	6th	
	Arrah	190	29·544		29·687	29·707	13th & 14th.	29·388	23rd	·319	83·8	98·7		76·3		87·4		22·4	105·9	25th	69·1	27th	
	Buxar	239	29·477		29·671	29·636	13th	29·321	23rd	·315	83·6	100·1		76·7		88·4		23·4	111·9	25th	69·1	27th	
17	Bhagalpur	160	29·597		29·710	29·766	10th	29·412	22nd	·354	81·2	93·3		74·5		83·9		18·8	106·8	24th	67·1	6th & 7th.	
	Darbhanga	166	29·589	+·040	29·709	29·758	10th	29·394	23rd	·364	80·3	93·1†	−2·5†	74·2	−2·1	84·3†	−2·3	18·9	103·1	24th	67·3	9th & 26th.	
	Muzaffarpur	178	29·578		29·712	29·749	13th	29·396	22nd	·353	80·7	92·9‡		73·5‡		83·2‡		19·4	103·3	18th & 24th.	65·0	3rd	
	Motihari	224	29·530		29·715	29·706	10th	29·343	22nd	·363	79·6	93·4		73·9		83·7		19·5	102·9	18th & 24th.	65·3	3rd	
	Chapra	181	29·547		29·683	29·709	13th	29·387	23rd	·322	82·1	96·0		74·8		85·4		21·2	106·9	25th	67·1	6th	
18	Benares	267	29·439	+·027	29·659	29·590	13th	29·305	23rd	·285	86·6	102·8	−2·7	76·8	−2·1	89·8	−2·4	26·0	111·5	25th	68·7	12th	
	Allahabad	309	29·389	+·022	29·649	29·525	13th	29·263	23rd	·262	87·5	105·1	−1·9	78·1	−1·4	91·7	−1·7	27·0	114·7	25th	70	12th	
23	Gorakhpur	257	29·473	+·040	29·688	29·632	10th	29·307	23rd	·325	82·7	96·8	−4·2	74·8	−2·5	85·8	−3·4	22·0	106·6	19th & 25th.	68·0	23rd	
19	Lucknow	368	29·328	+·023	29·652	29·479	13th	29·182	23rd	·297	86·2	103·0	−2·0	76·4	−1·4	89·7	−1·7	26·6	112·8	25th	67·3	23rd	
20	Bahraich	401	29·306	+·035	29·665	29·474	13th	29·142	23rd	·332	85·1	98·8?	−4·2?	75·1	−2·8	87·0?	−3·5?	23·7	107·6	20th	64·0	22n	
21	Cawnpore	416	29·279	+·034	29·649	29·427	13th	29·156	23rd	·271	87·3	104·4	−1·8	77·6	?	91·0	?	26·8	113·1	25th	70·7	22n	
	Mainpuri	516	29·183	+·040	29·650	29·334	13th	29·052	26th	·282	87·8	107·2	−0·3	79·9	+0·1	93·6	−0·1	27·3	115·7	25th	70·8?	h	

* Mean of 29 days. ‡ Mean of 30 days.

† „ „ 24 „

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the turns of

NOTE 2.—The data from which divisional means of the figure col nns Nos.

—continued.

n India, Burma, etc., in May 1905—continued.

Wind Direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction,	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May 1905.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
2	2	2	5	8	10	2			S 38° E	3·9			4·3	84		·904		5·7		8	7·74	+ 0·26	11·52	6·55	+ 4·97	11·52	6·55	+ 4·97	2·90	Krishnagar.
2	3	1	1	2	19	2		1	S 3° E	5·3			4·7	75		·857		2·4		6	7·05	— 1·05	5·11	5·69	— 0·58	5·11	5·69	— 0·58	1·70	Midnapore.
3	1	4	4	12	2	1	1		S 63° E	6·3			5·6	72		·798		3·0		3	6·19	— 3·19	2·73	3·89	— 1·16	2·73	3·89	— 1·16	1·31	Baukura.
			2	1					S 72° E	1·7				78		·818		3·4		6	5·18	+ 0·82	5·27	3·77	+ 1·50	5·27	3·77	+ 1·50	1·23	Raniganj.
3	1	3	5	3	8	5			S 29° E	3·7	5·5	— 33	3·6	82	+ 7	·886	?	5·4	+0·4	8	7·32	+ 0·68	9·52	6·35	+ 3·17	9·52	6·35	+ 3·17	3·08	Burdwan.
	1		7	4	2				S 68° E	2·9			3·3	82		·838		3·9		4	5·21	— 1·21	4·37	3·60	+ 0·77	4·37	3·60	+ 0·77	1·57	Naya Dumka.
	2	2	6	2	10				S 49° E	3·3			2·8	85	+ 2	·884	—·020	6·1	+0·5	9	7·74	+ 2·16	9·01	5·41	+ 3·60	9·01	5·41	+ 3·60	4·01	Berhampore.
		1	2	2	4	2			S 27° E	3·9			4·0	81		·880		4·3		8	7·74	+ 0·26	8·23	5·54	+ 2·69	8·23	5·54	+ 2·69	4·01	Rampur Boalia.
		9	8	10	3	1			S 79° E	7·5			6·9	87		·880		3·2		10	5·58	+ 4·42	11·70	3·85	+ 7·85	11·70	3·85	+ 7·85	2·75	Malda.
		1	18	1	3				S 81° E	3·1			2·6	84	+ 2	·801	—·050	5·3	+0·6	12	9·77	+ 2·23	12·91	8·04	+ 4·87	12·91	8·04	+ 4·87	3·63	Bogra.
	1	13	12	1	2	2			N 74° E	2·5			2·4	83	+ 3	·795	—·008	7·1	+1·2	10	8·23	+ 1·77	11·55	8·45	+ 3·10	11·55	8·45	+ 3·10	3·16	Dinajpuri.
		11	10	5		2		1	N 78° E	3·5*			3·2*	87		·848		4·7		15	11·19	+ 3·81	20·18	10·31	+ 9·87	20·18	10·31	+ 9·87	2·60	Rangpur.
	2	7	11	4	1	1			N 84° E	1·7			2·2	83	— 1	·782	—·018	4·6	+0·3	8	12·42	— 4·42	8·90	12·04	— 3·14	8·90	12·04	— 3·14	2·69	Jalpaiguri.
		9	8	3				1	S 73° E	3·0			3·1	87		·826		7·0		12	14·76	— 2·76	12·40	15·26	— 2·86	12·40	15·26	— 2·86	5·73	Cooch Behar.
		18	9	3					N 65° E	3·9	3·4	+ 15	3·5	83	+ 7	·815	+·002	1·4	—3·0	7	5·34	+ 1·66	5·62	4·77	+ 0·85	5·62	4·77	+ 0·85	1·50	Purnea.
	2	2		2	6	17	1		S 32° W	8·1			6·0	73	— 6	·857	—·114	4·5	—1·0	6	7·74	— 1·74	2·60	5·97	— 3·37	2·60	5·97	— 3·37	0·87	Balasore.
	1		2	2	10	13	3		S 21° W	12·7	12·6	+ 1	13·2	81	— 2	·963	—·052	6·6	+0·2	4	4·32	— 0·32	2·30	5·23	— 2·93	2·30	5·23	— 2·93	1·10	False Point.
			2	3	6	12	5		S 28° W	4·9	5·1	— 4		75	+ 3	889	—·015	4·8	+0·2	6	5·23	+ 0·77	5·04	4·24	+ 0·80	5·04	4·24	+ 0·80	1·58	Cuttack.
		1			1	23			S 43° W	18·8			18·4	84		·986		4·7		5	3·39	+ 1·61	1·90	2·89	— 0·99	1·90	2·89	— 0·99	0·65	Puri.
														64	+ 6	·708	+ ·030	2·2	+ 0·1				1·64	1·63	0					V.—Gangetic Plain and Chota Nagpur.
2			2	3	11	7	2	3	S 20° W	10·2	8·8	+ 16	9·1	52	+ 6	·557	+ ·023	3·2	+ 0·1	2	3·93	— 1·93	0·86	2·33	— 1·47	0·86	2·33	— 1·47	0·39	Hazaribagh.
1	1	1	5	6	7	7	3		S 39° W	7·6			9·0	54	+ 3	·565	—·040	1·6	—0·6	6	4·68	+ 1·32	3·56	2·08	+ 1·48	3·56	2·08	+ 1·48	1·58	Ranchi.
1	2	4	3		1				N 82° E	6·8			5·5	49		·593		0·7		1	2·07	— 1·07	0·20	1·04	— 0·84	0·20	1·04	— 0·84	0·10	Daltonganj.
1	5	7	7	4	2	4	1		S 61° E	4·4			5·1	54		·734		2·3		2	5·26	— 3·26	1·81	2·92	— 1·11	1·81	2·92	— 1·11	1·40	Purulia.
	1	1	1	1	3	1	1		S 27° W	6·1			5·3	66	+ 5	·742	—·047	1·6	—0·9	6	5·65	+ 0·35	3·12	3·34	— 0·22	3·12	3·34	— 0·22	1·76	Chaibassa.
	7	7	7	2	2	4			S 76° E	5·3	3·9	+ 36	4·2	66	+ 8	·814	+·036	2·5	—0·1	1	1·94	— 0·94	0·48	0·98	— 0·50	0·48	0·98	— 0·50	0·42	Gaya.
1	1	14	5	4	4	2			S 55° E	9·9			8·8	85		·622		5·3		1	1·47	— 0·47	0·59	0·82	— 0·23	0·59	0·82	— 0·23	0·54	Dehri.
	2	20	3	2		1	1		S 85° E	7·8	4·8	+ 63	8·8	69	+ 4	·746	—·020	2·8	+0·8	6	2·97	+ 3·03	1·35	1·93	— 0·58	1·35	1·93	— 0·58	0·38	Patna.
1	8	2	4		1				N 73° E	4·5			4·6	63		·715		0·7		3	2·45	+ 0·55	1·24	1·47	— 0·23	1·24	1·47	— 0·23	0·98	Arrah.
3	1	21	1	1	1	2			N 87° E	7·4			7·0	56		·626		2·4		1	1·97	— 0·97	0·22	0·82	— 0·60	0·22	0·82	— ·60	0·14	Buxar.
	8	9	3	3	1				S 89° E	4·6			4·3	77		·815		4·1		6	4·16	+ 1·84	4·57	2·79	+ 1·78	4·57	2·79	+ 1·78	1·61	Bhagalpur.
1	6	22	1						N 80° E	6·0	5·9	+ 1	5·3	85	+14	·887	+·095	2·9	+0·6	5	3·93	+ 1·07	4·04	3·07	+ 0·97	4·04	3·07	+ 0·97	1·65	Darbhanga.
	3	12	10						S 77° E	6·8				77		·837		1·6		5	3·65	+ 1·35	3·30	2·40	+ 0·90	3·30	2·40	+ 0·90	1·10	Muzaffarpur.
	13	15							N 69° E	5·8			5·5	72		·749		2·3		5	4·25	+ 0·75	4·20	2·65	+ 1·55	4·20	2·65	+ 1·55	1·30	Motihari.
	5	17	4	1	1				S 88° E	5·3			4·7	71		·758		2·0		3	2·13	+ 0·87	2·56	1·35	+ 1·21	2·56	1·35	+ 1·21	1·15	Chapra.
	5	10	4	1	4	1	3		S 84° E	4·1	5·2	— 21	4·7	56	+ 3	·700	+·026	1·8	+0·1	2	1·00	+ 1·00	1·12	0·64	+ 0·48	1·12	0·64	+ 0·48	0·70	Benares.
2	4	5	9	3	4	2	1		N 73° E	7·6	6·2	+ 23	6·3	53	+11	·670	+·082	2·2	+0·6	0	0·50	— 0·50	0	0·29	— 0·29	0	0·29	— 0·29	0	Allahabad.
4	19	4	1				1		N 45° E	3·1	3·9	— 21		66	+ 3	·742	+·008	1·7	+0·1	3	2·40	+ 0·60	1·27	1·34	— 0·07	1·27	1·34	— 0·07	0·61	Gorakhpur.
	6	16	2	1		2	3		N 78° E	4·7	4·3	+ 9	5·1	50	+ 4	·620	+·027	0·9	—0·6	0	1·50	— 1·50	0·16	1·01	— 0·85	0·16	1·01	— 0·85	0·09	Lucknow.
1		11	14	1	1		2		S 64° E	5·7			4·3	68	+ 8	·815	+·055	0·9	—0·5	2	2·50	— 0·50	1·04	1·95	— 0·91	1·04	1·95	— 0·91	0·78	Bahraich.
	2	13	4	1	1	5	1		S 78° E	5·1				47	+ 1	·590	?	1·6	+0·4	1	1·00	0	0·29	0·31	— 0·02	0·29	0·31	— 0·02	0·29	Cawnpore.
2	1	7	9	2	1	4	5		S 61° E	3·9			3·9	52	+10	·684	+·117	2·8	+1·5	0	1·10	— 1·10	0·02	0·43	— 0·41	0·02	0·4	— 0·4	0·02	Mainpuri.

on, the data for that station are not utilized in calculating the provincial departures from normal.
d 44 are derived, are incomplete.

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Abstract of Observations taken at 8 A.M. at 230 Stati

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	VI.—Upper Sub-Himalayas.			+·019								103·8	+0·9	77·1	+2·1	90·5	+1·5	26·8				
24	Bareilly	568	29·132	+·030	29·663	29·287	13th	28·985	23rd	·102	84·2	102·0	−1·2	76·3	−0·1	89·2	−0·7	25·7	109·5	25th	69·1	22nd & 23rd.
	Dehra Dun	2,233	27·519	+·026	29·689	27·696	13th	27·363	23rd	·333	78·2	94·1	−0·9	70·3	−0·2	82·2	−0·6	23·8	101·5	25th	62·5	7th
	Roorkee	899	28·806	+·035	29·663	28·992	13th	28·643	23rd	·349	85·8	101·6	−0·6	74·8	+0·2	88·3	−0·2	26·8	110·0	25th	64·3	22nd
22	Meerut	738	28·946	+·017	29·640	29·116	13th	28·808	23rd	·308	85·7	101·1	+1·1	76·4	+0·5	90·3	+0·9	27·7	111·7	25th	68·8	21st
26	Delhi	718	28·962	+·011	29·634	29·125	13th	28·834	26th	·291	86·4	105·0	+0·3	81·9	+1·7	93·5	+1·0	23·1	112·2	25th & 26th	73·3	15th
28	Lahore	702	28·949	+·009	29·610	29·166	13th	28·791	26th	·375	88·4	107·4	+1·7	78·0	+5·4	92·7	+3·6	29·4	114·4	4 days	66·7	21st
27	Sirsa	662	29·001	+·013	29·616	29·142	13th	28·868	27th	·274	90·6	108·4	+1·2	80·0	+2·6	94·2	+1·9	28·4	114·3	5 days	67·1	21st
	Patiala	*818*	28·857		29·632	29·034	13th	28·720	23rd	·314	87·5	103·9		76·4		91·2		25·5	113·0	26th	69·2	21st
29	Ludhiana	812	28·856	+·014	29·626	29·091	13th	28·722	26th	·369	87·4	105·8	+1·4	79·3	+3·9	92·6	+2·7	26·5	114·8	26th	70·1	21st
	Sialkot	830	28·831	+·010	29·621	28·978	13th	28·668	26th	·310	88·2	107·2	+4·1	79·4	+4·6	93·3	+4·4	27·8	115·9	27th & 31st.	69·6	20th & 21st.
	Ambala	892	28·792	+·036	29·641	28·981	13th	28·632	23rd	·349	86·0	105·9	+0·7	78·3	+1·4	92·1	+1·1	27·6	113·9	26th	71·2	21st
	Rawalpindi	1,674	28·019	+·008	29·647	28·166	13th	27·889	26th	·277	84·8	100·8	+2·7	71·8	+3·2	86·3	+3·0	29·0	111·0	28th	62·1	20th
	VII.—Indus Valley and North-West Rajputana.			+·009								108·1	+3·0	80·1	+2·3	94·1	+2·7	28·0				
22	Peshawar	1,110	28·605	+·014	29·687	28·802	1st	28·460	26th	·342	85·2	99·1	+0·5	71·9	+1·9	85·5	+1·2	27·2	108·0	27th & 28th.	61·0	19th
	D. I. Khan	590	29·086	+·002	29·618	29·279	1st	28·940	26th	·339	88·8	106·4	+2·2	76·8	+1·9	91·6	+2·1	29·6	114·2	28th	64·1	19th, 20th & 21st.
	Khushab	612	29·046	+·009	29·617	29·221	13th	28·888	26th	·333	91·8	106·3	+1·4	78·8	+1·5	92·6	+1·5	27·5	118·8	10th	67·9	21st
31	Montgomery	558	29·090	?	29·602	29·276	13th	28·925	26th	·351	93·9	109·4	+1·1	79·8	+1·4	91·6	+1·3	29·6	117·8	28th	66·0	20th
	Multan	420	29·217	−·005	29·594	29·397	1st	29·071	26th	·326	91·3	110·8	+4·2	82·0	+4·4	96·4	+4·3	28·8	118·5	31st	71·0	17th & 19th.
47	Jacobabad	186	29·467	+·009	29·609	29·603	2nd	29·319	27th	·284	94·6	116·4	+4·8	81·5	+3·3	99·1	+4·2	34·9	124·0	13th	68·3	19th & 21st.
	Hyderabad	96	29·614	+·021	29·663	29·735	4th	29·498	26th	·237	88·6	110·8	+3·7	78·6	+0·2	94·7	+2·0	32·2	119·7	14th	75·5	1st
	Kurrachee	30	29·717	+·009	29·698	29·837	4th	29·613	27th	·224	84·8	94·8	+1·9	79·1	+0·4	87·0	+1·2	15·7	106·9	16th & 18th.	75·2	19th
51	Bikaner	*771*	28·905	+·014	29·624	29·041	4th	28·798	23rd	·243	94·4	111·6	+4·5	87·5	+4·9	99·6	+4·7	24·1	117·8	11th	73·5	19th
	Pachpadra	*380*	29·337	+·011	29·667	29·461	4th	29·239	23rd	·222	90·9	113·2	+5·4	81·4	+3·3	97·3	+4·4	31·8	120·5	14th	69·5	20th
	Jodhpur	782	28·942		29·688	29·059	4th	28·850	23rd	·209	90·8	110·5		83·9		97·2		26·6	116·8	12th	72·8	22nd
	VIII.—East Rajputana, Central India and Gujarat.			+·013								105·3	+2·6	81·0	+2·1	93·2	+2·4	24·3				
	Jaipur	1,431	28·307	+·015	29·668	28·412	4th	28·210	27th	·202	91·8	109·5	+2·9	81·5	+3·3	95·5	+3·1	28·0	113·7	27th	72·1	20th & 22nd.
50	Bharatpur	585	29·105		29·641	29·247	14th	28·999	31st	·248	89·9	108·2		81·8		95·1		26·4	114·3	26th	73·1	23rd
	Kotah	819?	28·873		29·664	28·982	4th	28·774	27th	·208	97·2	111·3		88·5		99·9		22·8	115·1	11th & 26th.	79·6	21st
	Sambhar	1,254	28·474	+·026	29·662	28·584	4th	28·368	26th	·216	93·0	109·6	+4·5	83·6	+3·4	96·6	+4·0	26·0	114·5	11th	69·5	21st & 22nd.
	Ajmer	1,611	28·148	+·021	29·683	28·268	4th	28·047	27th	·221	91·3	108·1	+4·3	85·7	+6·4	96·9	+5·4	22·4	112·9	11th	70·6	22nd
	Udaipur	1,925	27·867?		29·689?	28·011	4th	27·783	23rd	·228	92·9	106·9		81·7		94·3		25·2	112·1	12th	71·3	22nd
	Bhuj	395	29·386	+·026	29·731	29·499	1st	29·301	11th	·198	85·6	105·3	+4·0	77·2	+0·5	91·3	+2·3	28·1	114·3	14th	74·0	3rd & 4th.
46	Jamnagar	61	29·735		29·741	29·545	3rd	29·642	22nd	·203	85·9	100·4		77·6		89·0		22·8	106·7	14th	74·2	4th, 5th & 6th.
	Rajkot	429	29·375	+·016	29·752	29·478	4th	29·280	22nd	·198	85·0	108·3	+2·9	75·6	+0·5	92·0	+1·7	32·7	113·3	14th	71·8	5th & 9th.
	Veraval	*18*	29·811	+·002	29·771	29·910	1st	29·709	22nd	·201	82·0	85·3	−1·4	78·2	−0·2	81·8	−0·8	7·1	89·1	8th	75·8	4th
	Dwarka	7	29·775		29·758	29·888	4th	29·684	22nd	·204	83·4	88·0		80·1		84·1		7·9	90·9	14th	77·7	1st
	Bhavnagar Para.	55	29·756	?	29·755	29·861	1st	29·663	22nd	·198	87·8	108·1	+4·9?	78·4	−0·6	93·2	+2·2?	29·7	112·7	14th 15th & 27th.	74·5	3rd
49	Nowgong	757	28·937	+·002	29·640	29·038	13th	28·841	26th & 30th.	·197	90·7	108·7	+1·3	81·5	+1·7	95·1	+1·5	27·2	114·5	26th	71·0	22nd & 23rd.
	Indore	1,823	27·973	+·021	29·710	28·070	4th	27·887	22nd	·183	89·4	107·1	+4·3	78·4	+2·5	92·8	+3·4	28·7	110·6	26th	71·1	22nd
	Neemuch	1,630	28·150	+·024	29·711	28·276	4th	28·054	23rd	·222	88·1	105·2	+1·2?	80·4	+3·3	92·8	+2·3?	24·8	112·1	12th	72·2	21st

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the re
Note 2.—The data from which divisional means of the figure col

I—*continued.*

in India, Burma, etc., in May 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May 1905.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
		16	4			2	1	S 83° E	4·2	5·2	−19	4·0	43	+1	·542	+·023	1·1	−0·9				0·43	0·91	−0·45					VI.—Upper Sub-Himalayas.
4		1	2	1	1	2		N 18° W	1·4	2·5	−44		60	+12	·697	+·107	0·3	−1·2	2	2·27	−0·27	0·57	0·73	−0·19	0·57	0·76	−0·19	0·33	Bareilly.
			24				3	S 45° E	6·4*	3·7	+73		53	+7	·512	+·045	2·6	+0·2	6	3·40	+2·60	2·29	1·69	+0·60	2·29	1·69	+0·60	0·98	Dehra Dun.
1		12	6	1	3	3	2	S 62° E	1·4	2·6	−46	1·4	43	+2	·535	+·021	0·6	−1·4	1	1·50	−0·50	0·37	0·82	−0·45	0·37	0·82	−0·45	0·37	Roorkee.
1	3	3	10	1		7	5	S 46° E	7·0	4·5	+55	6·2	40	+2	·523	+·033	0·2	−2·2	0	2·20	−2·20	0·18	0·60	−0·42	0·18	0·60	−0·42	0·13	Meerut.
3	2	3	6	3		1	3	S 83° E	3·3	3·3	0		39	−2	·537	+·036	1·4	−0·4	0	1·50	−1·50	0·06	0·72	−0·66	0·06	0·72	−0·66	0·06	Delhi.
8	3	2	7	3	9	1	2	S 2° E	7·2	4·8	+50	6·2	42	+5	·598	?	0·5	−2·4	1	1·60	−0·60	0·03	0·82	−0·79	0·03	0·82	−0·79	0·02	Lahore.
3	3	6	13		1	1	2	S 78° E	8·0			8·1	40		·522		1·6		1			0·23	0·71	−0·48	0·23	0·71	−0·48	0·23	Sirsa.
1	4		9		2		3	S 7° E	2·8	2·2	+27	2·5	39	−1	·511	−·004	0·8	−1·1	0	1·60	−1·60	0·14			0·14			0·10	Patiala.
7	8	7	4	1			1	N 56° E	4·0	2·5	+60	3·4	39	−2	·525	+·007	0·9	−0·6	0	1·60	−1·60	0	0·61	−0·61	0	0·61	−0·61	0	Ludhiana.
	2		19			4	4	S 42° E	5·2			4·6	44	−5	·551	−·045	0·6	−0·6	0	1·70	−1·70	0·51	1·03	−0·52	0·51	1·03	−0·52	0·30	Sialkot.
	3	1	1			2	2	N 9° E	4·7	2·8	−68	4·3	39	−5	·453	−·019	2·3	+0·2	3	3·00	0	0·03	0·73	−0·70	0·03	0·73	−0·70	0·03	Ambala.
																						0·72	1·47	−0·75	0·72	1·47	−0·75	0·33	Rawalpindi.
2		1		2		1	4						44	−4	·615	+·009	1·0	−0·6				0·22	0·42	−0·20					VII.—Indus Valley and North-West Rajputana.
3	12				1		1	S 45° E	1·9	4·8	−60	2·1	45	+3	·536	+·056	2·0	−0·1	2	1·60	+0·40	1·84	0·75	+1·09	1·84	0·75	+1·09	1·51	Peshawar.
3	12	4	2	1	1	1	2	N 31° E	2·9	2·3	+26	3·1	51	+2	690	+·079	1·1	+0·2	2	1·00	+1·00	0·30	0·34	−0·04	0·30	0·34	−0·04	0·20	D. I. Khan.
2	4	5	9	3	4	2	1	N 48° E	8·7			8·4	32	0	·432	−·010	0·6	−0·5	1	1·20	−0·20	0·13	0·78	−0·65	0·13	0·78	−0·65	0·13	Khushab.
2	4		3	2	8	2	2	S 53° E	8·3			7·7	24	−12	·378	?	0·6	−0·6	0	1·00	−1·00	0·05	0·27	−0·22	0·05	0·27	−0·22	0·05	Montgomery.
3	4	6	3	5	3	1	4	S 49° W	1·9	2·9	−35	1·7	40	−4	·588	+·012	0	−0·6	1	0·80	+0·20	0·10	0·30	−0·20	0·10	0·30	−0·20	0·10	Multan.
4				9	15	1	1	S 83° E	6·4	4·7	+36	6·7	38	−2	·637	+·054	1·0	+0·1	0	0·30	−0·30	0	0·16	−0·16	0	0·16	−0·16	0	Jacobabad.
				1	5	19	5	S 39° W	12·2	12·7	−4	10·9	50	−7	·661	−·030	0·2	−0·8	0	0·30	−0·30	0	0·18	−0·18	0	0·18	−0·18	0	Hyderabad.
	1	1	4	4	8	6	1	S 88° W	15·2	17·5	−13	15·0	76	−1	·910	−·004	3·3	−0·3	0	0	0	0	0	0	0	0	0	0	Kurrachee.
1	2	1	10	13	2	1		S 34° W	6·8	6·5	+5		34	−12	·553	−·088	0·3	−0·8	0	1·50	−1·50	0	0·88	−0·88	0	0·88	−0·88	0	Bikaner.
1	1		3	17	5			S 27° W	12·3†	8·8	+51	12·5†	66	+4‖	·933	?	0·4	−2·1	0	1·10	−1·10	0	0·66	−0·66	0	0·66	−0·66	0	Pachpadra.
								S 45° W	7·1			6·4	32		·452		1·0		0	1·20	−1·20	0	0·27	−0·27	0	0·27	−0·27	0	Jodhpur.
													52	−2	·682	−·001	1·2	−0·6				0·05	0·38	−0·33					VIII.—East Rajputana, Central India and Gujarat.
1	3	2	1		7	10	3	S 88° W	5·7	6·9	−17		30	−10	·448	−·088	0·6	−0·9	0	1·50	−1·50	0·02	0·49	−0·47	0·02	0·49	−0·47	0·02	Jaipur.
2		4	6	2	3	6	1	S 9° W	4·4			4·0	53		·752		0		0			0·02			0·02			0·02	Bharatpur.
3		2	2	1	4	11	7	N 80° W	6·6			5·3	23		·395		0·1		0	1·20	−1·20	0	1·11	−1·11	0	1·11	−1·11	0	Kotah.
3	2	4	3			12	4	N 55° W	10·2	9·9	+3		35	−6	·536	−·012	0·6	−0·6	0	1·60	−1·60	0	0·76	−0·76	0	0·76	−0·76	0	Sambhar.
	4		4		7	10	5	S 84° W	11·2	7·1	+58	9·7	35	−9	·521	−·048	0·8	−0·2	0	1·50	−1·50	0	0·61	−0·61	0	0·61	−0·61	0	Ajmer.
1	1	1		1	3	6	2	W	5·9			5·2	40		·620		0·4		0	1·70	−1·70	0·07			0·07			0·07	Udaipur.
					8	13	10	S 87° W	16·1	15·4	+5	13·5	72	+9	·870	+·100	1·4	+0·1	0	0·30	−0·30	0	0·09	−0·09	0	0·09	−0·09	0	Bhuj.
					14	13	4	S 75° W	21·0‖			25·4	66		·818		0·5		0			0			0			0	Jamnagar.
				2	8	15	5	S 81° W	13·3	14·6	−8	13·2	68	−3	·818	−·007	0·7	−0·9	0	0·60	−0·60	0	0·22	−0·22	0	0·22	−0·22	0	Rajkot.
		1	2	5	17	6		S 85° W	9·9	9·5	+4	9·9	86	+5	·940	+·034	2·5	−1·5	0	0·10	−0·10	0	0·02	−0·02	0	0·02	−0·02	0	Veraval.
			6	14	8	3		S 56° W	13·2				86		·983		2·0		0			0			0			0	Dwarka.
	1		2	13	8	6		N 73° W	10·6			9·6	52	?	·684	?	1·5	−2·2	0	0·40	−0·40	0	0·10	−0·10	0	0·10	−0·10	0.	Bhavnagar Para.
1	9	1		3	8	3		N 83° W	2·8	3·4	−18	2·8	38	+4	·536	+·046	3·0	+1·6	1	0·90	+0·10	0·17	0·33	−0·16	0·17	0·33	−0·16	0·17	Nowgo
3	2			2	13	8		N 65° W	9·0	6·1	+48	7·3	47	−3	·653	+·033	1·0	−0·1	2	1·20	+0·80	0·38	0·59	−0·21	0·38	0·59	−0·21	0·21	Indore.
3	2		1	1	12	11	1	S 74° W	12·0	12·4	−3	10·1	40	−10	·528	−·110	1·2	+0·3	1	1·00	0	0·10	0·45	−0·35	0·10	0·45	−0·35	0·10	Neemuch.

y station, the data for that station are not utilized in calculating the provincial departures from normal.
40, 43 and 44 are derived are incomplete.

‖ Mean of 28 days. † Mean of 21 days.
* „ „ 30 „

Tab

Abstract of Observations taken at 8 A.M. at 230 Stat

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
45	Surat	39	29·768	+·001	29·772	29·883	1st	29·688	22nd	·195	86·6	96·9	−1·3	79·2	+1·1	88·1	−0·1	17·7	107·1	22nd	75·0	9th
	Ahmedabad	163	29·636	−·001	29·745	29·736	1st	29·531	22nd	·205	88·4	111·0	+4·8	80·7	+1·2	96·3	+3·0	31·2	115·4	15th	76·6	1st
	Deesa	466	29·309	+·006	29·723	29·415	1st	29·212	22nd	·203	88·4	112·5	+5·8	80·1	+2·6	96·3	+4·0	32·4	118·6	15th	75·0	1st
22	Agra	555	29·124?	+·001?	29·631?	29·261	13th	29·006	23rd	·255	90·3	106·8	−0·4	83·3	+1·8	95·1	+0·7	23·5	114·0	26th	75·4	21st
21	Jhansi	858	28·852	+·007	29·647	28·968	13th	28·739	26th	·229	93·0	110·6	+2·3	87·0	+3·4	98·8	+2·9	23·6	116·4	26th	78·1	12th
	IX.—Deccan.			+·005								106·2	+2·0	79·7	+1·6	93·0	+1·8	26·5				
38	Belgaum	2,539	27·338	+·016	29·799	27·422	4th	27·251	22nd	·171	76·5	93·8	+0·8	68·9	+0·7	81·4	+0·8	24·9	99·3	12th	65·8	15th
	Sholapur	1,590	28·232	+·001	29·748	28·309	1st	28·128	22nd	·181	86·8	107·0	+2·2	79·9	+3·4	93·5	+2·9	27·1	111·2	11th & 25th.	75·5	17th
	Poona	1,840	28·019	+·007	29·799	28·100	4th	27·897	22nd	·203	80·2	102·9	+3·7	73·3	+1·4	88·1	+2·6	29·6	108·6	8th	68·4	15th
	Bijapur	*1,948*	27·890	−·008	29·763	27·974	4th	27·799	22nd	·175	83·6	103 9	+3·6	75·6	+0·9	89·8	+2·3	28·3	107·5	11th & 12th.	72·2	21st & 23rd.
40	Malegaon	1,430	28·364	−·016	29·717	28·455	1st	28·268	22nd	·187	90·9	108·9	+4·9	77·8	+2·7	93·4	+3·8	31·1	112·3	12th & 13th.	74·6	2nd
	Ahmednagar	2,154	27·701	+·008	29·755	27·785	4th	27·596	22nd	·189	87·7	106·3	+6·9	?	?	?	?	?	110·0	10th & 13th.	?	
41	Akola	930	28·834	0	29·691	28·935	1st	28·719	22nd	·216	92·7	111·7	+4·0	83·8	+2·7	97·8	+3·4	27·9	114·0	10th, 21st & 26th.	79·4	17th
	Amraoti	1,215	28·541	+·003	29·680	28·645	4th	28·434	21st	·211	92·7	110·9	+3·2	84·1	+4·1	97·5	+3·7	26·8	114·0	10th & 26th.	78·5	16th
42	Khandwa	1,044	28·716	−·005	29·699	28·835	4th	28·620	22nd	·215	90·5	111·0	+4·5	84·0	+3·1	97·5	+3·8	27·0	113·7	4th & 26th.	80·6	1st
	Hoshangabad	1,006	28·743	−·003	29·686	28·854	4th	28·668	23rd	·186	93·1	111·0	+3·4	82·6	+2·3	96·8	+2·9	28·4	114·0	26th	74·2	23rd
	Nagpur	1,025	28 718	+·015	29·677	28·833	4th	28·610	30th	·223	92·6	110·8	+1·5	82·3	+0·4	96·6	+1·0	28·5	114·7	9th & 30th.	71·6	15th
43	Chanda	*634*	29·133	?	29·699	29·240	8th	28·997	22nd	·243	91·8	109·4	−0·1	83·2	+1·3	96·3	+0·6	26·2	113·7	27th & 30th.	75·0	22nd
	Seoni	2,033	27·740	+·009	29·669	27·835	4th	27·620	30th	·215	90·2	105·6	+1·7	78·8	+1·7	92·2	+1·7	26·8	109·9	27th & 29th.	71·0	16th
	Jubbulpore	1,327	28·405	+·010	29·663	28·512	4th	28·310	30th	·202	90·0	107·8	+2·2	78·5	−0·4	93·2	+0·9	29·3	112 0	26th	69·1	22nd & 23rd.
	Saugor	1,807	27·939	+·004	29·653	28·032	4th	27·850	30th	·182	91·4	107·2	+2·1	82·4	+3·9	94·8	+3·0	24·8	111·0	26th	78·1	12th & 13th.
49	Sutna	1,040	28·655	+·005	29·639	28·759	14th	28·544	26th	·215	89·7	106·9	+1·4	80·7	+1·4	93·8	+1·4	26·2	112·6	25th	72·6	12th
44	Raipur	970	28·763	+·016	29·664	28·872	4th	28·619	31st	·253	90·5	106·5	−0·9	81·9	−0·1	94·2	−0·5	24·6	112·3	27th	68·4	22nd
	Pendra	2,123?	27·718		29·655	27·830	4th	27·601	30th	·229	86·3	101·4		77·1		89·3		24·3	106·8	9th, 26th & 27th.	67·1	14th
	Sambalpur	486	29·249	+·017	29·678	29·374	13th	29·110	31st	·264	88·2	105·3	−1·6	79·3	−2·3	92·3	−2·0	26·0	110·6	25th & 26th.	71·1	8th
39	Aurangabad	1,905	27·921		29·729	28·004	13th	27·824	22nd	·180	88·8	106·7		76·9		91·8		29·8	113·6	25th	72·7	1st
	Indur	1,260	28·575?		29·763?	28·634	11th	28·503	22nd& 23rd.	·131	90·6	107·5		81·5		94·5		26·0	111·2	27th	72·2	12th
	Bidar	*2,165*	27·687?		29·760?	27·787	10th	27·561	21st	·226	85·0	101·4		79·5		90·5		21·9	106·8	24th	72·0	15th
53	Gulbarga	1,503	28·299?	−·021?	29·730?	28·385	4th	28·202	22nd	·183	86·3	106·4	+1·7	79·2	+0·8	92·9	+1·3	27·2	110·9	25th	76·3	1st & 5th.
	Raichur	1,326?	28·491	+·004	29·748	28·576	4th & 8th.	28·377	22nd	·199	87·1	104·6	+1·2	81·1	+1·6	92·9	+1·4‡	23·5	108·0	25th	74·6	27th
	Hyderabad (Deccan)	1,690	28·124	+·014	29·737	28·228	8th	27·979	22nd	·249	85·9	103·3	−0·5	79·8	+1·2	91·6	+0·4	23·5	108·4	27th	67·7	17th
	Hanumkonda	871	28·904		29·719	29·024	8th	28·749	22nd	·275	86·1	101·0		80·8		92·4		23·2	111·2	30th	71·8	15th
	X.—West Coast.			+·005								88·6	−0·8	79·1	−0·5	83·9	−0·7	9·5				
37	Bombay	37	29·824	+·002	29·800	29·908	2nd	29·724	22nd	·184	84·3	90·5	−0·2	80·5	−0·2	85·5	−0·2	10·0	92·0	6 days	77·0	1st
	Ratnagiri	110	29·767	?	29·816	29·852	4th	29·677	22nd	·175	84·5	90·4	−0·7	79·5?	−0·1?	85·0?	−0·4?	10·9?	92·3	25th	74·4?	1st
	Mormugao	*60*	29·823	+·012	29·818	29·920	4th	29·721	21st	·199	84·7	89·5	−0·5	80·6	−0·5	85·1	−0·5	8·9	92·5	14th, 15th & 16th.	76·9	19th
	Goa	199	29·674	+·002	29·810	29·757	4th	29·578	21st & 22nd,	·179	84·7	87·5	−2·5?	82·1	?	84·8	?	5·4	89·0	4 days	78·0	3rd
	Karwar	44	29·837	+·016	29·815	29 932	4th	29·731	21st	·201	83·0	89·4	−0·4	79·7	0	84·6	−0·2	9·7	90·8	4 days	76·0	1st
3	Cochin	10	29·874	0	29·812	29·933	2nd & 4th.	29·790	22nd	·143	81·8	89·5	−0·1	77·4	−0·2	83·5	−0·2	12·1	93·3	8th & 9th.	72·7	12th
	Calicut	27	29·860	+·006	29·816	29·934	4th	29·776	22nd	·158	81·9	88·7	−1·7	78·0	+0·1	83·4	−0·8	10·7	92·8	12th	74·7	13th
	Mangalore	65	29·823	+·007	29·821	29·904	4th	29·733	20th	·171	82·4	88·7	−1·6	78·4	−0·4	83·6	−1·0	10·3	91·7	8th	70·9	20th
	Trivandrum	198	29·684	−·003	29·813	29·750	4th	29·595	23rd	·155	80·3	85·3	−1·0	76·2	−2·3*	80·8*	−1·7	9·1	88·5	7th	72·0	24th

* Mean of 30 days.

N. B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the re

NOTE 2.—The data from which divisional means of the figure colu

—continued.

n India, Burma, etc., in May, 1905—continued.

Wind Direction. Number of winds from									Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.								Heaviest rainfall during month.	Station.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour. Instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May 1905.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May 1905.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
			1	1	16	6	7		S 24° W	10·1	12·7	−20	9·5	67	− 1	·856	+·009	1·8	− 1·6	0	0·30	− 0·30	0	0·13	− 0·13	0	0·13	− 0·13	0	Surat.
	2	1			7	8	6	6	S 69° W	3·9			5·4	58	− 1	·773	+·019	1·7	−1·0	0	0·50	− 0·50	0	0·01	− 0·01	0	0·01	− 0·01	0	Ahmedabad.
	1	1			6	11	9	3	S 61° W	12·0	13·4	−10		53	− 5	·690	−·009	0·5	−1·9	0	0·55	− 0·55	0	0·25	− 0·25	0	0·25	− 0·25	0	Deesa.
1		1		12		11		6	S 14° W	6·6	5·9	+12	7·8	39	+ 1	·558	+·022	0·2	− 0·8	0	1·50	− 1·50	0·03	0·56	− 0·53	0·03	0·56	− 0·53	0·03	Agra.
2		3	3	3		8	4	8	W	6·2	4·8	+29	7·6	50	?	·738	?	1·5	+0·5	1	0·70	+ 0·30	0·23	0·41	− 0·18	0·23	0·41	− 0·18	0·15	Jhansi.
														46	+ 1	·597	+·023	2·4	0				0·86	0·89	−0·13					IX.—Deccan.
4					3	12	11	1	S 62° W	13·0	13·1	−28		71	+ 2	·645	+·028	5·3	+1·6	5	4·70	+ 0·30	3·27	2·49	+ 0·78	3·27	2·49	+ 0·78	1·64	Belgaum.
	1	1		1	1	2	9	16	N 64° W	10·9	10·0	+ 9	13·2	43	− 2	·539	+·011	3·5	+0·4	1	2·00	− 1·00	0·21	1·00	− 0·79	0·21	1·00	− 0·79	0·13	Sholapur.
						1	13	17	N 66° W	15·5	14·2	+ 9		52	− 2	·530	−·018	2·5	−0·1	4	2·10	+ 1·90	1·69	1·33	+ 0·36	1·69	1·33	+ 0·36	0·61	Poona.
	2	1		1	3	5	17	2	S 82° W	10·0			·	64	0	·720	+·018	3·3	+0·1	1	3·30	− 2·30	0·37	1·79	− 1·42	0·37	1·79	− 1·42	0·11	Bijapur.
3	3			1		3	12	9	N 72° W	13·3	10·4	+28	15·3	32	?	·468	?	0·3	−1·8	0	1·20	− 1·20	0	0·73	− 0·73	0	0·73	− 0·73	0	Malegaon.
3	1				1	1		25	N 48° W	9·2			11·2	60	0	·789	+·110	1·4	−0·7	0	1·80	− 1·80	0·04	0·88	− 0·84	0·04	0·88	− 0·84	0·03	Ahmednagar.
			1	1	1	1	9	18	N 64° W	9·6	8·6	+12	8·4	38	0	·572	+·053	0·5	−1·4	0	0·80	− 0·80	0	0·43	− 0·43	0	0·43	− 0·43	0	Akola.
	1		2	2	4	7	10	5	S 69° W	7·8	6·0	+30	7·0	40	+ 1	·618	+·076	1·4	−0·7	0	1·50	− 1·50	0·08	0·63	− 0·55	0·08	0·63	− 0·55	0·03	Amraoti.
	3					1	5	22	N 5° W	7·8	9·1	−14	7·4	44	+ 1	·622	+·073	1·1	0	0	0·80	− 0·80	0	0·35	− 0·35	0	0·35	− 0·35	0	Khandwa.
		5	3			14	6	3	S 70° W	7·6	3·8	+100	7·8	38	− 3	·593	+·040	1·7	+0·4	1	1·00	0	0·27	0·55	− 0·28	0·27	0·55	− 0·28	0·14	Hoshangabad.
	3	2	1		8	6	4	7	S 74° W	8·8	9·5	− 7	7·0	34		·511	−·003	1·6	−1·1	2	1·40	+ 0·60	0·37	0·72	− 0·35	0·37	0·72	− 0·35	0·12	Nagpur.
4	1		1	8	10			1	S 3° E	6·5	4·9	+33	5·8	52	+16	·772	?	1·7	− 0·6	2	1·70	+ 0·30	0·49	0·74	− 0·25	0·49	0·74	− 0·25	0·22	Chanda.
	5	5		3	7	7	2	2	S 34° W	6·5	4·6	+41	5·5	37	+ 4	·480	+·019	2·2	+0·4	2	1·90	+ 0·10	1·46	0·68	+ 0·78	1·46	0·68	+ 0·78	1·04	Seoni.
	1		3	9	9	4	8	2	S 28° W	3·9	4·5	−13	3·4	32	− 1	·452	−·012	0·7	−0·7	0	1·30	− 1·30	0·08	0·55	− 0·47	0·08	0·55	− 0·47	0·05	Jubbulpore.
2		4	3	1	1	5	12	3	S 88° W	7·2	4·4	+64	6·4	24	−12	·349	−·137	1·3	+0·1	0	1·00	− 1·00	0	0·50	− 0·50	0	0·50	− 0·50	0	Saugor.
	1	4	9	1	1	1	8	6	N 4° W	5·0	8·1	−38	4·6	38	+ 9	·513	+·085	3·6	+2·6	0	1·10	− 1·10	0	0·38	− 0·38	0	0·38	− 0·38	0	Sutna.
7			3	1	1	14	4	1	S 45° W	7·0	7·4	− 5	8·4	41	+ 6	·581	+·069	3·9	+0·8	1	2·30	− 1·30	1·08	0·94	+ 0·14	1·08	0·94	+ 0·14	0·97	Raipur.
4	4			3	12	5	1	2	S 17° W	6·8			5·8	40		·483		1·3		2			3·76			3·76			3·43	Pendra.
		1	1	8	5	16			S 11° W	5·6	3·0	+87	5·5	52	+ 1	·679	−·044	3·1	−0·4	4	3·00	+ 1·00	2·19	1·62	+ 0·57	2·19	1·62	+ 0·57	1·09	Sambalpur.
3	2				1	3	10	7	N 77° W	9·5			9·4	34		·469		1·5		0	1·60	− 1·60	0·05	0·74	− 0·69	0·05	0·74	− 0·69	0·05	Aurangabad.
5						7		19	N 63° W	5·7			4·8	46		·666		3·5		1	1·20	− 0·20	0·10	0·39	− 0·29	0·10	0·39	− 0·29	0·10	Indur.
	4	2			9	10	4	2	S 51° W	7·0			5·8	70†		·849†		3·1		3	2·50	− 0·50	1·21	1·00	+ 0·21	1·21	1·00	+ 0·21	0·48	Bidar.
3	3	2	1			3	11	5	N 67° W	11·9			10·5	52	− 3	·644	−·003	3·0	−0·4	2	2·50	− 0·50	1·28	1·16	+ 0·12	1·28	1·16	+ 0·12	1·10	Gulbarga.
				3		20	2	2	S 46° W	13·7			13·0	50	− 4	·629	−·013	2·3	−1·0	0	1·80	− 1·80	0	0·72	− 0·72	0	0·72	− 0·72	0	Raichur.
	1		1	1	1	1	6	2	S 88° W	3·8			3·7	54	+ 4	·658	+·040	5·5	+2·6	4			4·05	0·99	+ 3·06	4·05	0·99	+ 3·06	2·56	Hyderabad (Deccan).
				19	5	2	3	1	S 23° E	10·4			9·2	56		·689		3·3		2	1·00	+ 1·00	0·38			0·38			0·23	Hanumkonda.
														79	+ 2	·886	+·012	6·1	+ 1·2				5·39	5·14	+ 0·25					X.—West Coast.
		2		1	8	7	8	5	S 58° W	7·9	9·9	−20		77	+ 4	·907	+·028	3·8	− 0·3	0	0·70	− 0·70	0	0·71	− 0·71	0	0·71	− 0·71	0	Bombay.
	8			3	1	1	2	6	N 30° W	9·8	11·2	−13	9·7	74	+ 5†	·860	+·021	5·2	+1·7	0	1·50	− 1·50	0·04	1·45	− 1·41	0·04	1·45	− 1·41	0·02	Ratnagiri.
	10	1	2			4	1	9	N 28° W	8·7				77	+ 1	·813	+·003	6·2	+1·6	2			1·15	2·57	− 1·42	1·15	2·57	− 1·42	0·75	Mormugao.
	5	4		1		3	5	4	N 39° W	10·0				76	+ 3	·909	+·040	6·4	+2·4	3			1·23	2·32	− 1·10	1·23	2·33	− 1·10	0·70	Goa.
	18	1		2		5	3	1	N 10° W	6·2				76	− 1	·850	+·001	5·3	+1·4	3	3·80	− 0·80	2·39	3·28	− 0·89	2·39	3·28	− 0·89	1·44	Karwar.
		9	8	3	1	1	1		N 80° E	8·5				82	0	·888	−·009	6·7	+1·0	20	12·90	+ 7·10	14·00	12·39	+ 1·61	14·00	12·39	+ 1·61	1·85	Cochin.
	2	4	2	3	2		1	11	N 12° W	9·1			9·1	81	+ 2	·885	+·005	7·3	+1·9	12	9·00	+ 3·00	8·97	7·78	+ 1·19	8·97	7·78	+ 1·19	2·39	Calicut.
	4	2	11	1	1			4	N 58° E	5·5	4·6	+20		81	+ 3	·897	+·021	6·7	+0·3	11	6·90	+ 4·10	7·79	6·66	+ 1·13	7·79	6·66	+ 1·13	1·75	Mangalore.
	4					1	6	15	N 52° W	5·3				83	+ 2	·867	−·004	7·2	+1·0	16	10·70	+ 5·80	12·89	9·05	+ 3·84	12·89	9·05	+ 3·84	2·39	Trivandrum

ny station, the data for that station are not utilized in calculating the provincial departures from normal.
. 40, 42 and 44 are derived or incomplete.

† Mean of 23 days.

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Abstract of Observations taken at 8 A.M. at 230 Stat

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	XI.—South India.			+·014								96·9	—0·8	77·5	—0·3	87·2	—0·5	19·4				
57	Pamban . .	37	29·808	+·003	29·771	29·905	9th	29·705	22nd	·200	84·9	91·4	+0·2	80·8	−0·6	86·1	−0·2	10·6	91·8	4th	77·7	12th
	Tinnevelly .	168	29·682	0	29·778	29·771	8th	29·581	22nd	·190	86·3	98·6	−1·8	79·2	−1·5	88·9	−1·7	19·4	102·9	26th & 29th.	73·9	13th
	Madura . .	447	29·405	+·021	29·785	29·502	7th	29·288	22nd	·214	85·3	99·5	—0·6	77·9	+0·4	88·7	−0·1	21·6	101·0	12th	72·0	31st
	Periyakulam	945	28·911		29·790	29·001	8th	28·797	22nd	·204	82·4	96·7		74·7		81·3		22·0	101·1	3rd	72·1	26th
34	Salem . .	940	28·931	+·002	29·807	29·024	8th	28·816	22nd	·208	83·6	99·8	!+0·6	77·5	+1·6	88·7	+1·2	22·3	104·7	5th	70·4	28th
	Coimbatore .	1,348	28·516	+·010	29·807	28·603	8th	28·398	22nd	·205	79·8	94·3	—0·7	73·9	+0·5	84·1	−0·1	20·4	101·4	11th	67·8	25th
35	Mercara . .	3,781	26·209	+·010	26·142	26·310	4th	26·126	22nd	·184	68·4	81·5	+1·2	63·9	−1·0	72·7	+0·1	17·6	92·0	1st	58·6	13th
36	Chitaldroog .	2,405	27·477	+·001	29·801	27·541	9th	27·392	21st	·149	78·1	91·8	+1·1	72·4	+1·4	83·6	+1·3	22·4	101·2	1st & 8th	66·4	20th
	Bangalore .	3,021	26·899	+·003	29·813	26·980	4th	26·798	21st	·182	75·8	91·6	+0·3	69·5	+0·4	80·6	+0·4	22·1	97·3	4th	65·8	25th & 28th.
	Hassan . .	3,091	26·845	+·001	29·829	26·930	4th	26·749	21st	·181	75·5	90·8	+3·2?	67·1	+0·5	79·0	+1·9?	23·7	97·4	2nd	63·1	24th
	Mysore . .	2,518	27·391	—·004	29·837	27·476	4th	27·298	21st	·178	75·9	92·3*	+0·2*	70·3	+0·7	81·4*	+0·5*	22·0	100·4	4th	65·0	6th
56	Negapatam .	31	29·802	+·008	29·761	29·901	9th	29·665	22nd	·239	85·3	95·9	−1·4	79·8	−0·4	87·9	−0·9	16·1	101·9	28th.	71·0	30th 31st.
	Cuddalore .	37	29·797	+·027	29·760	29·900	1st 4th & 7th.	29·656	22nd	·241	86·6	98·9	+0·1	79·4	−0·7	89·2	−0·3	19·5	108·7	30th	76·2	14th & 30th.
	Trichinopoly .	255	29·586	+·008	29·773	29·683	8th	29·472	22nd	·211	84·6	100·5	−1·3	78·1	−0·6	89·3	−1·0	22·4	104·6	27th	71·9	31st
	Madras . .	22	29·792	+·008	29·744	29·908	4th	29·663	22nd	·245	87·5	96·6	−1·9	80·6	−0·5	88·6	−1·2	16·0	103·0	30th	76·0	4th
	Vellore . .	707	29·116		29·757	29·225	4th	28·993	22nd	·232	85·3	96·2		78·5		87·3		17·7	101·4	27th	71·7	24th
55	Nellore . .	52	29·754	+·032	29·739	29·864	8th	29·598	22nd	·266	87·9	102·9	−3·1	80·3	−1·7	91·6	−2·4	22·6	111·3	23rd	72·1	
	Masulipatam .	15	29·801	+·045	29·749	29·949	4th	29·610	22nd	·239	87·6	96·9	−3·2	81·1	−0·5	89·0	−1·9	15·8	111·7	22nd	74·6	15th
54	Cuddapah .	433	29·381	+·003	29·745	29·469	8th	29·262	22nd	·207	90·1	106·4	+0·1	83·3	−0·2	94·9	−0·1	23·1	111·3	4th	73·8	
	Kurnool .	923	28·886	−·002	29·740	28·974	4th	28·785	22nd	·189	87·5	105·4	+0·6	81·4	+0·4	93·4	+0·5	24·0	108·8	2nd	73·7	22nd
	Bellary . .	1,475	28·349	−·002	29·756	28·450	4th	28·252	22nd	·198	84·5	103·3	+0·9	78·6	+1·1	91·0	+1·0	24·7	107·0	1st & 11th	73·2	
52	Cocanada .	26	29·790	+·041	29·752	29·933	4th	29·598	22nd	·335	86·0	97·6	−3·1	80·6	−2·2	89·1	−2·7	17·0	110·0	22nd	75·0	0th
	Waltair(Vizag.)	*226*	29·577	+·040	29·744	29·707	7th	29·386	22nd	·321	84·7	90·6	P	79·3	P	85·0	P	11·3	98·9	22nd	68·9	
	Gopalpur .	72	29·701	+·050	29·715	29·833	4th	29·529	21st	·304	83·5	88·6	−1·2	78·4	−2·1	83·5	−1·7	10·2	96·2	22nd	70·0	13th
	XII.—Hill Stations.																					
48	Pishin . .											88·2		53·8		71·1		34·4	96·9	28th	39·0	19th
	Quetta . .	5,502									70·9	85·1	+ 1·6	51·9	−0·3	68·5	+0·7	33·2	92·6	12th	37·9	19th
	Kalat . .										68·4	86·4	+ 1·1	46·6	+3·3	66·5	+2·2	39·8	97·1	13th	33·0	1st
	Chaman .	4,311	25·648	+·017	25·610	25·731	3rd	25·509	27th	·222	79·0	92·1		65·1	−0·8	78·6	—1·5	27·0	101·2	13th	50·1	18th
30	Leh . .	11,503	19·792	+·065	19·761	19·906	4th	19·673	20th	·233	46·8	61·8	— 2·2	36·8	0	49·3	−1·1	25·0	71·1	29th & 31st.	30·9	21st
	Srinagar .	5,204	24·877	+·029	24·848	24·989	11th	24·775	26th	·214	60·9	76·6	— 0·3	52·6	+0·5	64·6	+0·1	24·0	86·2	13th	47·2	21st
	Sonemarg .	*8,764*	21·907		21·875	22·011	4th	21·807	20th	·204	40·7	58·9		34·4		46·7		24·5	72·9	31st	26·7	20th
	Astor (Kashmir)	*7,955*																				
	Minimarg .	*9,359*																				
	Skardu .	*7,505*	22·900		22·870	23·047	4th	22·798	15th	·249	58·9	72·1		49·8		61·0		22·3	81·5	13th & 14th.	40·6	16th
	Dras . .	*10,059*	20·690		20·858	21·034	4th	20·685	16th	·349	42·6	54·7		32·4		43·5		22·3	71·9	31st	20·1	4th
	Gilgit . .	4,890	25·142		25·115	25·242	3rd	25·002	26th	·240	68·4	82·3	− 3·1	59·7	−2·1	71·0	−2·6	22·6	93·8	13th	49·1	19th
32	Chitral . .	*5,486*									64·4	83·3		54·5		68·9		28·8	94·2	31st	46·0	20th
	Killa Drosh .	4,700?									64·6	83·8		59·6		71·7		24·2	94·2	31st	49·3	18th
	Para Chinar .	6,000	24·402		24·369	24·531	13th	24·22 5	18th	·306	70·1	81·6		57·5		69·6		24·1	90·9	26th	46·0	19th & 20th.
	Cherat . .	*4,256*	25·625	+·032	25·593	25·748	13th	25·474	18th	·274	75·3	8·3	− 1·3	68·1	−0·2	78·2	−0·8	20·2	98·4	28th	58·0	19th

N. B.—Elevations in italics indicate barometrical determinations. * Mean of 27 days.

NOTE 1.—When a query is inserted against any reading or in the r

NOTE 2.—The data from which divisional means of the figure co

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

[—*continued.*

in India, Burma, etc., in May, 1905—continued.

Wind Direction. Number of winds from: N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1905.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													71	+3	·828	+·027	4·7	+0·2				2·64	2·25	+0·39					XI.—South India.
1	1	1	4	4	12	3		S 27° W	12·0			12·7	80		·953		3·2		2	1·20	+ 0·80	1·01	0·55	+ 0·46	1·01	0·55	+ 0·46	0·50	Pamban.
5	2	2	3	3	4	6	4	N 78° W	5·4			5·2	61	0	·761	−·033	5·9	+1·0	5	3·30	+ 1·70	3·22	1·37	+ 1·85	3·22	1·37	+ 1·85	1·47	Tinnevelly.
	4	4	1		1		10	N 2° W	4·7	3·7	+ 27	5·4	69	+ 3	·842	+·028	5·8	+1·8	5	4·20	+ 0·80	3·02	2·65	+ 0·37	3·02	2·65	+ 0·37	0·98	Madura.
4	3			4	2	2	3	N 45° W	3·1			3·4	66		·732		4·0		6	5·10	+ 0·90	5·84	2·73	+ 3·11	5·84	2·73	+ 3·11	3·83	Periyakulam.
1	7	3	3	1	8	4	2	S 38° W	6·1	4·4	+ 39	5·6	75	+ 4	·871	+·059	5·5	+1·3	5	7·10	− 2·10	3·94	5·01	− 1·07	3·94	5·01	− 1·07	1·63	Salem.
5	3	1	2	4	9	5		S 56° W	5·8	5·3	+ 9	5·3	81	+ 1	·829	+·012	3·8	−0·5	5	4·70	+ 0·30	2·91	2·28	+ 0·63	2·91	2·28	+ 0·63	1·17	Coimbatore.
3	1	1				2	23	N 40° W	3·6	5·3	− 32	3·3	86	− 1	·599	−·013	5·6	−0·5	12	9·00	+ 3·00	6·36	5·78	+ 0·58	6·36	5·78	+ 0·58	1·45	Mercara.
1			1		8	15	5	S 86° W	8·5			7·4	70	0	·670	+·002	5·0	−0·5	5	4·60	+ 0·40	2·10	3·74	− 1·64	2·10	3·74	− 1·64	0·63	Chitaldroog.
				5	13	9	3	S 59° W	7·4	5·5	+ 35	6·6	77	+ 1	·687	+·019	4·3	−0·4	5	6·50	− 1·50	3·57	4·22	− 0·65	3·57	4·22	− 0·65	1·08	Bangalore.
			1		6	11	8	N 87° W	3·5			3·1	78	+ 3	·680	+·041	5·7	0	11	7·80	+ 3·20	3·82	5·17	− 1·35	3·82	5·17	− 1·35	0·60	Hassan.
1				3	13	11	2	S 66° W	8·3			9·0	78	+ 4	·696	+·029	7·4	+2·4	9	8·30	+ 0·70	6·15	3·37	+ 2·78	6·15	3·37	+ 2·78	2·25	Mysore.
	1	1	5	5	8	7		S 29° W	10·7	7·4	+ 45	9·4	71	+ 3	·883	+·008	4·6	+0·5	4	2·10	+ 1·90	1·91	1·61	+ 0·30	1·91	1·61	+ 0·30	0·75	Negapatam.
		1	9	6	13			S 5° W	4·6			5·7	72	− 1?	·918	?	4·3	+0·1	2	1·20	+ 0·80	2·66	0·28	+ 2·38	2·66	0·28	+ 2·38	2·40	Cuddalore.
1	1	3		5	8	6		S 42° W	4·6	6·0	− 23		69	+ 5	·823	+·042	3·8	−0·6	4	3·50	+ 0·50	1·26	2·94	− 1·68	1·26	2·94	− 1·68	0·44	Trichinopoly.
			3	15	8	5		S 20° W	8·4	9·2	− 9		66	+ 2	·869	+·005	4·6	+0·5	0	2·30	− 2·30	0·06	0·90	− 0·84	0·06	0·90	− 0·84	0·06	Madras.
3	6		6		3		9	N	5·0			5·0	67		·815		4·0		5	4·40	+ 0·60	2·04	3·02	− 0·98	2·04	3·02	− 0·98	1·07	Vellore.
			7	9	3	5	5	S 25° W	7·8				63	0	·817	?	4·5	+0·3	1	1·60	− 0·60	0·17	0·39	− 0·22	0·17	0·39	− 0·22	0·13	Nellore.
			6	9	6	5	1	S 19° W	9·8	8·9	+ 10	8·6	89	+13	1·168	+·123	5·2	0	3	1·90	+ 1·10	1·13	1·27	− 0·14	1·13	1·27	− 0·14	0·52	Masulipatam.
	1		7	1	8	8	6	S 62° W	9·1				58	+ 5	·818	+·079	3·5	−0·1	2	2·50	− 0·50	0·29	1·80	− 1·51	0·29	1·80	− 1·51	0·14	Cuddapah.
		1	3	5	9	4	6	S 51° W	9·1				62	+10	·798	+·127	3·7	+0·3	3	2·90	+ 0·10	1·74	0·95	+ 0·79	1·74	0·95	+ 0·79	0·85	Kurnool.
		2	2		1	11	10	N 73° W	7·1	8·4	− 15	6·2	55	+ 2	·658	+·032	4·3	−0·4	3	3·20	− 0·20	0·99	1·98	− 0·99	0·99	1·98	− 0·99	0·41	Bellary.
	1		3		11	5	1	S 49° W	6·5			5·5	79	+ 9	·985	+·064	4·6	−0·4	6	2·80	+ 3·20	1·71	0·93	+ 0·78	1·71	0·93	+ 0·78	0·52	Cocanada.
	1		1	1	20	6		S 51° W	15·0				71	− 4	·852	−·079	7·1	+1·2	5	3·40	+ 1·60	5·35	2·47	+ 2·88	5·35	2·47	+ 2·88	2·16	Waltair (Vizag.).
3	1	1		9	13	1		S 30° W	17·4	13·3	+ 31	17·1	80	− 4	·919	−·067	2·5	−2·9	7	3·30	+ 3·70	5·81	2·10	+ 3·71	5·81	2·10	+ 3·71	1·80	Gopalpur.
																													XII.—Hill Stations.
																			0	0·70	− 0·70	0·02	0·19	− 0·17	0·02	0·19	− 0·17	0·02	Pishin.
					1	1		S 66° W	1·4	4·7	− 70	1·5	43	− 2	·330	−·011	0·6	−0·4	0	1·10	− 1·10	0	0·40	− 0·40	0	0·40	− 0·40	0	Quetta.
5		4		21		1		S 11° W					38	+ 8	·273				0	0·90	− 0·90	0	0·26	− 0·26	0	0·26	− 0·26	0	Kalat.
	1	2	11	8	7	2		S 10° E	9·3			10·2	28	− 2	·293	−·013	0·1	−0·5	0	0·10	− 0·10	0	0·05	− 0·05	0	0·05	− 0·05	0	Chaman.
1	5	4	1	13	7			S 13° E	2·0				44	− 1	·135	−·006	4·0	−0·7	2	0·90	+ 1·10	0·32	0·22	+ 0·10	0·32	0·22	+ 0·10	0·13	Leh.
1	1	2	12	5		1	4	S 40° E	4·6			4·3	83	+ 2	·452	+·015	4·2	+0·8	6	5·80	+ 0·20	3·02	2·60	+ 0·42	3·02	2·60	+ 0·42	1·34	Srinagar.
3	3	2	2	1	1			N 67° E	2·8			2·5	82		·221		3·9		10			11·95			11·95			3·55	Sonemarg.
																													Aster (Kashmir).
																													Minimarg.
3	8	2	1	1	5	5	1	N 13° W	6·5			6·6	48		·224		4·7		3	1·90	+ 1·10	1·26	1·04	+ 0·22	1·26	1·04	+ 0·22	0·73	Skardu
2	2	1			1	7		N 63° W	2·5			2·0	80		·217		3·9		7	6·20	+ 0·80	6·18	2·82	+ 3·36	6·18	2·82	+ 3·36	1·65	Dras.
2		1			1	3		N 64° W	2·6			2·3	51	+ 7	·337	+·026	4·2	+0·1	7	1·70	+ 5·30	2·01	0·57	+ 1·44	2·01	0·57	+ 1·44	0·64	Gilgit.
2	1			1	1		1	N 27° W	3·3			2·9	58		·339		1·9		6			2·87			2·87			0·80	Chitral.
1		13			3	3		S 83° E					59		·352		2·5		6			2·06			2·06			0·50	Killa Drosh.
1								N	5·0			4·6	45		·328		3·3		7	6·50	+ 0·50	3·12	2·02	+ 1·10	3·12	2·02	+ 1·10	0·70	Para Chinar.
0			1		1	1	4	N 10° W	10·0			9·3	46	+12	·397	+·103	1·3	−0·9	5			1·06	1·21	− 15	1·06	1·21	− 15	0·48	Cherat.

? station, the data for that station are not utilized in calculating the provincial departures from normal.
40, 42 and 44 are derived are incomplete.

Table

Abstract of Observations taken at 8 A.M. at 230 Station

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
29	Murree	6,333	23·831	+·034	23·799	23·927	13th	23·724	18th	·203	69·4	?	?	59·6	+0·2	?	?	?	?	?	44·9	15th	?
	Kallang	*10,087*	20·983		20·938	21·029	8th	20·833	21st	·196	43·7	58·8	—3·1	57·1	—1·0	48.0	—2·1	21·7	71·1	31st	29·5	18th	41·6
	Poo											67·6		47·8*		57·7*		19·3	75·2	& 29th.	37·4	8th	37·8
	Simla	7,224	23·108	+·036	23·070	23·222	13th	22·001	22nd	·218	65·0	73·1	0	59·7	+1·1	66·4	+0·6	13·4	79·4	27th	53·3	15th	26·1
	Sarain		23·149			23·271	13th	23·038	22nd	·233	61·8	73·5		50·7		62·1		22·8	79·6	25th	45·6	21st	34·0
	Chakrata	7,022	23·272	+·026	23·232	23·396	13th	23·156	22nd	·240	63·7	72·3	—1·5	58·6	+2·0	65·8	+0·3	14·2	80·5	25th	53·8	11th, 16th & 17th.	26·7
25	Ranikhet	6,069	24·073	+·027	24·032	24 179	13th	23·960	22nd	·219	67·2	79·0	+0·8	61·0	+0·5	70·0	+0·7	18·0	85·0	25th	51·5	16th	33·5
	Muktesar	7,600	22·820		22·778	22·921	13th	22·714	22nd	·207	62·2	73·8		56·5		65·2		17·3	79·7	25th	46·6	16th	33·1
13	Yatung	10,480										58·8		49·8		49·8		18·0	64·1	18th	35·1	4 days	29·0
	Darjeeling	7,376	23·007	+·026	22·962	23·111	14th	22·891	23rd	·220	56·6	63·1	—0·7	51·9	—0·7	57·5	—0·7	11·2	70·2	17th	46·1	10th	24·1
8	Shillong	4,920	25·130		25·082	25·238	5th	24·960	22nd	·269	65·0	73·2		56·5		64·9			·1	18th	41·0	28th	38·1
	Cherra Poonjee	4,309	25·678		25·629	25·779	10th	25·484	22nd	·295	65·6	72·5		60·7		66·6		11·8	78·2	22nd	52·0	9th	26·2
50	Mount Abu	3,945	26·005	+·025	25·955	26·110	4th	25·928	26th	·182	83·5	92·5	+4·3	76·7	+5·6	84·6	+5·0	15·8	97·7	14th	69·3	1st	28·4
62	Pachmarhi	3,528									85·3	99·8	+4·7	76·3	+1·2	88·1	+3·0	23·5	103·2	26th	70·7	23rd	32·5
34	Wellington	6,200	24·243	+·009	24·176	24·319	4th	24·158	22nd	·161	68·0	76·3	+0·2	57·0	—1·0	66·7	—0·4	19·3	80·2	5th	52·2	20th	28·0
	Ootacamund	*7,322*	23·035		22 971	23·099	1st & 2nd.	22·953	22nd	·146	63·7	70·9		54·3		62·6		16·6	76·6	11th	51·2	2nd	25·4
57	Kodaikanal	7,688	22·826		22 761	22·888	4th	22·753	19th	·135	61·9	69·9		51·8		60·7		15·1	74·7	6th	50·9	28th	23·8
	XIII.—Extra India.																						
	Trincomalee	12	29·836	+·024	29·774	29·938	9th	29·725	20th	·213	81·4	90·1	—2·9	73·7	—0·1	81·4	—1·5	11·4	91·5	3rd	76·5		18·0
	Colombo	40	29·856	0	29·822	29·925	4th	29·772	19th	·153	81·8	87·1	—0·9	77·8	—0·6	82·5	—0·8	9 3	89·5	6th	71·0	9th, 10th & 12th.	15·5
	Meshed	3,104									68·4	75·9		56·1	—1·0	66·0		19·8	98·1	30th	48·9	1 h & th.	49·2
	Ispahan (*b*)	*5,817*	24·313			24·470	15th	24·140	29th	·330	63·1	81·0	—3·2	51·5	+0·4	67·8	—1·4	26·5	89·4	29th & 31st.	44·3	1Pth	45·1
	Bushire	14	29·827	+·030	29·800	30·025	3rd	29·691	19th	·334	79·1	87·8	—1·3	74·8	—0·5	81·3	—0·9	13·0	103·0	20th	64·7	1st	38·3
	Bahrein¶	30	29·846			30·015	9th	29·669	20th	·346	81·6	89·8		77·9		83·8		11·9	96·9	20th	73·8	2nd	23·1
	Jask	13	29·751	0	29·721	29·878	4th & 6th.	29·603	22nd	·275	83·8	91·8	—0·6	78·8†	+0·5†	85·4†	—0·1†	13·0†	97·3	18th	71·7	8th	23·6
	Muscat*	20	29·764	+·030	29·732	29·874	4th & 5th.	29·642	30th	·232	92·5	99·1	+7·3	87·6	+1·7	93·4	+4·7	11·5	106·2	26th	82·0	18th	24·2
	Baghdad	220	29·737	+·025	29·932	29·898	2nd	29·563	19th	·335	76·4	95·3	+3·5	67·6	—0·3	81·5	+1·6	27·7	109·9	29th	57·7	20th	52·2
	Busrah		29·918			30·094	6th	29·760	20th	·334		91·2		72·7		82·0		18·5	100·4	28th	60·7	1st	39·7
	Aden	94	29·797	+·029	29·822	29·912	9th	29·664	23rd	·248	85·9	90·3	—3·0	81·8	+0·7	86·1	—1·2	8·5	94·3	26th	79·2	7th	15·1
	Perim	201	29·665	+·034	29·800	·708	1st, 4th & 9th	29·590	24th	·118	86·2	92·3	—0 1	82·5	+0·6	87·4	+0·3	9·8	94·5	17th	80·8	14th	13·7
	Kabul		24·268		24·237	24·367	8th	24·060	18th	307	70·3	84·9	+2·3	53·5	+0·3	69·2	+1·3	31·4	92·6	31st	40·0	19th	51·7
	Kashgar	4,255	25·555			26·030	8th	5·410	29th	·620	66·0	79·0	—1·8	55·7	—2·4	67·4	—2·1	23·3	98·3		41·5	7th	56·8
	Amini Divi	13									84·9	90·5	+0·4	79·8	—0·8	85·2	—0·2	10·7	95·0	17th	72·9	20th	22·1
	Minicoy	7	29·905		29·838	29·972	4th	29·803	22nd	·169	83·7	88·9	+0·2						93·3	12th			
	Zanzibar	72	29·992	—·016	29 991	30·050	14th	29·876	5th	·174	77·3	82 9	+0·5	75·5	—0·1	79·2	+0·2	7·4	85·7	22nd.	73·7	1st	12·0
	Do. Dunga**	*154*	29·916		30·000	29·974	29th	29 866	2nd	108	76·1	84·0		72·6		78·9		1 0·4	92·9	26th	70·4	31st	22·5
	Penang (*a*)	20	29 921		29·866	29·952	13th	29·865	30th	·087	81·4	89·5		74·1		81·8		15·4	92·0	1st, 8th & 10th	72·0	25th	20·0
	Singapore (*a*)	10	29·935		29·866	29·987	23rd	29·889	18th	·098	85·5	89·4		74·8		82·1		14·6	93·6	11th &. 27th.	70·2	9th	23·4

(*a*) 9 hours' observations. * Mean of 29 days.
(*b*) Aneroid uncorrected. † Mean of 30 days.

N.B.—Elections in italics indicate barometrical determinations.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet

¶ Observations of 28 days.

** " " 17 "

NOTE 1.—When a query is inserted against any reading or in the returns of any

NOTE 2.—The data from which divisional means of the figure columns Nos. 40,

I—*concluded.*

in India, Burma, etc., in May, 1905—concluded.

Wind Direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May 1905.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
21	1		2	3	4				S 39° E	5·2	8·3	− 37	5·6	38	− 1	·273	+·016	2·1	−0·7	3	6·30	−3·30	1·65	2·97	− 1·32	1·65	2·97	− 1·32	0·79	Murree.
		1	1	2	3	6	13	5	S 77° W	1·1				62		·175		3·2		?			?	2·58		?	2·58		?	Kailang.
28			1		1	1			S 31° E									2·3		3			2·07	0·71	+ 1·36	2·07	0·71	+ 1·36	0·93	Poo.
4	15	3		1	2		1	5	N 5° W	5·5	2·9	+90	5·3	44	− 1	·269	+·002	2·4	−0·4	2	5·20	−3·20	0·59	3·06	− 2·47	0·59	3·06	− 2·47	0·30	Simla.
17	1		2	1	2	5	3		S 39° W	2·4			2·3	44		·257		2·9		3			0·79			0·79			0·32	Sarain.
9	7			2	12			1	S 7° E	8·8	6·0	+47	10·6	53	+ 6	·304	+·024	3·2	+1·3	5	5·90	−0·90	2·12	2·43	− 0·31	2·12	2·43	− 0·31	1·11	Chakrata.
17	1	2				3	2	6	N 57° W	3·5	3·3	+ 6	4·0	62	+ 12	·410	+·056	1·9	−0·4	3	5·50	−2·50	1·73	2·23	− 0·55	1·73	2·28	− 0·55	0·59	Ranikhet.
4	1		1	1	2	9	12	1	S 6° W	10·1			9·3	58		·316		2·9		7			2·37			2·37			0·69	Muktesar.
																				10	14·50	−4·50	3·59	4·88	− 1·29	3·59	4·88	− 1·29	0·72	Yatung.
15		3	2	3		1	5	2	N 45° W	3·6	6·2	−42	3·3	90	0	·418	−·011	7·8	+1·1	21	13·43	+7·57	10·86	8·78	+ 2·08	10·86	8·78	+ 2·08	2·51	Darjeeling.
24					1	6			S 39° W	2·4			2·7	80		·464		6·3		18	17·80	+0·20	13·33	10·15	+ 3·18	13·33	10·15	+ 3·18	2·65	Shillong.
4	1	11	1	1	1	8	3	1	N 3° E	7·0			6·2	83		·529		7·5		21	21·10	−0·10	41·67	19·93	− 8·26	41·67	49·93	−8·26	12·27	Cherra Poonjee.
1	2					14	7	7	S 82° W	10·4	9·4	+11	10·5	24	− 16	·280	−·080	0·3	−0·5	0	1·30	−1·30	0	0·99	− 0·99	0	0·99	−0·99	0	Mount Abu.
	2	4		1		10		14	N 63° W	8·3	6·8	+22	8·5	23	− 14	·272	−·135	1·0	−1·0	1	1·30	−0·30	0·23	0·50	− 0·27	0·23	0·50	−0·27	0·15	Pachmarhi.
19	6	3		2		1			N 25° E	2·6	3·0	−13		68	+ 8	·469	+·035	5·6	+1·6	10	8·20	+1·80	6·80	3·76	+ 3·04	6·80	3·76	+3·04	2·92	Wellington.
1	4	5	14	4			2	1	N 74 E	6·0			5·6	58		·339		5·0		10	9·70	+0·30	8·87	5·93	+ 2·94	8·87	5·93	+ 2·94	4·29	Ootacamund.
	5	5	6	2	5			8	N 32° E	12·3				66		·361		4·4		9	9·30	−0·30	6·52	6·47	+ 0·05	6·52	6·47	+0·05	2·49	Kodaikanal.
																														XIII.—Extra India
10						21			S 45° W	8·6				85	+ 7	·913	−·005	2·9	+0·4	4			1·29	2·46	− 1·17	1·29	2·46	− 1·17	0·50	Trincomalee
		3	3	3	4	16	2		S 22° E	9·6	8·5	+13		83	+ 5	·914	0	6·8	+0·5	17			13·57	11·12	+ 2·45	13·57	11·12	+ 2·45	3·00	Colombo.
														57		·404		3·2		1			0·82	0·74	+ 0·08	0·82	0·74	+ 0·08	0·82	Meshed.
21		1	2		1	1	4	1	S 85° W	2·7	8·9	−70	3·5	53		·304		3·5		1			0·17	0·11	+ 0·06	0·17	0·11	+ 0·06	0·13	Ispahan.
10	5	1	1	1			1	11	N 26° W	13·4	8·9	+51	14·7	78	+ 18	·783	+·125	2·1	+0·7	1			0·24	0	+ 0·24	0·24	0	+ 0·24	0·15	Bushire.
	5	2	3			1	1	16	N 28° W	10·3‡			8·8‡	71		·769		1·1		0			0			0			0	Bahrein.
1		1	6	3		7	2	11	N 77° W	12·5			10·4	66	− 2	·755	−·068	1·0	+0·3	0			0	0	0	0	0	0	0	Jask.
15	3	1	1	2				7	N 16° W	4·2			4·4	41	− 21	·821	+·003	2·0	+1·6	0			0	0	0	0	0	0	0	Muscat.
9	4		2	2			4	1	N 32 W	6·0	4·2	- 43	7·9	51	− 5	·459	−·048	1·8	+1·0	0			0·03	0·24	− 0·21	0·03	0·21	− 0·21	0·03	Baghdad.
		2																		2			0·66			0·66			0·50	Busrah.
	1	1		6	1	1		21	N 45° W																					
	1	5	10	7	1	2	2	3	S 87° E	10·4	10·6	−2	8·4	78	+ 3	·972	+·054	3·4	+0·4	0			0	0·19	− 0·19	0	0·19	−0·19	0	Aden.
		1	27	2				1	E	15·5			15·6	74		·930		·5		0			0	0·37	− 0·37	0	0·37	− 0·37	0	Perim.
		21	4	1	1	1	1	2	N 49° E					89		·668		1·1	+0·8	2			0·33	0·54	− 0·21	0·33	0·54	−0·21	0·15	Kabul.
22		1	2					6	N 22° W	3·5			3·1	48	+ 4	·295	−·006	3·5	+0·3	4			1·77	0·88	+ 0·89	1·77	0·88	+0·89	1·20	Kashgar.
4	3	3			1	1	1	18	N 37° W					78		·915		6·4		6			11·01	4·10	+6·91	11·01	4·10	+6·91	5·50	Amini Divi.
	4	1				1	1	24	N 41° W	7·1			7·6	77		·882		6·1		7			6·57	6·40	+ 0·17	6·57	6·40	+0·17	1·54	Minicoy.
			2	23	6				S 60° W	8·9			8·4	88		·829		5·9		10			10·20	10·62	− 0·42	10·20	10·62	−0·42	2·91	Zanzibar.
6			1	4	6				S 24° W	5·2‡			5·0‡	91		·820		6·9		11			7·61			7·61			2·08	Do. Dunga.
8		6	6	3	7			1	S 70° E	10·7								1·3		11			6·58			6·58			1·68	Penang.
	1	1	1	7	10	6	2	3	7 W	4·4								4·3		11			9·36			9·36			2·79	Singapore.

ation, the data for that station are not utilized in calculating the provincial departures from normal.
2 and 41 are derived are incomplete.

‡ Mean of 25 days.
‡ „ 15 „

Table II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Stations in India, Burma, etc, in May, 1905.

Tal

Abstract of Observations recorded at 10 A.M. and 4 P.M. at

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet		
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burma Coast and Bay Islands.	Port Blair	61	29·825	29·737	·088	9·781	+·019	29 773	89·9	79·5 ††	10·4	96·0	74·6	21·4	86·5	86·4	83·5 ††	+ 0·9	76·2	80·7	80·3
	Rangoon	57	·807	·686	·121	·751	+·012	·745	92·5	78·1	14·4	101·4	73·1	28·3	87·4	88·0	82·9	+ 0·7	75·0	78·4	78·5
	Diamond Island	41	·824	·721	·103	·773	+·005	·748	88·1	79·2	8·9	92·2	71·7	20·5	86·7	86·2	84·2	− 0·1	75·1	79·3	78·7
	Cocos Island	119	·748	·648	·100	·698		·748	91·8	81·1	10·7	97·2	75·0	22·2	88·0	87·2	85·4		77·4		
	Akyab	20	·821	·715	·106	·774	+·013	·737	89·9	78·0	11·9	94·9	73·2	21·7	86·5	86·7	84·6	− 0·4		80·9	80·2
Bengal and Orissa.	Chittagong	87	·745	·634	·111	·688	+·019	·722	88·3	75·8	12·5	91·3	70·2	21·1	84·9	85·3	82·0	+ 0·1		79·0	78·8
	Calcutta (Alipore)	21	·760	·645	·115	·705	+·044	·671	92·0	76·8	15·2	100·7	67·4	33·3	87·1	90·1	84·1	− 1·6	74·6	79·7	79·8
	Saugor Island	25	·745	·636	·109	·695	+·022	·664	91·0	79·8	11·2	96·9	68·7	28·2	87·1	88·8	84·3	− 1·0	76·4	81·2	81·8
	False Point	21	·764	·651	·113	·712	+·026	·674	89·8	80·0	9·8	98·5	69·1	29·4	87·3	87·1	83·8	− 0·5	77·3	81·3	81·2
Ganoetic Plain and Chota Nagpur.	Hazaribagh	2,007	27·736	27·633	·103	27·682	+·005	·579	97·7	74·2	23·5	107·9	66·3	41·6	89·4	93·8	84·8	− 1·4	65·9	70·7	71·1
	Allahabad	309	29·392	29·269	·123	29·327	+·013	·580	105·0	77·5	27·5	114·5	69·3	45·2	95·6	103·5	90·5	− 2·0	69·8	75·4	76·2
Upper Sub-Himalayas.	Dehra Dun	2,233	27·529	27·427	·102	27·472	+·011	·608	94·2	70·6	23·6	101·6	62·8	38·8	85·3	91·2	81·2	− 0·4	62·0	68·3	69·5
	Roorkee	899	28·808	28·687	·121	28·742	+·012	·579	101·8	74·9	26·9	110·0	64·3	45·7	92·3	100·5	87·3	− 0·3	61·0	71·6	71·9
	Meerut	738	·958	·840	·118	·893	+·007	·571	104·2	76·5	27·7	115·0	68·8	46·2	93·5	102·3	89·3	+ 0·9	66·6	72·6	73·2
	Lahore	702	·957	·857	·100	·901	−·004	·541	107·8	78·0	29·8	116·8	66·7	50·1	98·2	106·2	92·6	+ 3·7	65·6	73·6	75·7
	Ludhiana	812	·860	·770	·090	·809	+·007	·557	106·0	79·3	26·7	114·8	70·1	44·7	96·6	104·2	91·9	+ 2·7	68·5	72·5	73·6
Indus Valley and N.-W. Rajputana.	Peshawar	1,110	·610	·507	·103	·553	+·008	·615	99·7	71·7	28·0	108·0	61·0	47·0	92·4	96·4	85·4	+ 1·4	62·2	70·7	71·3
	Jacobabad	186	29·471	29·362	·109	29·413	+·005	·549	116·7	81·5	35·2	124·0	68·4	55·6	105·6	113·8	98·4	+ 4·2	65·7	79·2	80·3
	Kurrachee	30	·730	·645	·085	·683	+·008	·663	94·9	79·1	15·8	106·7	75·4	31·3	90·3	90·5	85·9	+ 1·2	76·0	80·7	81·4
East Rajputana, Central India and Gujarat.	Jaipur	1,431	28·315	28·204	·111	28·254	+·010	·580	109·6	81·5	28·1	113·7	71·9	41·8	99·8	107·5	94·8	+ 3·2	64·0	71·8	72·5
	Udaipur	1,925	27·861	27·766	·095	27·813		·603	107·0	81·7	25·3	112·0	71·3	40·7	100·1	103·8	94·0		69·1	75·8	77·7
	Deesa	466	29·301	29·169	·132	29·234	−·005	·631	112·6	80·1	32·5	118·5	74·9	43·6	97·6	110·9	95·9	+ 4·2	68·3	75·1	74·6
	Jamnagar	61	·736	·640	·096	·685		·691	100·4	77·5	22·9	106·6	74·2	32·4	93·6	95·4	87·8		72·8	76·6	76·6
Deccan.	Belgaum	2,539	27·340	27·232	·108	27·288	+·010	·699	93·6	69·0	24·6	99·2	65·9	33·3	83·5	87·7	78·7	+ 0·7	66·7	70·6	73·2
	Sholapur	1,590	28·229	28·074	·155	28·151	−·003	·626	107·0	79·9	27·1	111·2	75·5	35·7	94·9	101·0	91·7	+ 2·8	67·4	71·8	72·2
	Akola	930	·832	·675	·157	·756	−·011	·588	111·6	83·9	27·7	114·0	79·6	34·4	101·0	109·0	96·7	+ 3·4	67·1	76·1	77·2
	Buldana	2,132	27·685	27·560	·125	27·620	−·018	·604	105·3	80·5	24·8	107·6	76·0	31·6	94·1	102·8	91·5	+ 3·6	63·6	70·9 ¶	70·4
	Khandwa	1,044	28·720	28·575	·145	28·650	−·008	·605	110·8	84·0	26·8	113·7	80·9	32·8	99·0	109·3	96·	+ 3·8		71·6	72·4†
	Nagpur	1,02	·716	·570	·146	·645	+·007	·581	111·1	82·3	28·8	115·2	71·8	43·4	100·5	107·3	95·6	+ 1·1	65·9	73·9	74·1
	Do. (Sanitary Commr.'s Office)	1,013	·726	·580	·146	·655		·580	111·5	83·4	28·1	115·9	75·4	40·5	101·6	108·6	96·4		66·8	73·4	73·7
	Hyderabad (Deccan).	1,690	·123	27·993	·130	28·059	+·008	·635	103·3	79·6	23·7	108·2	67·9	40·3	92·8	100·	90·4	+ 0·3	69·8†	73·7	74·9
West Coast.	Bombay	37	29·829	29·739	·099	29·779	+·005	·755	90·7	80·5	10·2	92·1	77·2	14·9	86·8	88·0	84·5	− 0·1	77·1	79·2	80·0
	Karwar	44	·847	·752	·095	·801	+·014	·778	89·4	79·7	9·7	91·0	76·0	15·0	86·2	87·4	83·5	− 0·2	76·2	77·9	79·1

† Mean of 28 days. ¶ Mean of 30 days. †† Mean of 29 days.

II.

Stations in India, Burma, etc., in May, 1905.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.	Meteorological Province.
														Total number of 10 hours and 16 hours winds from																	
From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
††					††																				%	%						
·866	·977	·963	·915	−·006	80	77	76	80	· 5	6·9	7·7	7·3	+0·3		1	11	5	8		24	6	7	S 47° W	S 39° W	21	43	212*	178	11·11	2·80	Port Blair.	Burma Coast and Bay Islands.
·832	·855	·851	·860	−·030	86	67	66	77	−6	5·6	6·6	6·1	−1·0	3	1	1	9	15	28		5		S 22° E	S 21° W	64	59	82*	110	10·34	3·82	Rangoon.	
·817	·907	·882	·877	−·022	82	71	71	77	−1	5·0	6·0	5·5	−1·0		3	5	1	10	5	12	6	20	N 89° W	S 72° W	27	46	218*	187	8·74	2·55	Diamond Island.	
·895					81					6·8	7·5	7·2	+0·7											S 46° W		52			10·61	3·70	Cocos Island,	
	·985	·950				78	75			4·7	3·7	4·2	−1·5			4	1	19	11	16	2	9	S 5° W	S 24° W	43	30	99*	84	14·67	2·87	Akyab.	
	·923	·908				76	74			5·4	3·5	4·5	−1·2	3	1	5	1	8	6	26	5	7	S 42° W	S 1° W	43	43	113*	154	5·52	1·46	Chittagong.	
·834	·920	·881	·887	+·004	90	71	63	78	+3	6·2	4·7	5·5	+1·2		1	2	5	10	29	13		2	S 4° E	S 9° W	67	67	150*	168	10·01	3·63	Calcutta, (Alipore).	Bengal and Orissa.
·874	·990	·993	·954	−·033	85	77	73	79	−2	5·7	5·1	5·4	−0·5		4	1		13	36	6	1	1	S 5° E	S 6° W	71	73	446	406	5·70	2·22	Saugor Island,	
·911	·987	·984	·963	−·015	88	76	77	81	−2	5·7	4·4	5·1	+0·3				1	6	34	21			S 10° W	S 21° W	87	75	313*	329	2·30	1·10	False Point.	
·540	·527	·486	·539	+·047	65	40	33	43	+6	2·8	5·3	4·1	+0·2	2	8	4	5	8	14	6	5	10	S 24° W	S 89° W	11	16	216*	221	0·86	0·39	Hazaribagh.	Gangetic Plain and Chota Nagpur.
·630	·651	·574	·631	+·110	65	41	28	46	+7	1·0	1·7	1·4	−0·2		5	15	20	3	1	1	6	11	N 43° E	N 6° W	43	24	153*	163	0	0	Allahabad.	
·461	·486	·456	·471	+·068	61	41	32	47	+6	2·5	3·7	3·1	+0·4	9	4	4	2	9	12	12	9	1	S 21° W	S 79° W	32	24	35	53	2·29	0·98	Debra Dun.	Upper Sub-Himalayas.
·467	·501	·403	·462	+·034	53	33	21	38	+1	0·3	0·9	0·6	−1·0	3		1		32	4	2	2	18	S 26° E	S 54° W	26	11	135	89	0·37	0·37	Roorkee.	
·532	·524	·436	·500	+·007	57	31	22	40	−1	0·5	1·1	0·8	−1·1	12	4	1	16	10		1	10	8	N 71° E	N 57° W	13	21	34*	62	0·18	0·13	Meerut.	
·472	·503	·483	·497	+·043	49	28	21	34	−2	1·2	0·9	1·1	−1·1	7	11	5	7	8	6	1	8	9	N 7° E	N 12° E	14	18	79	77	0·03	0·02	Lahore.	
·563	·491	·433	·503	+·016	55	28	20	36	−5	0·7	0·6	0·7	−1·4	3	1	8		17			12	21	N 44° W	N 57° W	21	10	58*	62	0	0	Ludhiana.	
·448	·492	·462	·473	+·042	59	33	28	41	+1	1·3	3·3	2·3	−0·8	13	17	7	8	2	3	2	6	4	N 12° E	N 16° E	31	28	52*	110	1·84	1·51	Peshawar.	Indus Valley and N.-W. Rajputana.
·433	·651	·597	·571	+·081	39	29	21	31	−1	0·5	0·5	0·5	−0·7	10	3	4	6	6	5	9	10	9	S 70° W	S 33° E	16	10	141*	113	0	0	Jacobabad.	
·858	·919	·952	·932	+·014	86	65	67	79	0	1·8	1·4	1·6	−0·4						1	24	36	1	S 72° W	S 67° W	91	84	355*	406	0	0	Kurrachee.	
·386	·435	·356	·399	−·049	35	23	15	26	−9	0·9	2·8	1·9	−0·4	3		4	3	2	2	23	20	5	S 68° W	N 72° W	56	48	139	151	0·02	0·02	Jaipur.	East Rajputana, Central India and Gujarat.
·559	·606	·640	·608		52	32	30	38		0	2·3	1·2		9	1		4	2	4	13	23	6	S 73° W		52		125*		0·07	0·07	Udaipur.	
·540	·571	·373	·501	−·065	53	33	14	34	−6	0·1	0·5	0·3	−1·1		1	2			4	20	29	6	S 76° W	S 63° W	76	71	288	322	0	0	Deesa.	
·746	·687	·666	·718		79	44	40	59		0·1	0·2	0·2			1					13	46	2	S 83° W		92		571*		0	0	Jamnagar.	
·6	·590	·637	·650	+·024	89	53	49	73	+3	3·2	5·1	4·2	+0·7	1	2				1	21	23	2	S 72° W	W	82	60	3548	422	3·27	1 64	Belgaum.	Deccan.
·517	·491	·395	·501	+·002	51	31	18	39	−3	2·9	7·1	5·0	+0·9		9	7	3	1	3	5	5	29	N 37° W	N 48° W	55	58	316*	271	0·21	0·13	Sholapur.	
·441	·573	·511	·495	+·084	38	29	21	29	+1	0·6	4·0	2·3	−0·1	2	4	5	4		1	3	11	32	N 44° W	N 49° W	63	72	209*	230	0	0	Akola.	
·384	·473	·343	·392	−·011	37	30	16	28	−4	1·0	3·6	2·3	−0·1	2	10	3	1		1	1	16	28	N 48° W	N 51° W	72	68	299*	293	0·03	0·02	Buldana.	
	·43 ¶	·342†				24	19 †			0·8	2·6	1·7	−0·4	7	9	3	1	1			6	35	N 38° W	N 63° W	71	75	159*	247	0	0	Khandwa.	
·436	·511	·430	·472	+·011	40	27	19	29	+1	0·9	5·6	3·3	−0·5	1	17	6	7	1	8	8	8	6	N 27° W	N 48° W	21	41	152*	192	0·37	0·12	Nagpur.	
·441	·473	·400	·425		39	24	16	26		1·3	5·0	3·2		4		8		16		13		21	W		11		83*		0·53	0·18	Do. (Sanitary Commr.'s Office).	
·611†	·594	·544	·589	+·023	61†	40	29	44	+2	4·3	5·4	4·9	+1·7	38		2	3	4		1	9	5	N 77° W	N 64° W	10	43	95*	154	4·05	2·56	Hyderabad (Deccan).	
·884	·902	·920	·915	+·026	85	71	69	78	+2	2·6	2·3	2·5	−0·1						4	13	38	7	S 81° W	N 83° W	85	71	189	242	0	0	Bombay.	West Coast.
·857	·848	·882	·875	+·010	84	68	68	76	+1	2·8	2·6	2·7	−0·5		5					7	23	27	N 68° W	N 66° W	82	81	151	137	2·39	1·44	Karwar.	

§ Mean of 19 days ‖ Mean of 25 days ¶¶ Mean of 30½ days * Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64

STATION.	Elevation of barometer cistern above sea-level, in feet.	PRESSURE. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	TEMPERATURE OF AIR. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	TEMPERATURE, WET-BULB. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three previous columns.
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
riyakulam	944	28·912	28·787	·125	28·866		29·729	96·5	74·7	21·8	101·1	72·1	29·0	87·8	91·8	84·2		71·5	75·7	76·0	74·4
llem	940	·930	·792	·138	·873	+·002	·730	99·5	77·5	21·9	104·7	70·6	34·1	88·5	96·5	86·2	+0·9	74·2	79·2	82·4	75·6
ittaldroog	2,405	27·477	27·356	·121	27·421	+·003	·695	94·5	72·4	22·1	101·1	66·4	34·7	84·6	92·0	81·8	+1·1	67·7	72·6	72·5	70·9
ngalore	3,021	26·905	26·789	·116	26·854	+·011	·706	91·5	69·5	22·0	97·5	65·8	31·7	82·0	89·7	78·9	+0·4	66·0	71·9	71·6	69·8
assan	3,091	·854	·749	·105	·809	+·018	·740	90·6 **	67·2	23·4	97·4	63·1	34·3	82·4	84·8	77·2 **	+1·8	65·6	72·0	72·2	69·9
ysore	2,518	27·394	27·268	·126	27·338	—·002	·730	92·1	70·3	21·8	100·4	64·9	35·5	81·6	89·4	79·6	+0·4	67·8	71·9	73·1	70·9
adras	22	29·796	29·691	·111	29·753	+·020	·703	96·8	80·5	16·3	107·9	76·1	31·8	93·1	89·1	86·7	—2·0		79·7	80·0	79·2
llary	1,475	28·352	28·213	·139	28·283	—·015	·659	103·2	78·4	24·8	107·0	73·1	33·9	91·4	98·7	89·8	+0·8	68·7	74·2	74·0	72·3
altair	*226*	29·582	29·472	·110	29·527	+·036	·692	90·5	79·3	11·2	99·1	69·0	30·1	87·3	86·8	83·8	—2·0	75·3	78·8	79·7	77·9
ietta	5,502							85·4	52·9	32·5	92·5	37·8	54·7	79·6	82·5	69·3	+1·3	47·1	57·9	59·4	54·8
h	11,503	19·788	19·701	·087	19·752	+·058	19·720	63·2	36·8	26·4	72·6	30·9	41·7	54·0	59·7	49·4	—0·4	32·4	41·2	44·2	39·3
inagar	5,204	24·884	24·797	·087	24·843	+·029	24·813	76·6	52·6	24·0	86·4	47·2	39·2	65·6	75·5	64·0	+0·1	50·3	61·4	69·9	60·5
rain		23·160	23·106	·054	23·124			71·0	50·7	22·3	79·6	45·6	34·0	68·2	71·0	62·5			52·9	54·4	
dabagh								Imperfect.													
nta (Ridge)	7,224	23·126	23·078	·048	23·093	+·031	23·055	73·6	59·4	14·2	79·4	53·3	26·1	67·6	71·0	66·7	+ 0·7	49·6	53·5	55·9	53·0
akrata	7,022	·288	·240	·048	·254	+·024	·214	72·8	58·7	14·1	80·5	53·8	26·7	68·5	69·2	65·9	+ 0·3	49·9	56·0	56·7	54·2
nikhet	6,069	24·086	24·015	·071	24·042	+·017	24·001	79·1	61·3	17·8	85·1	51·6	33·5	72·9	74·8	70·3	+ 0·8	54·0	60·7	61·2	58·6
aktesar	7,600	22·836	22·775	·061	22·797		22·754	73·9	56·5	17·4	79·7	46·6	33·1	65·7	69·7	65·3		48·9	55·6	58·0	54·2
tmandu	4,388	25·585	25·485	·100	25·531	+·038§	25·485	82·1	62·3	19·8	89·4	57·6	31·8	75·9	76·8	72·3	+1·5§	61·9‡	66·8	66·7	65·1
rjeeling	7,376	23·009	22·970	·039	22·986	+·024	22·941	63·3	52·0	11·3	70·2	46·3	23·9	60·1	61·4	57·8	—0·5	51·1	57·7	59·2	59·0
unt Abu	3,945	26·018	25·945	·073	25·979	+·021	25·929	92·6	76·8	15·8	97·7	69·5	28·2	87·1	90·3	84·7	+4·9	57·0	62·9	65·3	61·7
chmarhi	3,526							99·9	76·3	23·6	103·2	70·7	32·5	88·7	97·7	88·2	+3·0	60·1	62·6	64·7	62·5
ikalda	3,642	26·285	26·183	·102	26·231	+·001	26·175	98·1	76·2	21·9	101·0	66·5	31·5	89·1	95·9	87·3	+3·6	60·9	65·6	67·0	64·5
daikanal	7,688	22·838	22·775	·063	22·805		22·742	69·9	54·8	15·1	74·7	50·9	23·8	66·4	63·2	62·3		50·3	57·6	58·6	55·5
cacamund	7,322	23·047	·982	·065	23·015		·951	70·9	54·4	16·5	76·6	51·2	25·4	67·6	65·0	62·8		50·1	57·0	56·9	54·7
dabetta	8,539?	22·043	21·987	·056	22·015		21·952	63·6	50·6	13·0	67·8	45·1	22·7	61·3	58·8	57·2			54·4	54·8	
n	94	29·811	29·686	·125	29·746	+·027	29·770	90·5	81·8	8·7	94·1	79·2	14·9	88·0	89·4	85·0	—1·0	77·7	82·3	78·9	79·6
im	201	·672	·556	·116	·611	+·028	·744	92·3	82·5	9·8	94·5	80·8	13·7	89·0	90·2	86·3	+0·3	74·7	79·7	80·1	78·2
icoy	7	·919	·856	·063	·893		·826	88·9			93·3			85·5	85·6				78·7	78·9	
zibar	72	30·012	29·916	·096	29·969	—·006	·969	83·0	75·6	7·4	85·7	73·7	12·0		82·2	78·1	+0·3	72·6		75·6	
t Victoria (Seychelles).	15	29·975	·894	·081	·936	—·005§	·874	85·2	78·9	6·3	88·2	75·8	12·4	83·1	84·0	80·7	+1·2§	71·2	77·5	77·6	76·4
uritius (Pamplemouses).	181				·927	+·026	30·056				81·7	60·6	21·1			71·9	—0·2				68·4

N.B.—Elevations in italics indicate barometric determinations. § Departures from old normals.

** Mean of 27 days. NOTE.—The barometric readings are not reduced to sea level in the cases

oncluded.

ons in India, Burma, etc., in May, 1905—concluded.

Vapour Tension.				Humidity.					Cloud.				Wind direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.	Meteorological Province.
													Total number of 10 hours and 16 hours winds from																	
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
·727	·686	·706		85	55	47	61		3·7	5·8	4·8		3	7	5	7	5	16	12	3	4	S 1° W		% 24	%	82*		5·81	3·33	Periyakulam	South India.
·880	·932	·874	+·101	85	65	54	70	+ 5	4·9	6·4	5·7	+0·9	8	1	7	9	3	6	11	12	5	S 49° W	S 52° W	16	52	128*	98	3·94	1·63	Salem.	
·655	·553	·625	+·036	78	56	38	59	+ 2	3·5	5·8	4·7	+0·3		3	4	3	1	1	8	22	20	N 71° W	N 78° W	60	73	179*	216	2·10	0·63	Chitaldroog.	
·667	·565	·626	+·021	84	62	41	64	+ 1	3·1	5·7	4·4		5	4	3	7	2	4	11	16	10	W	S 81° W	33	66	¶ 155*	151	3·57	1·08	Bangalore.	
·664	·649	·657	+·044	92	61	56	72	+ 3	5·6	7·9	6·8	+0·8	1	1	10	7	2	1	8	17	15	N 59° W	N 82° W	34	70	75*	96	3·82	0·60	Hassan.	
·665	·615	·658	+·032	88	62	45	67	+ 2	6·6	7·1	7·0	+0·9		2	5	6	4	3	12	20	10	S 86° W	S 84° W	37	60	215*	245	6·15	2·26	Mysore.	
·836	·903	·898	+·002		54	66	70	0	3·5	3·9	3·7	0				2	29	15	7	6	3	S 14° E	S 9° E	61	66	203	218	0·06	0·06	Madras.	
·636	·540	·612	+·026	60	43	29	46	+ 1	3·1	6·3	4·7	−0·6	5	4	3	3	6	4	3	19	15	N 74° W	N 72° W	37	58	154*	204	0·99	0·41	Bellary	
·871	·920	·688	+·001	82	67	72	76	+ 6	5·8	6·1	6·0	+1·6					3	32	25	2		S 19° W	S 19° W	89	67	153		5·35	2·16	Waltair.	
·262	·273	·261	−·013	67	25	24	39	− 2	0·4	2·1	1·3	−0·7	22	4		1	4	3	1	16	11	N 76° W	N 69° W	34	45	34*	79	0	0	Quetta.	Hill Station, Baluchistan.
·158	·161	·155	+·025	68	38	34	47	+ 7	4·7	6·1	5·4	−1·1		5	4	5	4	11	11	15	7	S 63° W	S 72° W	31	31	48	77	0·32	0·13	Leh.	Hill Stations, Northern India.
·507	·688	·483	+·041	85	79	76	80†	+ 2	3·8	4·1	4·0	0	18	6	5		7	5		4	17	N 34° W	N 30° E	23	6	94*	103	3·02	1·34	Srinagar.	
·213	·257				37	33			2·5	3·9	3·2		15		3	1	2	14	16	9	2	S 37° W		47		57*		0·79	0·32	Sarain.	
												Imperfect.																		Kalabagh.	
·270	·295	·268	−·001	52	41	39	44	− 2	3·2 ¶	3·0 ¶	3·1	−0·8	3	31	3		3	7	2	1	12	N 12° W	N 18° W	52	25	125*	144	0·59	0·30	Simla (Ridge).	
·321	·335	·303	+·035	56	48	48	51	+ 3	3·5	4·2	3·9	+0·3	11	1			7	42	1			S 5° E	S 57° W	76	33	258*	187	2·12	1·11	Chakrata.	
·408	·403	·380	+·056	65	52	48	55	+ 6	2·4	2·7	2·6	−0·8	17	3			1		18	15	8	S 82° W	S 66° W	53	44	97*	98	1·73	0·59	Ranikhet.	
·341	·366	·321		61	55	52	56		3·6	4·7	4·2		2		1	2		1	14	38	4	S 9° W		77		223*		2·37	0·69	Muktesar.	
·555	·542	·542	+·052	94‡	62	60	72	+ 4	4·6	6·1	5·4	+0·2	2		10	13	3		4	22	8	N 48° W	S 89° W	18	39	30	43	5·43	1·85	Katmandu.	
·456	·483	·430	+·027	94	87	88	90	+ 3	7·2	6·8	7·0	−0·4	17			2	2		16	13	12	S 82° W	S 78° W	48	36	80*	163	10·86	2·51	Darjeeling.	
·297	·336	·283	−·062	27	23	24	25	−11	0	1·4	0·7	−0·5		1	1			1	42	9	8	S 62° W	S 66° W	80	70	253*	259	0	0	Mount Abu.	Hill Stations, C. India.
·263	·229	·267	−·096	37	20	13	23	−10	1·1	3·0	2·1	−0·9		3	3		1		10	2	43	N 53° W	N 66° W	74	58	239*	180	0·23	0·15	Pachmarhi.	
·360	·325	·341	−·025	41	27	20	29	− 5	2·6	4·9	3·8	+0·8	1	20	7		1	4	1		28	N 21° W	N 33° W	68	67	203*	242	0·51	0·51	Chikalda.	
·392	·446	·387		75	62	78	72		4·4	6·9	5·7			13	10	12	6	9		1	11	N 45° E	N 42° E	34	32	292		6·52	2·49	Kodaikanal.	Hill Stations, S. India.
·357	·381	·348		75	53	62	63		4·8	7·3	6·1		1	6	14	27	7	2		1	4	N 73° E	N 60° E	64	42	131*		8·87	4·29	Ootacamund	
·355	·387				66	78			4·8	6·2	5·5			7	28	18	5	3			1	N 63° E	N 49° E	74	58	447		7·18	4·08	Dodabetta.	
·025	·847	·957	+·082	82	78	61	77	+ 7	2·0	0·8	1·4	−0·5	1	1	9	7	15	6	20		3	S 20° E	S 59° E	37	43	207*	269	0	0	Aden.	Extra India.
·890	·899	·882	−·084	67	65	63	68	− 8	0?	0?	0?	−1·6§		1	1	2	29	29				S 26° E	N 86° E	85	29	375*	329	0	0	Perim.	
·889	·897				73	74			6·3	6·0	6·2			8		1			5	5	43	N 47° W		82		182*		6·57	1·54	Minicoy.	
	·802			86		73				5·1							9	21	1			S 12° E	S 5° E	94	85	200*	194	10·20	2·91	Zanzibar.	
·873	·866	·855	+·009	79	77	74	79	− 1	5·2	‖ 5·4	5·3	+0·2§	13	4	2	1	26	6	2	3	5	S 37° E	S 39° E	34	56	174	173	9·88	2·85	Port Victoria (Seychelles)	
		·637	+·012				81	+ 2			6·7	+1·5										S 67° E	S 65° E			231	246	3·37	0·97	Mauritius (Pamplemousses).	

* Corrected. † Mean of three previous columns. ¶ Mean of 30 days.

‖ Mean of 29½ days. ‡ Mean of 25 days.

plateau stations, the elevations of which exceed 3,100 feet.

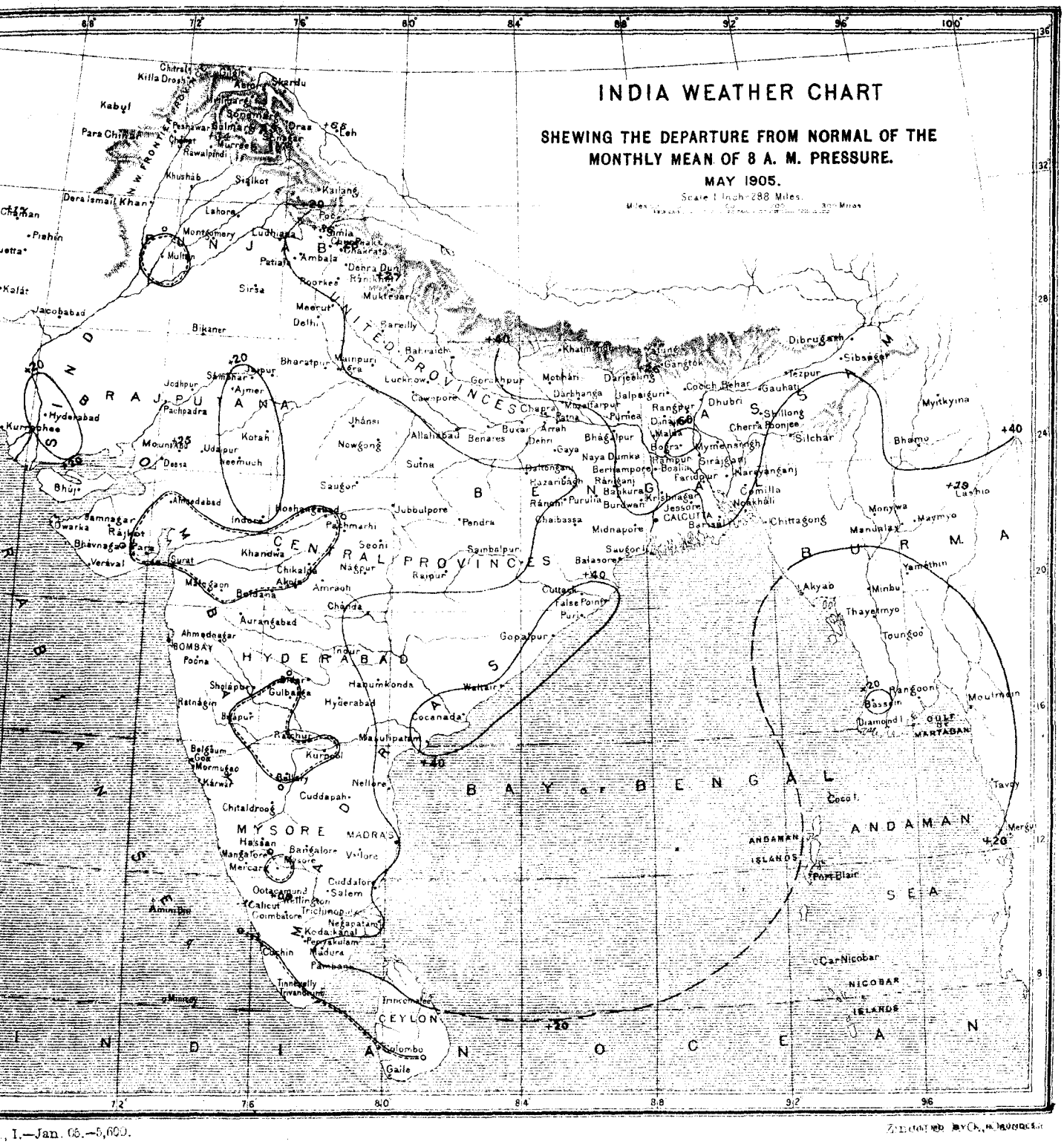
I. C P. O.—No. 550 Meteo.—6-12-05.—550.—B. N. D.

W. I.—Jan. 6,—5,'07. LITHO. BY S. S. MUNDLE, Zinco. S. I. O., Calcutta.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric ssure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the re observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of nbert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are icated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the nth is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added to the wind arrow.						
,,	,, 2 to 5	,,	,,	,,	...	two	feathers	,,	,,	,,	,,	
,,	,, 5 to 10	,,	,,	,,	...	three	,,	,,	,,	,,	,,	
,,	,, 10 to 20	,,	,,	,,	...	four	,,	,,	,,	,,	,,	
	over 20	,,	,,	,,	...	five	,,	,,	,,	,,	,,	



I.—Jan. 06.—5,600.

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal unts of departure. The numbers are given in thousandths of an inch, 20 representing ·020″ or two hundredths of an inch, &c. inuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continu- and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative rtures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

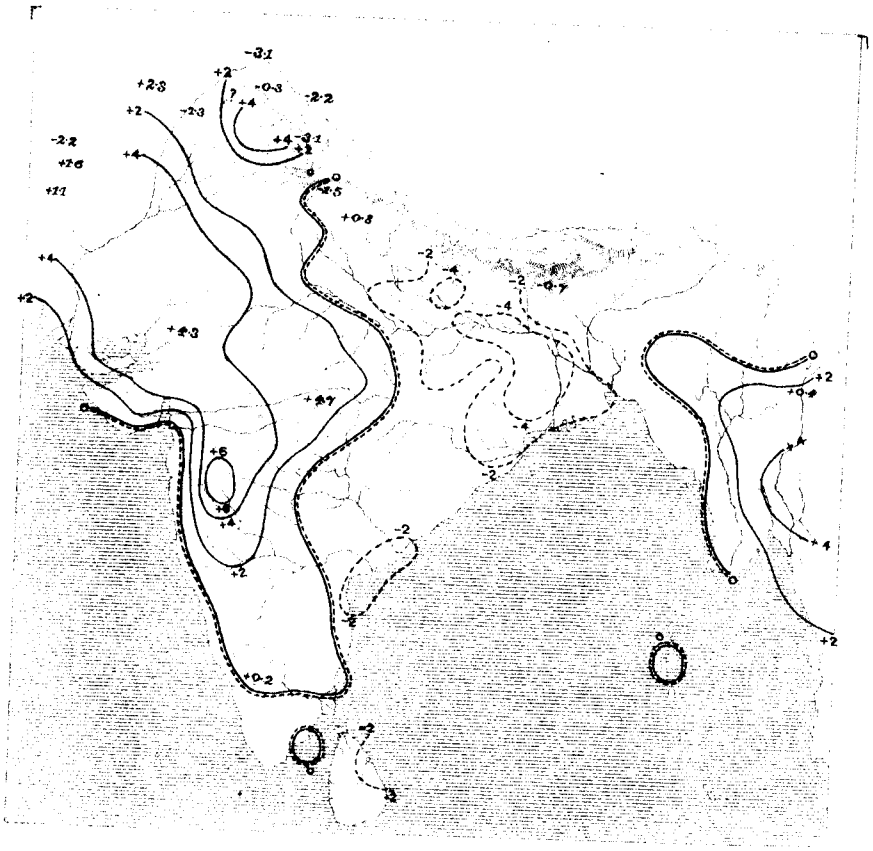


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.

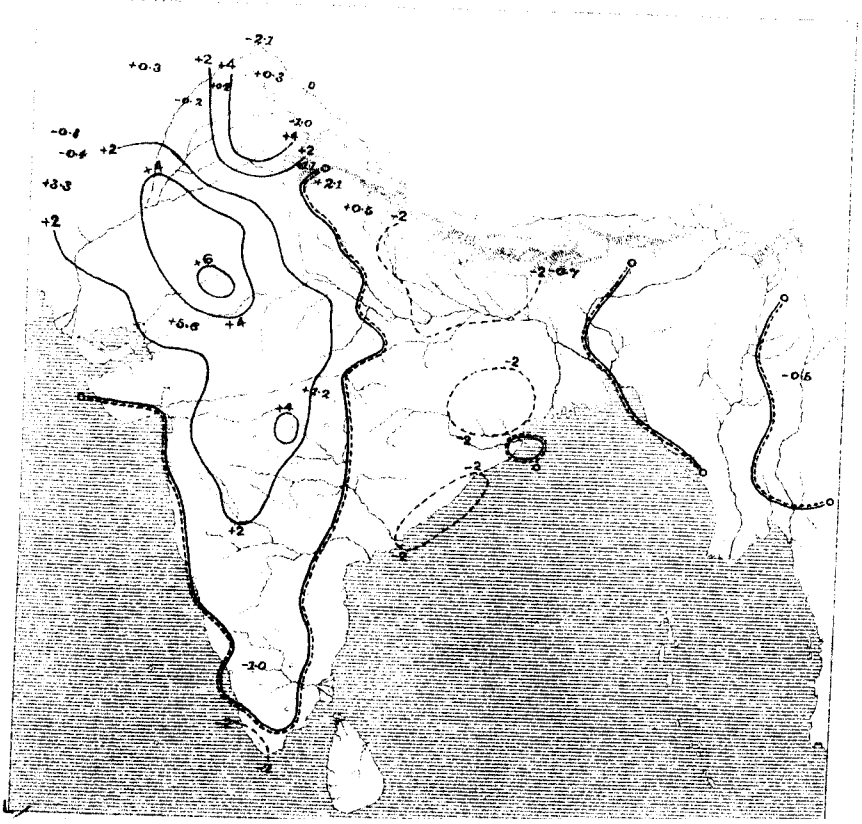


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

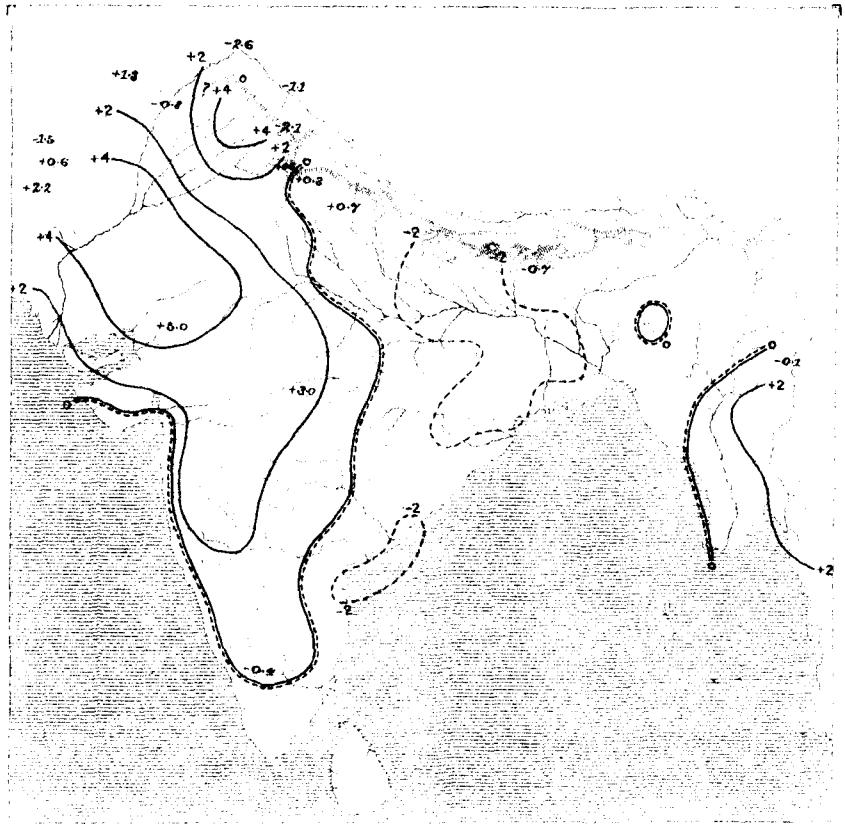


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

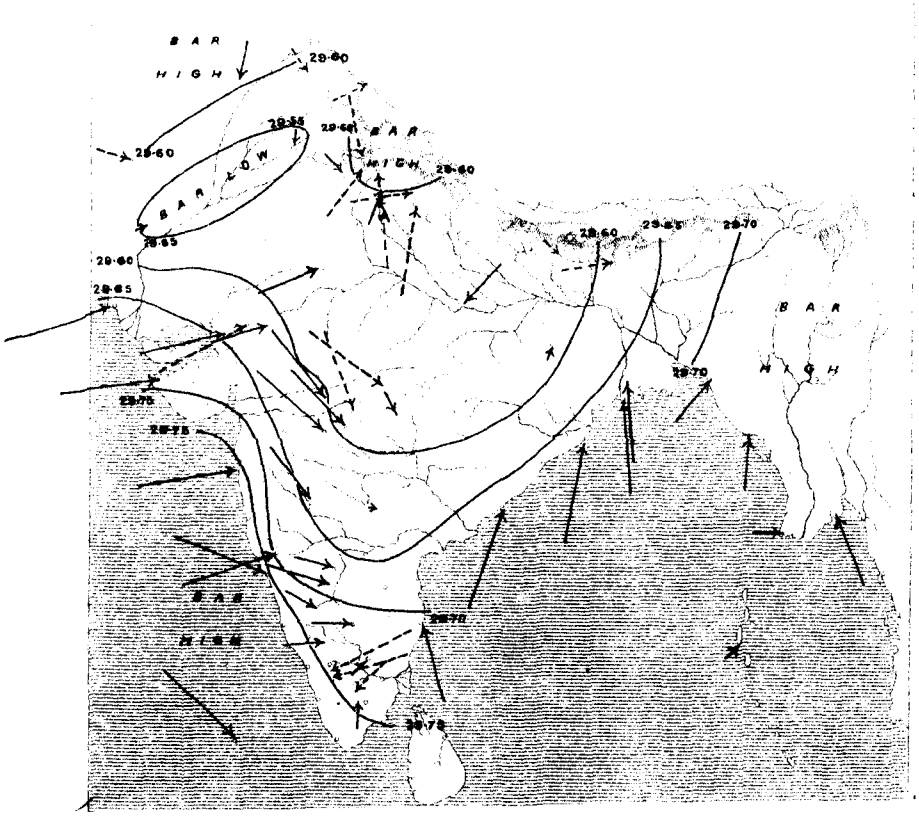


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF ABSOLUTE
HUMIDITY AT 8 A. M.

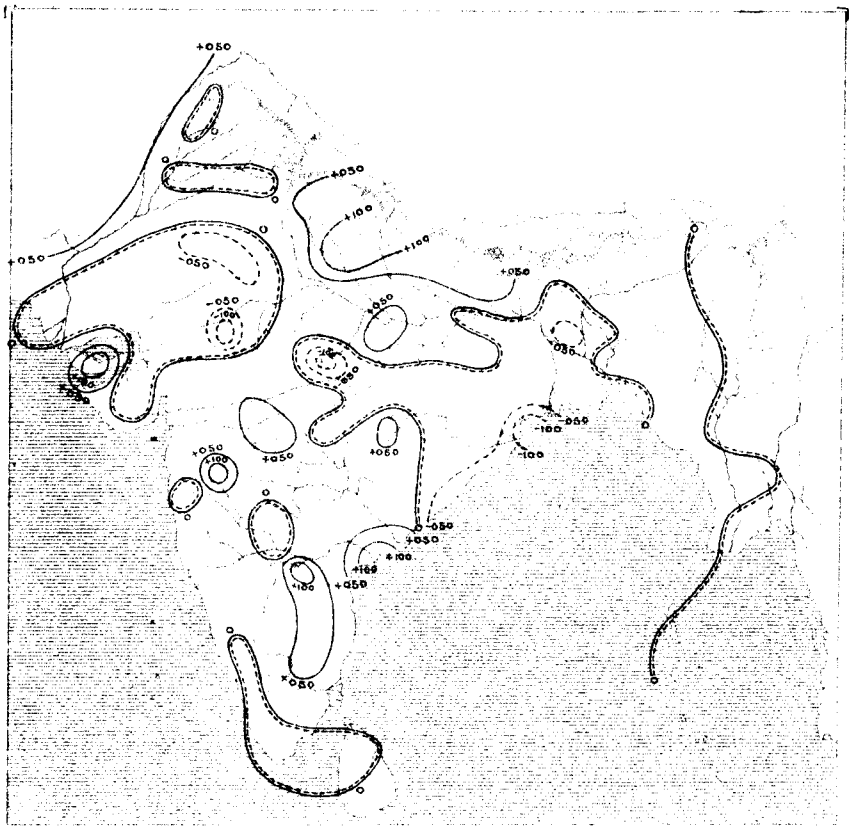


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF RELATIVE
HUMIDITY AT 8 A. M.

LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 A. M.

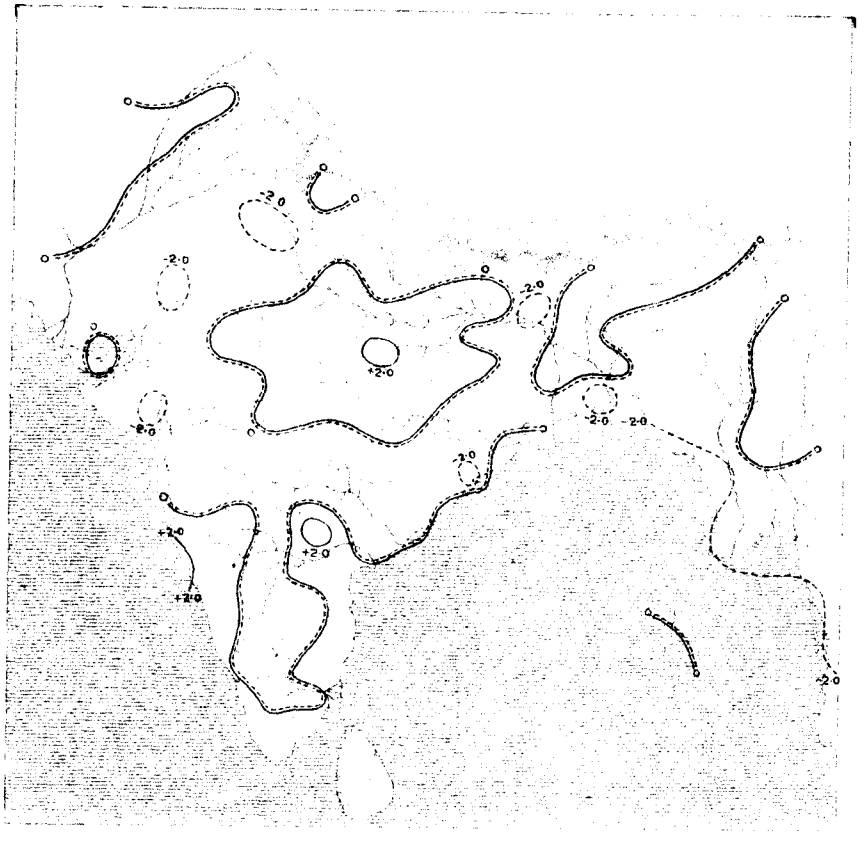
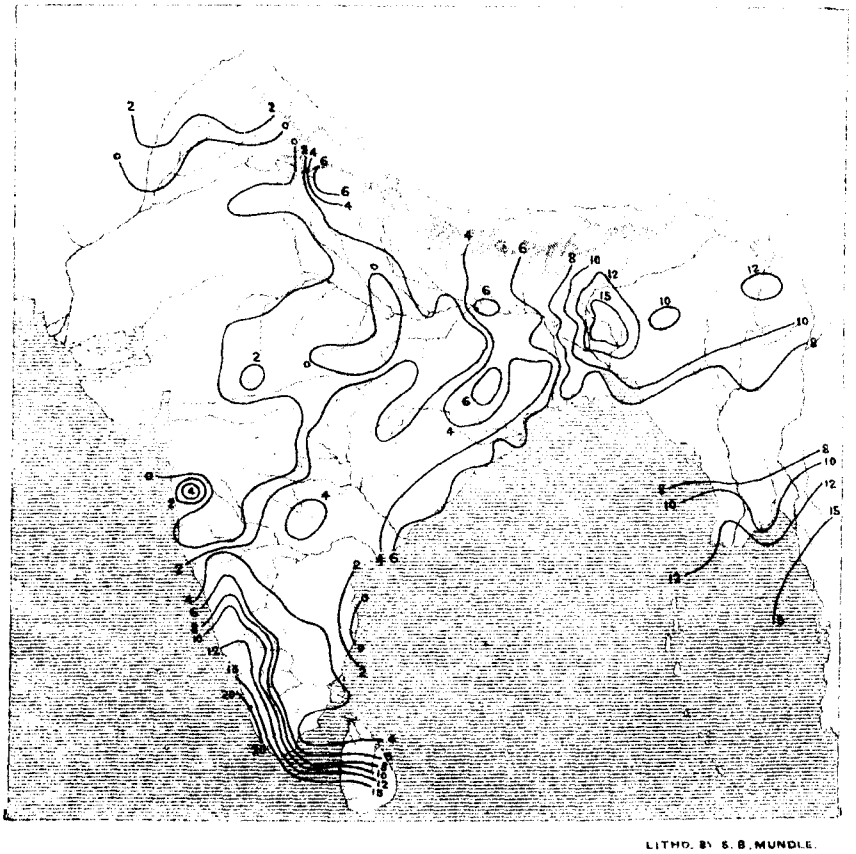
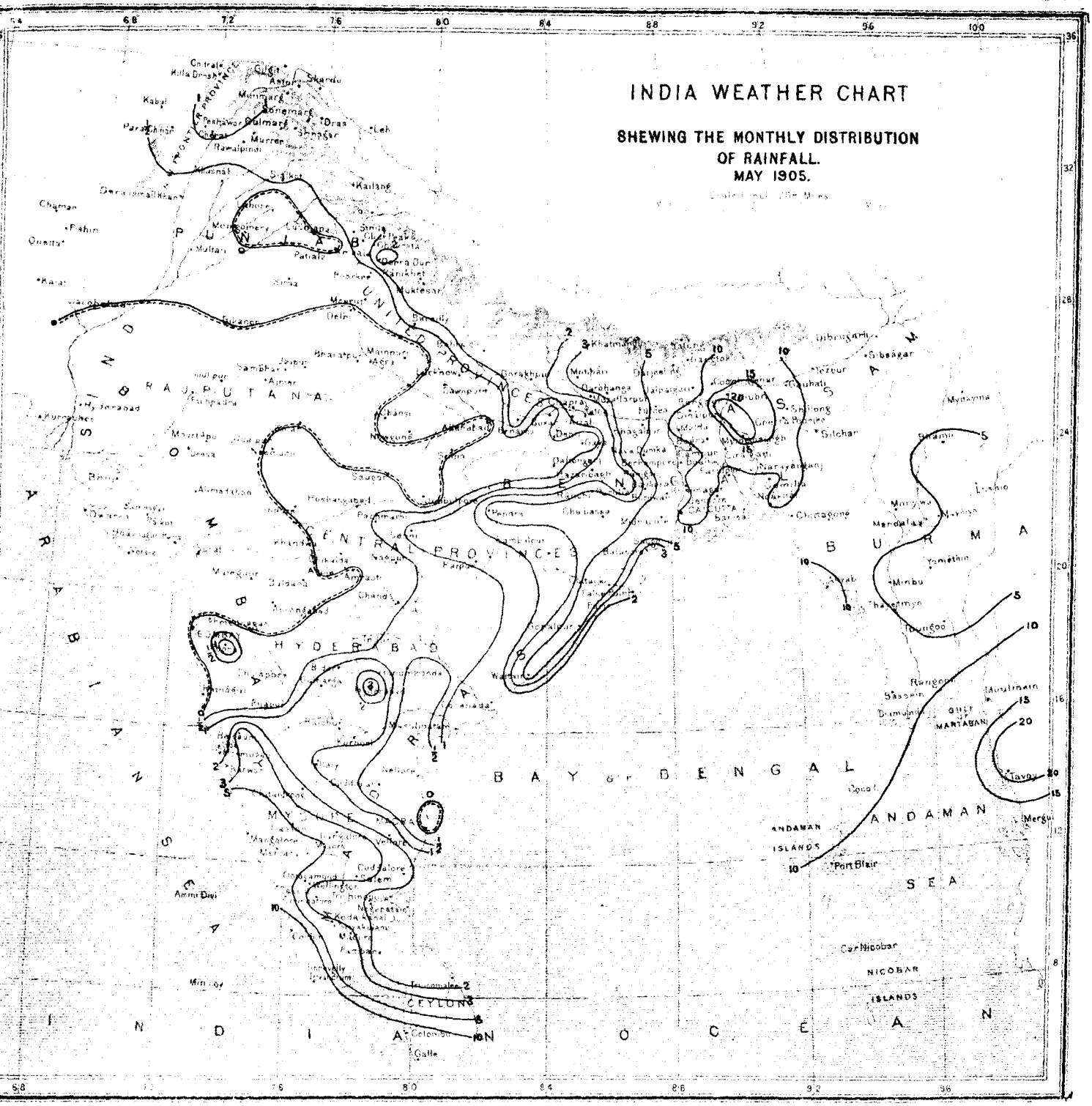


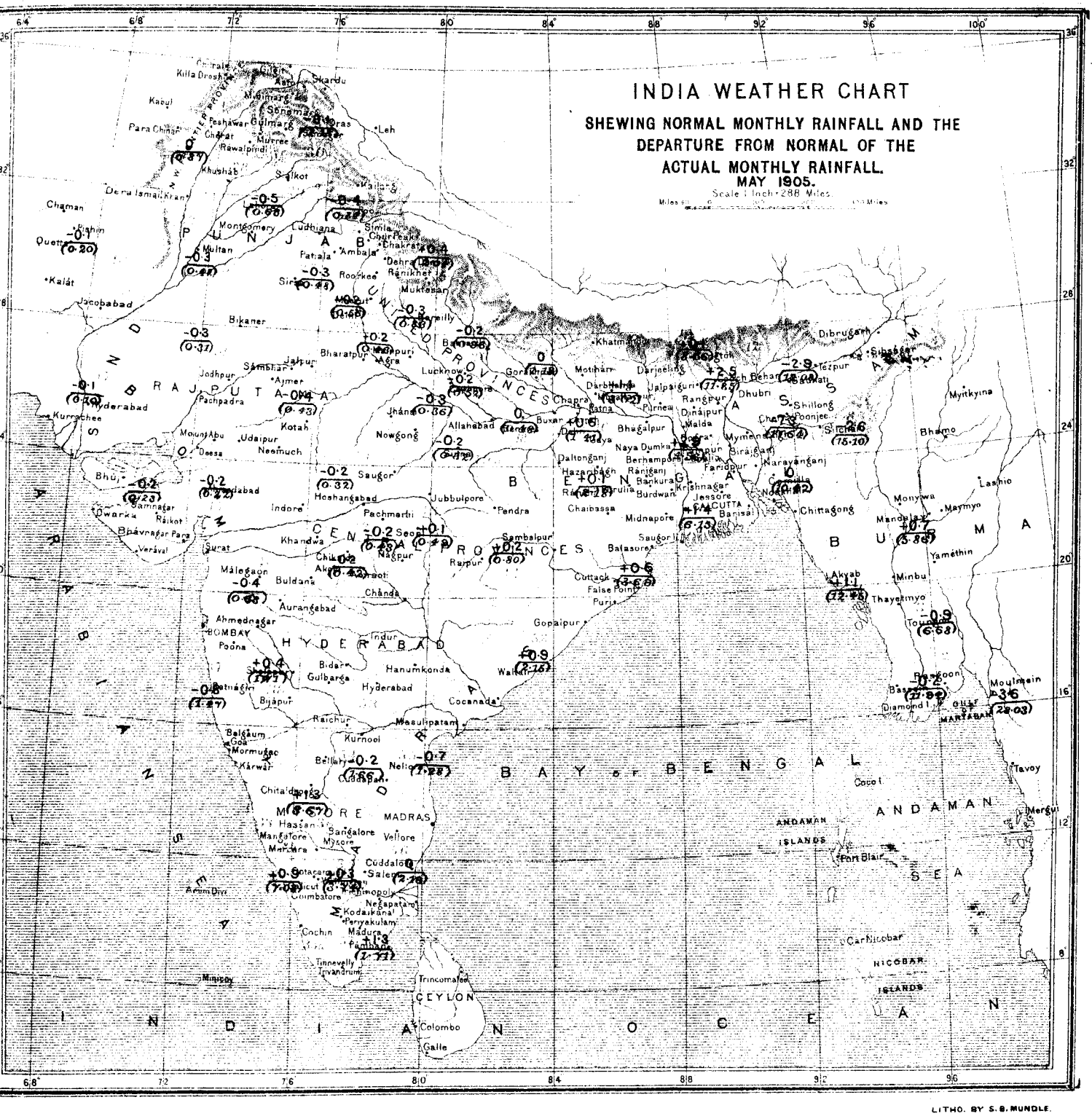
CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.



LITHO. BY S. B. MUNDLE.



The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S. B. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above these give the departure from these normals or the average actual rainfall over the division. The name of the district can be ascertained by referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. [illegible]
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. [illegible]
33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JUNE, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of June, 1905, is based on observations taken daily at 8 A.M. at 231 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 65 stations. In the rainfall summary the rainfall data of the meteorological observatories and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the preparation of the review are utilized and brief notes on Solar and Magnetic disturbances are supplied by the Observatories.

Summary of the chief features of the weather in India during the month of June, 1905.

The principal feature of the weather over India during June, 1905, was the delay in the advance of both the Arabian Sea and the Bay of Bengal monsoon currents. Heavy rain was not received at Bombay until the 26th June, about three weeks after the normal date, while the rains were not ushered fully into north-east India until quite the close of the month. This delay naturally had a marked effect on the temperature, rainfall and weather conditions of the month, perhaps the most marked feature having been the excessive temperature which prevailed during a large part of the month over west Bengal and the adjoining regions.

Between the 1st and the 5th, rain was mainly confined to Burma, Assam and portions of Bengal, and the mean temperature was generally low over those areas and higher than usual elsewhere. The excess was considerable over the Punjab, the Central Provinces and Madras, as is shown by the following comparative data:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	1st June.	2nd June.	3rd June.	4th June.	5th June.
	°	°	°	°	°
Punjab	+5·5	+3·4	+3·8	+3·9	+4·2
Central Provinces	+3·2	+3·7	+1·4	+2·1	+2·0
Madras Coast	−0·8	+2·4	+1·9	+2·4	+2·5
Madras Deccan	+3·3	+4·0	+4·2	+4·6	+4·3

Between the 6th and the 11th the rainfall became more general, local rain having been reported from a large part of the country, but particularly from the west of the Peninsula and parts of north-west India. On the 10th, a burst of monsoon rainfall occurred over the Malabar and Kanara coast districts during which the following amounts were recorded :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Malabar	Mannarghat	10th June	5·88
	Nilambur	" "	5·35
	Calicut	" "	4·48
	Manjeri	" "	4·33
	Tirurangadi	" "	4·26
	Cochin	" "	4·15
	Kuttiadi	" "	4·12
North Kanara	Karwar	" "	5·65
Ratnagiri	Dapoli	" "	3·85
	Devgad	" "	3·58
North Kanara	Honavar	" "	3·22

This burst proved to be very short-lived and during the two following days the rainfall diminished quickly and on the 12th was very light and restricted.

In north-west India the rainfall amounts were not heavy, but snow fell on the higher hills and the effect of this on the temperature was very marked. The following gives comparative data of temperature for the different divisions of north-west India from the 6th to the 11th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					
	6th June.	7th June.	8th June.	9th June.	10th June.	11th June.
	°	°	°	°	°	°
Punjab	+3·6	−1·5	−4·1	−7·5	−7·9	−5·4
North-west Frontier Province.	+3·6	−4·8	−4·3	−11·1	−7·8	−5·9
Sind	+1·8	−0·8	−0·4	−2·9	−2·6	−1·8
Baluchistan	−6·3	−7·6	−10·5	−3·2	−2·4	−0·2
Rajputana	+0·6	+0·9	−3·5	−6·0	−6·5	−1·9
Gujarat East	−0·6	−0·5	−0·7	−0·5	−0·9	−0·9

On the 12th there was no rain of importance except on the south Burman coast. The monsoon through of low pressure had been transferred north-ward to the hill or submontane districts, and hot, dry westerly and north-westerly winds were setting in over a large part of the country. These conditions lasted more or less continuously until the 25th. During this period precipitation was mainly confined to local rain over Burma, Assam, East and North Bengal and the West Coast, where more or less heavy rain was experienced. In consequence of this restriction of rain to the extreme east and north-east, the mean temperature was very excessive over west Bengal, the Gangetic Plain, Central India and the Central Provinces where, in years of normal conditions, general rain is ordinarily received during this period. The following table gives comparative data of temperature for the above areas for each alternate day from the 13th to the 25th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of						
	13th June.	15th June.	17th June.	19th June.	21st June.	23rd June.	25th June.
	°	°	°	°	°	°	°
Bengal	+4·3	+1·7	+1·5	+2·2	+2·0	+3·2	+2·2
Bihar	+6·8	+6·0	+4·9	+6·2	+1·5	+5·8	+4·7
Chota Nagpur	+12·3	+5·4	+4·1	+11·4	+9·7	+11·4	+11·6
United Provinces of Agra and Oudh.	+2·0	+8·6	+3·6	+0·6	+4·2	+8·0	+8·1
Central India	+4·6	+5·3	+4·5	+4·9	+7·6	+7·9	+9·1
Central Provinces	+8·3	+5·2	+6·4	+8·3	+11·5	+10·9	+8·5
Berar	+5·9	+6·7	+6·5	+7·7	+10·5	+10·0	+8·2

The excess was most marked in the day temperature which was 17½ degrees or more above the normal at the following places during the period 13th to 26th :—

Date.	Station.	Maximum temperature		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
14th June	Chaibassa	113·4	95·7	+17·7
15th "	Chaibassa	113·9	95·0	+18·9
16th "	False Point	108·5	90·5	+18·0
17th "	Balasore	111·5	90·9	+20·6
	Chaibassa	112·4	93·9	+18·5
18th "	Cuttack	112·5	93·8	+18·7
	Balasore	109·0	90·7	+18·3
19th "	Cuttack	112·0	93·5	+18·5
21st "	Seoni	107·9	89·9	+18·0
22nd "	Nagpur	111·2	93·6	+17·6
	Seoni	106·9	89·3	+17·6
23rd "	Seoni	106·4	88·8	+17·6
	Hazaribagh	106·1	88·5	+17·6
24th "	Chaibassa	109·4	91·9	+17·5
25th "	Hazaribagh	107·6	87·7	+19·9
26th "	Hazaribagh	106·1	87·3	+18·8
	Gaya	113·0	94·3	+18·7
	Chaibassa	109·9	91·5	+18·4

Although the weather was generally fine in the north-west during this period, showers occurred in the submontane districts and some rain and snow on the hills between the 15th and the 17th and again on the 23rd, and after each of these periods there occurred a marked reduction of temperature over the Punjab and adjacent districts, though it was only at the submontane stations that the mean temperature fell to below the normal.

On the 26th, moderately heavy rain was reported from Bombay and local rain extended into parts of Gujarat, of the Central Provinces, of the Deccan and of the East Coast during that and the two following days, causing a brisk decrease of temperature over those regions. On the 27th and 28th, the mean temperature was reduced to below the normal over the greater part of the Peninsula. This is shown below :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of	
	27th June.	28th June.
	°	°
West Coast	−2·5	−2·7
Bombay Deccan	+1·4	+1·3
Mysore	0	−1·8
Madras Coast	+0·4	−1·6
Madras Deccan	−3·5	−2·3
South India	−2·8	−2·6

On the 29th the observations showed that a barometric depression or storm was developing over the north-west of the Bay, and on the 30th a well-marked storm lay off the Orissa coast. This storm occasioned rain over west and south-west Bengal and the Central Provinces, and brought about a considerable change in the temperature conditions. Mean temperature was reduced to below the normal over south-west Bengal, Orissa and the north-east of the Peninsula, while the area of greatest excess of temperature was transferred from the east Gangetic Plain to north-west India. The following table gives comparative data of temperature for the different divisions of northern India from the 27th to the 30th, and shows the extent of this change :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	27th June.	28th June.	29th June.	30th June.
	°	°	°	°
Assam	−2·9	+0·2	+2·5	+0·3
Bengal	+2·9	+1·5	+1·0	+0·8
Orissa	+5·6	+5·3	+1·8	−0·6
Bihar	+3·1	+3·8	+(illegible)	+3·6
Chota Nagpur	+11·8	+9·9	+7·7	+0·7
United Provinces of Agra and Oudh	+7·8	+9·7	+10·7	+7·6
Punjab	+4·0	+6·2	+8·5	+10·2
North-west Frontier Province	+1·0	+3·7	+6·5	+5·2
Sind	−0·8	−0·3	+0·7	+1·6
Rajputana	+5·6	+8·7	+10·2	+11·6
Gujarat East	+3·2	+3·3	+3·1	+4·1
Central India	+6·9	+9·1	+10·7	+7·4

Solar, Magnetic and Seismic disturbances.

The following reports regarding solar and magnetic disturbances during the month of June have been received from the observatories :—

Kodaikanal :—Solar observations :

During the month bad weather prevented all observations on four days (10th, 19th, 26th, and 27th), and on four other days (8th, 9th, 18th and 20th) prominences could not be observed.

Spots :—There was a great falling off in solar activity during this month as compared with the two previous months. Only 17 new groups were recorded as against 27 in both April and May, and the average daily number of groups was 3·6 against 4·3 in May. Only two of the groups—563 and 574—were of moderate size. Of these the former appeared round the east limb on May 30th. It was a double spot of regular outline until it had crossed more than half of the disc. It then began to break up and changed greatly in form and size before it disappeared at the west limb on the 11th. Its spectrum showed the C line frequently reversed.

Group 574 was first seen on the 21st as a small dot in a group of faculæ near the east limb. During the next two days it consisted of a number of small dots, but by the morning of the 24th it had formed into a double spot of regular outline. The leading spot then began to decay while the rear one grew in size. This was the largest group of the month. The C line was frequently seen reversed in it.

The distribution of the spots in latitude showed no features of special interest.

Prominences :—These also were less numerous than during the previous month. There were 27 prominences seen of or over 1 minute in height, of which one exceeded 3 minutes, and two others exceeded 2 minutes. The tallest of these was seen and photographed about 9 o'clock on the morning of the 22nd. It rose from the sun's limb at position angle 58 and drifted northwards, like the smoke from a steamer, till it could be traced to a height of 195 seconds over a point on the limb 20° north of where it was issuing. The form changed very rapidly so that a drawing made at 10h. 20m. had practically no resemblance to one made an hour and a quarter earlier.

Only one prominence showing a large velocity in the line of sight was observed during the month. This prominence was an eruptive one which rapidly changed

in shape. There was no spot or faculæ seen near it. In one part of the prominence the C line was shifted nearly four wave-lengths towards the less refrangible side, indicating a velocity away from the observer of about 114 miles per second.

No great magnetic disturbance was recorded during the month but there were moderate disturbances on the 9th, 10th, 11th, 22nd, and 23rd and on all these days there were spots not far from the central meridian.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Colaba, Bombay:—Magnetic Observations:—

During the month the traces showed 15 calm days, 13 days of small and 2 days of moderate disturbances.

Movements suspected to be due to seismic causes occurred on the 3rd and 21st, the strain apparently lasting for four hours in the former case and for three hours in the latter.

The selected quiet days of the month were the 2nd, 13th, 18th, 19th, and 25th.

The mean observed absolute values of the several elements as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follows:—

Declination . . .	0° 12′ 34″ East.
Horizontal Force . . .	·37410 C. G. S. Unit.
Dip	21° 56′·2
Horizontal Force range . .	·00051 C. G. S. Unit.
Horizontal Force Summed range	·00370 „ „
Declination range . . .	4′·78
Declination summed range .	19′·82

Note:—[Summed range means sum without regard to signs of 24 ordinates of diurnal inequality].

Two small seismic disturbances were recorded during the month, on the 2nd and 14th:—

Magnetic Disturbances.

June, 1905.		June, 1905.		June, 1905.	
1	C.	11	S.	21	S.
2	C.	12	C.	22	S.
3	S.	13	C.	23	M.
4	S.	14	C.	24	S.
5	S.	15	S.	25	C.
6	S.	16	C.	26	C.
7	S.	17	C.	27	C.
8	S.	18	C.	28	C.
9	S.	19	C.	29	C.
10	M.	20	S.	30	C.

The magnitudes of the disturbances are determined from Horizontal Force traces.
C=calm; S=small; M=moderate; G=great, and VG=very great.
Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Govt. Observatory, Bombay.

Alipore.—List of displacements recorded by the seismograph at the Alipore Observatory, during June, 1905.

Date, 1905.	P. T. Commencement. G.M.T.	L. W. commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum amplitude in m. m.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M.	
2-6-05	5-48·1	6-2·3	6-6·4	6-31·8	3·00	0-43·7	
7-6-05	6-7·4		6-11·0	6-17·1	0·50	0-9·7	
9-6-05	12-40·4			13-24·1		0-43·7	Thickening of line.
12-6-05	5-41·4			5-50·5		0-9·1	Thickening of line.
14-6-05	11-54·5	12-34·1	12-41·3	14-2·6	1·00	2-8·1	
19-6-05	1-34·1	1-41·3	1-42·3	1-50·4	0·75	0-16·3	
30-6-05	17-20·3	18-0·0	18-13·2	19-43·7	1·50	2-23·4	Sensibility $1^{m.m.}=0''.38$ of tilt.

The local times of the commencement:—

Date,	H. M.
June, 2	11-41·7
„ 7	12-0·7
„ 9	18-33·7
„ 12	11-34·7
„ 14	17-47·8
„ 19	7-27·4
„ 30	23-13·6

G. W. KÜCHLER,
Asst. Meteo. Reporter to the Govt. of India.

Mauritius:—Royal Alfred Observatory:—

Groups of sunspots were observed on twenty six days during the month and detached spots on twelve days, *viz.*, from the 6th to the 19th. On the 4th, 7th, 14th, and 23rd no observations were recorded owing to the cloudy state of the sky. The groups of spots were distributed as follows:—

4 days with	1 group.
11 „ „	2 groups.
6 „ „	3 „
5 „ „	4 „

The magnetic disturbances during the month of June were as follows:—

Day.	Hours.	Disturbances.
5	$5\frac{3}{4}$	Sudden increase of H. F. (·000083).
	$5\frac{3}{4}$–$23\frac{1}{4}$	Double wave in H. F. +·000267 to —·000568 with superposed fluctuations, very small fluctuations in Dec and V. F.
6	13–23	Small fluctuations in H. F.
9	17–23	Serrated wave in H. F. (—·000301) very small fluctuations in Dec.
10	13–20	Wave in H. F. (—·000668) small fluctuations in Dec. and V. F.
11	$13\frac{1}{2}$–$17\frac{1}{2}$	Wave in H. F. (—·000234) with small rapid superposed fluctuations, very smal fluctuations in Dec.
21	$5\frac{3}{4}$	Sudden increase of H. F. (·000084).
23	$10\frac{1}{4}$–18	Wave in H. F. (—·000101).
23	20–$22\frac{1}{4}$	Double wave in H. F. (—·000167 to +·000200) small fluctuations in Dec.

T. F. CLAXTON,
Director.

Weather in Indian Monsoon Region.

Meteorological conditions over the South-East Trades region departed irregularly from the normal. At Mauritius the mean pressure of the month was about average, but at Zanzibar there was some defect and at the Seychelles some excess. At all three stations the winds were somewhat more easterly than usual and at all of them the velocity was more or less below the normal. At Zanzibar and Mauritius the rainfall of the month was in some excess while at the Seychelles, on the contrary, the total rainfall was only about one-fifth of the normal. The following gives comparative data :—

June 1905.	Zanzibar.	Seychelles.	Mauritius.
	"	"	"
Departure of Pressure . . .	—·079	+·029	—·007
Actual mean wind direction . .	S 11°E	S 38°E	S 67°E
Normal mean wind direction . .	S 4°E	S 24°E	S 61°E
Actual mean wind velocity . .	155	274	211
Normal mean wind velocity . .	211	278	269
Rainfall departure	+0·82	—5·53	+0·62

For the Arabian Sea no comparative data are available, but the steamer reports of the month show the increase and extension of south-westerly winds over the Arabian Sea. The following reports have been received :—

The mail steamer *Egypt* left Aden on the 4th, and experienced from Long. 53° to Long. 68°E moderate to fresh south-westerly winds, occasional passing clouds and moderate south west sea and swell ; thence to arrival at Bombay on the morning of the 9th, light west-north-westerly and south-easterly winds, north-west swell and fine weather.

The S. S. *Reichstag* left Lamu on the 2nd, and experienced up to Lat. 2°N in Long. 47°E at midnight on the 3rd moderate to light south-easterly winds and passing clouds ; thence to Lat. 14°N in Long. 63°E at noon on the 8th moderate to fresh south-westerly winds, passing clouds and a moderate to high sea ; thence to arrival at Bombay on the 11th, light north-westerly winds and cloudy and squally weather.

The mail steamer *Arcadia* left Aden on the 11th, and experienced from Long. 53°E to Bombay moderate to fresh south-westerly winds, occasional passing clouds and a moderate to considerable sea and swell.

The mail steamer *Caledonia* left Aden on the 18th, and experienced from Long. 51° to Long. 65°E fresh south-westerly winds occasionally blowing strongly and considerable to heavy sea; thence to arrival on the morning of the 23rd moderate to gentle west-south-westerly winds, passing clouds and a moderate sea.

The mail steamer *Peninsular* left Aden on the 25th, and experienced from Long. 52° to Long. 68°E a strong monsoon blowing with a moderate to fresh gale, a high sea and overcast skies ; thence to arrival at Bombay on the morning of the 30th a moderate to fresh monsoon, considerable swell and light to heavy rain.

The S. S. *Safari* experienced from Lat. 1°N in Long. 45°E at noon on the 16th to Lat. 4° N in Long. 49°E at noon on the 17th moderate to light south-westerly winds and fine weather ; thence to Lat. 8° N in Long. 58°E at noon on the 20th a fresh monsoon occasionally blowing strongly and moderate to heavy swell ; thence to Lat. 13°N in Long. 68°E at noon on the 23rd a strong monsoon blowing with a moderate gale, cloudy weather, and passing light to heavy rain squalls and heavy sea ; thence to arrival at Goa on the 25th moderate to light south-westerly winds, overcast skies and passing heavy rain squalls.

The S. S. *Putiala* left Zanzibar on the 17th, and experienced up to Lat. 4°N in Long. 51°E at noon on the 21st moderate south-easterly winds and moderate to considerable sea ; thence to Lat. 16°N. in Long. 70°E at midnight on the 27th a fresh to strong monsoon, cloudy weather, heavy sea and a few passing showers ; thence to arrival at Bombay on the 29th a moderate north-westerly wind and cloudy squally weather with heavy westerly swell.

The above extracts show that during the first half of the month moderate to fresh south-west winds prevailed over the Arabian Sea as far as Long. 68°E or to about 400 miles from Bombay after which north-westerly winds were experienced. About the 15th the south-west winds became strong over the west and centre of the Arabian Sea and about the same date south-westerly winds extended over the east of the sea as far as the Bombay coast.

The following table shows the departure of the mean daily rainfall over India for comparison with the conditions, so far as they are known, over the equatorial belt and the Arabian Sea :—

Day of month (June).	Diurnal departure of pressure gradient from normal between Mauritius and Seychelles.	Diurnal departure of pressure gradient from normal between Seychelles and Bombay.	Easterly deflection of wind at Mauritius.	Easterly deflection of wind at Seychelles.	Departure of hourly wind velocity from normal at Mauritius.	Departure of daily wind velocity from normal at Seychelles.	Mean departure of rain over India.
1	2	3	4	5	6	7	8
1 . . .	+·032	—·068	+16	+21	—1·0	+112	—0·07
2 . . .	—·007	—·039	+ 7	+21	—0·6	+ 82	—0·14
3 . . .	—·077	—·008	+28	+21	—3·7	— 37	—0·09
4 . . .	—·113	—·041	+21	—24	—4·6	—123	—0·10
5 . . .	—·071	—·019	+ 3	—24	—1·0	— 62	—0·08
6 . . .	—·036	—·049	+21	+21	—0·5	— 47	—0·16

Day of month (June).	Diurnal departure of pressure gradient from normal between Mauritius and Seychelles.	Diurnal departures of pressure gradient from normal between Seychelles and Bombay.	Easterly deflection of wind at Mauritius.	Easterly deflection of wind at Seychelles.	Departure of hourly wind velocity from normal at Mauritius.	Departure of daily wind velocity from normal at Seychelles.	Mean departure of rain over India.
1	2	3	4	5	6	7	8
7	−·018	−·067	+25	+21	−1·9	+ 9	−0·13
8	−·039	−·051	+36	0	−2·0	− 38	−0·09
9	−·051	−·016	+20	0	−3·6	+ 16	−0·09
10	−·052	−·063	+ 7	+21	−3·2	− 77	+0·08
11	−·075	−·034	+26	+21	−4·0	− 30	−0·16
12	−·086	−·054	+41	+21	−5·4	+ 35	−0·22
13	−·121	−·041	+92	+21	−7·5	+ 87	−0·20
14	−·083	−·046	− 0	0	−6·0	− 36	−0·20
15	−·037	−·012	−10	+21	+1·7	+ 15	−0·19
16	−·035	+·019	+ 7	+21	+2·0	− 33	−0·17
17	−·030	+·044	+20	+21	−0·3	+ 42	−0·10
18	−·011	+·046	+12	+42	−1·1	+ 29	−0·20
19	−·013	+·031	+ 0	+21	−2·7	− 10	−0·06
20	−·040	+·039	− 6	−28	−9·0	− 36	−0·11
21	−·072	+·023	−50	0	−7·7	− 1	−0·08
22	−·073	−·029	− 1	+21	−5·4	+ 20	0·12
23	−·130	−·046	−59	+21	−5·2	+ 60	−0·10
24	−·098	−·004	−31	+21	−2·0	− 82	−0·10
25	−·034	+·012	−27	+21	−2·0	−·68	−0·12
26	−·003	+·024	− 9	0	−0·8	− 29	+0·02
27	+·026	+·057	+ 1	0	+0·9	− 30	+0·08
28	+·054	+·037	+ 2	+21	+0·8	+ 9	−0·13
29	+·069	+·023	+ 3	0	+1·9	− 40	−0·12
30	+·038	−·037	+12	+21	+0·7	+ 4	−0·03

On all days except the 1st and the 27th to 30th the barometric difference between Mauritius and the Seychelles was less than usual and between the Seychelles and Bombay it was below the average except between the 16th and 21st, and the 25th and 29th. The winds were more easterly than usual on most days of the month at the stations in the South-East Trades region, and the velocity generally below the normal. The Indian rainfall was less than usual on all days except the 10th, 26th and 27th. There is thus no obvious connexion between the meteorological conditions and changes over the equatorial belt and the rainfall over India and the same is true of the changes over south-east Europe and western Asia. From the 1st to the 4th a high pressure area covered central and southern Europe. On the 5th this gave way and the highest pressures were then transferred to Scandinavia and relatively low pressures were reported from southern Europe and the Black Sea region. Between the 13th and the 20th depressions passed eastward across central Europe to the Caspian area, but after the latter date pressure became high over south-east Europe and the Caspian and this condition was maintained till the close of the month.

In Egypt the mean pressure of the month exceeded the normal while temperature was lower than usual. The rainfall exceeded the normal in parts of the Sudan but the Nile at Wadi Halfa was below its mean height.

The following shows the daily departures of pressure from the normal at certain selected stations in the monsoon area and the mean departure of the whole number of stations :—

DEPARTURE FROM NORMAL AT

Date.	Calcutta.	Madras.	Colombo.	Bombay.	Lahore.	Bushire.	Aden.	Zanzibar.	Seychelles	Whole.
1	−·013	−·025	+·011	+·104	+·058	+·094	+·127	−·039	+·036	+·033
2	−·018	−·057	+·009	+·074	−·058	+·094	−·001	−·036	+·035	+·005
3	−·027	−·035	+·006	+·022	−·061	+·062	−·022	−·054	+·014	−·012
4	−·020	+·012	+·050	+·070	−·031	+·042	+·119	−·086	+·022	+·021
5	−·034	+·024	+·019	+·039	−·080	−·016	+·135	−·072	+·020	+·004
6	−·034	+·047	+·023	+·058	−·032	−·022	+·007	−·072	+·009	−·002
7	−·023	+·064	+·035	+·071	+·058	−·016	−·013	−·075	+·004	+·012
8	+·013	+·069	+·074	+·094	+·087	+·062	+·011	−·047	+·043	+·045
9	+·050	+·038	+·042	+·079	+·107	+·001	+·026	−·040	+·053	+·040
10	+·029	+·051	+·070	+·100	+·130	+·044	+·028	−·071	+·037	+·047
11	−·003	+·018	+·016	+·076	+·043	+·064	−·001	−·076	+·042	+·019
12	−·026	−·001	+·020	+·079	+·032	+·109	−·007	−·097	+·025	+·015
13	−·013	+·009	+·031	+·083	+·021	+·096	+·125	−·089	+·042	+·034
14	−·029	+·056	+·061	+·112	+·037	+·059	+·132	−·041	+·056	+·051
15	−·112	+·054	−·005	+·091	−·074	+·102	+·112	·031	+·079	+·024
16	−·138	+·010	+·029	+·055	−·074	+·099	+·048	−·018	+·074	+·009
17	−·124	+·008	+·008	+·031	−·092	+·004	−·005	−·034	+·075	−·014
18	−·080	−·008	+·017	+·034	−·071	+·038	−·003	−·004	+·080	0
19	−·075	−·035	+·035	+·006	−·078	+·074	+·006	+·012	+·037	−·002
20	−·060	−·064	−·021	−·034	−·135	+·041	+·044	−·008	+·005	−·026
21	−·012	−·083	−·028	−·008	−·033	+·090	+·041	−·021	+·015	−·004
22	−·006	−·032	−·005	+·036	−·039	+·085	+·068	−·002	+·007	+·013
23	+·002	−·004	+·032	+·071	·023	+·066	+·142	−·022	+·025	+·032
24	−·020	−·013	−·004	+·040	−·071	+·039	+·018	−·018	+·036	+·001
25	+·001	+·015	+·018	+·038	−·017	+·045	+·025	−·017	+·050	+·018
26	+·004	+·011	+·021	+·029	+·018	+·095	+·156	+·008	+·053	+·044
27	−·015	−·007	+·034	−·021	+·018	+·044	+·066	+·005	+·036	+·018
28	0	−·031	−·019	−·027	−·025	+·030	+·056	−·007	+·010	−·001
29	+·038	−·042	−·024	−·042	−·012	+·040	+·041	−·020	−·019	−·004
30	+·004	−·021	−·003	−·009	+·032	+·048	+·043	−·055	−·046	−·001

Depressions and cyclonic storms of the month.

There was only one storm of any importance during the month of June and that occurred on the last day.

Between the 1st and the 7th of June, 1905, the monsoon trough of low pressure over northern India occupied about its normal position though perhaps somewhat more to the southward than usual in the east—and a series of very feeble depressions formed within the trough and advanced slowly north-westward within it. None of these depressions was of any consequence though they were accompanied with occasional local rainfall. On the 8th, pressure increased over Central India, Rajputana and the east Punjab. A shoulder of high pressure was formed over this area and the low pressure trough was broken into two parts. When this change in the distribution was accomplished the low pressure trough was transferred northward to the foot of the hills and dry north-westerly and westerly winds were established over northern India.

These conditions prevailed more or less uninterruptedly till the 25th and during this period, *i.e.*, from the 10th to the 25th, dry weather and excessively high temperatures prevailed over the greater part of northern India, but more particularly over west Bengal and the Gangetic Plain.

Between the 26th and the 29th the low pressure trough moved southward from the hills into the Gangetic Plain. Easterly winds appeared in the submontane districts on the 27th, and extended over the Gangetic Plain to the north of the Ganges on the 28th and 29th. On the latter date the trough was well-defined and extended south-eastward from the Punjab to the north-west of the Bay. On this day the wind was easterly at Saugor Island, north-easterly at False Point and north-north-westerly at Gopalpur and a depression was developing over the north-west of the Bay. On the morning of the 30th a well marked storm was shown off the Orissa coast and pressure was ·162″ below the normal at False Point. Steep barometric gradients prevailed to the east and south-east of the centre. Moderate general rain had fallen in the neighbourhood of the storm and over the Central Provinces. The storm subsequently moved west-north-westward, north-westward and northward, reaching Pendra on the 1st July; Nowgong on the 2nd July and filling up over the submontane districts of the United Provinces on the 3rd.

When the storm was developing at the eastern extremity of the low pressure trough on the 29th and 30th June, the weather was rough over the head of the Bay. On board the F. L. V. *Torch* the weather on the morning of the 30th was threatening with a moderate east south-east gale at 7·30A.M. During the day the wind increased from a moderate south-south-east gale to a hard gale by midnight, with very heavy confused seas and violent rain squalls. The 1st July commenced with a hard south gale, very heavy passing rain squalls and very heavy confused sea. The force of the wind this day between 7 and 10 A.M. was from 8 to 10. The lowest reading of the barometer on the morning of the 30th was 29·400″ (corrected) at 6 A.M.

The *Luna* at the Mutlah station reported unsettled weather on the 29th; at 10 A.M. on the 30th the wind was south-easterly, but hauled to south at 6 P.M. with strong squalls during the night with a high sea. During the 1st and 2nd July the wind was very hard from south-south-west to south-west.

The *Canopus* at the eastern Channel station reported that the storm commenced on the 28th June and lasted to about 5 P.M. on the 2nd July. The wind worked round from east to west-south-west, the hardest part of it from south-west and west-south-west, the strongest squalls from 9 to 10 in force with a very high sea.

The depression presented no features of particular interest but it occasioned much needed rain over south-west Bengal and across the head of the Peninsula and broke down the excessive temperatures which had previously prevailed over these areas.

Pressure.

The 8 A.M. pressure of the Indian land area, on the mean of all stations, was ·007″ above the normal. There had consequently been a greater or less positive pressure departure from normal over India for the past eleven months.

The actual distribution of the mean 8 A.M. pressure is shown in Plate I. Pressure was highest (29·80″) over the south-west of the Peninsula, south Ceylon and the south of the Bay and was lowest (29·45″) over the south-west of the Punjab. The barometric gradient was somewhat steeper than usual and the trough of low pressure in northern India, at least in the western part of its course, lay further north than usual. The mean pressure was higher than usual over the Peninsula (except the extreme north-east), the central parts of India, Rajputana, Sind and Gujarat and was lower than usual over the upper Indus Valley, the north and east Punjab, the north Gangetic Plain, north-east India and Burma.

The departures from normal were considerable, both in the region of excess and that of defect, and amounted to 0·040″ or more at the following places:—

Station.	Positive departure from normal of pressure.	Station.	Negative departure from normal of pressure.
	″		″
Veraval	+·078	Yamethin	—·060
Rajkot	+·065	Minbu	—·058
Indore	+·064	Thayetmyo	—·052
Ahmedabad	+·062	Mandalay	—·044
Bhuj	+·059	Sibsagar	—·042
Ahmednagar	+·058	Bahraich	—·041
Pachpadra	+·058	Darbhanga	—·040
Surat	+·056		

STATION.	Positive departure from normal of pressure.	STATION.	Negative departure from normal of pressure
	"		"
Deesa	+ 055		
Mormugao	+ ·053		
Ratnagiri	+ 051		
Poona	+ ·050		
Neemuch	+ 049		
Ajmer	+ ·046		
Sambhar	+ ·045		
Bombay	+ ·045		
Bijapur	+ ·045		
Raichur	+ ·045		
Akola	+ ·044		
Khandwa	+ ·044		
Belgaum	+ 043		
Karwar	+ ·043		
Hyderabad (Sind)	+ ·043		
Malegaon	+ ·042		
Hoshangabad	+ ·041		

The mean excess was thus greatest over parts of north Bombay and the mean deficiency greatest over Central Burma.

The pressure conditions, relatively to the average, were in the case of the north-west Himalayas the opposite of those prevailing on the neighbouring plains, but were similar in other parts of the Indian region. Pressure exceeded the normal at the hill stations in the north-west Himalayas in Baluchistan, in Rajputana and in South India, but was lower than usual at the hill stations in the eastern Himalayas and in Burma. The vertical pressure gradient was slighter than the normal except in Burma, South India and Rajputana. The following gives data for ten pairs of stations:—

HILL STATION.	Departure from normal pressure.	PLAIN STATION.	Departure from normal pressure.	Departure of pressure difference.
	"		"	"
Quetta	+ ·018	Jacobabad	+ ·015	— ·003
Leh	+ ·023	Lahore	— ·012	— ·035
Murree	+ ·012	Peshawar	— ·012	— ·024
Simla	+ ·015	Ludhiana	— ·012	— ·027
Ranikhet	+ ·008	Bareilly	— ·010	— ·018
Chakrata	+ ·008	Roorkee	— ·007	— ·015
Darjeeling	— ·023	Dhubri	— ·033	— ·010
Lashio	— ·063	Bhamo	— ·025	+ ·037
Mount Abu	+ ·040	Deesa	+ ·055	+ ·015
Wellington	+ ·016	Coimbatore	+ ·022	+ 006

High presure conditions were as strongly marked over the countries to the westward of India, *i.e.*, in Asiatic Turkey, Persia and Arabia as in western India and the excess apparently extended into western Siberia where, on the average of the six stations Orenberg, Tashkent, Omsk, Barnaul, Tomsk and Irkutsk, the departure of June pressure from normal was +9 m. m. or +·035." To the southward of the Indian region the departures from normal were irregular, the Seychelles exhibiting some excess and Zanzibar and Mauritius some defect.

The following gives pressure departure data for the extra-Indian stations.

STATION.	Departure from normal of mean 8 A. M. pressure of June, 1905.
	"
Trincomalee	+ ·032
Colombo	+ ·018
Bushire	+ ·053
Jask	+ ·027
Muscat	+ ·043
Baghdad	+ ·029
Aden	+ ·046
Perim	+ ·059
Zanzibar	— ·029
Seychelles	+ ·009
Mauritius	— ·007

The most important abnormal features of the pressure distribution may be summed up as follows:—

(1) There was a slight general excess over the Indian area.

(2) Pressure was higher than usual over the Peninsula, the central parts of the country, Rajputana and north Bombay.

(3) Pressure was lower than usual over the submontane districts of north-west India, over north-east India and Burma.

(4) Barometric gradients were steeper than usual over India and the trough of low pressure in northern India was further north than usual.

(5) Pressure was in excess of the normal over the countries to the north and west of the Indian area, but the departures from normal were irregular in the South-East Trades region.

(6) The vertical pressure gradients were generally about the average or slighter than usual.

The following table gives the mean pressure departures

and anomalies of the month for the eleven meteorological divisions :—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of June, 1905.	Pressure anomaly, June, 1905.
	"	"
Burma Coast and Bay Islands	—·024	—·031
Burma Inland	—·048	—·055
Assam	—·034	—·041
Bengal and Orissa	—·028	—·035
Gangetic Plain and Chota Nagpur	—·020	—·027
Upper Sub-Himalayas	—·010	—·017
Indus Valley and North-West Rajputana	+·017	+·010
East Rajputana, Central India and Gujarat	+·049	+·042
Deccan	+·033	+·026
West Coast	+·039	+·032
South India	+·018	+·011

Temperature.

The mean maximum or day temperature of the month under review was normal or slightly below the normal over parts of the north-west dry area, of the south-west and south of the Peninsula, of Burma and Tenasserim and of Assam. The deficiency was generally small and exceeded 1° only at the following stations :—

STATION.	MEAN MAXIMUM TEMPERATURE.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°	°
Tavoy	82·5	84·8	—2·3
Rangoon	84·9	86·5	—1·6
Montgomery	108·4	110·0	—1·6
Tinnevelly	95·6	97·1	—1·5
Moulmein	83·2	84·6	—1·4
Coimbatore	88·7	89·9	—1·2
Mangalore	83·9	85·0	—1·1
Bassein	85·2	86·3	—1·1

In all other parts of the country the mean day temperatures exceeded the average and the excess was large over west and south-west Bengal and the whole of the central parts of the country where the usual rainfall was absent. The excess was more than 6° at the following large number of stations :—

STATION.	MEAN MAXIMUM TEMPERATURE.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°	°
Hazaribagh	102·7	92·5	+10·2
Chaibassa	106·4	96·2	+10·2
Ranchi	100·8	91·1	+ 9·7
Sambalpur	106·	97·3	+ 8·8
Balasore	100·6	91·9	+ 8·7
Seoni	102·8	94·2	+ 8·6
Sutna	107·1	98·7	+ 8·4
Hoshangabad	106·3	98·1	+ 8·2
Nagpur	106·5	98·3	+ 8·2
Raipur	105·2	97·2	+ 8·0
Chanda	106·4	98 5	+ 7·9
Gaya	107·5	99·6	+ 7·9
Mainpuri	108·7	101·2	+ 7·5
Cuttack	103·0	95·5	+ 7·5
Amraoti	104·5	97·2	+ 7·3
Benares	107·4	100·1	+ 7·3
Lucknow	107·5	100·5	+ 7·0
Allahabad	108·5	101·7	+ 6·8
Jhansi	109·6	102·8	+ 6·8
Nowgong	108·2	101·6	+ 6·6
Cocanada	101·5	95·2	+ 6·3
Saugor	103·9	97·8	+ 6·1
Cawnpore	107·2	101·1	+ 6·1

The mean day temperatures were higher than usual at most of the hill stations, but at the highest stations where the influence of the heavy snowfall of the past winter was still felt and where fresh snow fell in the neighbourhood during the month under review, there was some deficiency. The departures from normal exceeded 2° at the following places:—

Hill Station.	Mean maximum temperature.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°	°
Pachmarhi	94·8	85·9	+8·9
Ranikhet	81·3	77·9	+3·4
Darjeeling	67·5	65·2	+2·3
Gilgit	90·8	94·6	−3·8
Leh	69·3	73·1	−3·8
Kailang	69·4	71·7	−2·3

The following gives the highest maximum recorded in each division during the month together with the highest reading previously registered at the stations:—

Province or division.	Station.	Highest maximum temperature recorded in June, 1905.	Date on which recorded.	Highest maximum temperature recorded in June previous to 1905.	Year in which recorded.
		°		°	
Burma	Mandalay	103·1	12th	104·9	1891
Assam	Dibrugarh	101·7	8th	98·2	1904
Bengal	Midnapore	111·9	17th	112·4	1888
Orissa	Cuttack	112·5	18th	116·0	1872
Bihar	Gaya	113·0	26th	116·2	1878
Chota Nagpur	Chaibassa	113·9	15th	112·1	1895
U. P. of Agra and Oudh.	Jhansi	114·4	4th	119·2	1873
Punjab	Sialkot	117·0	30th	120·0	1876
N.-W.F. Province	Peshawar	117·0	29th	119·0	1880
Sind	Jacobabad	123·0	21st	126·0	1897
Rajputana	Bikaner	113·9	30th	119·8	1897
Gujarat (East)	Bhavnagar Para	108·2	20th	112·7	1901
Central India	Nowgong	113·0	4th	117·2	1878
Central Provinces	Nagpur	115·2	2nd	117·3	1878
Berar	Amraoti	110·4	1st	113·5	1903
West Coast	Bombay	94·0	23rd	98·5	1901
Bombay, Deccan	Sholapur	105·2	3rd	109·2	1898, 1900 and 1901.
Mysore	Chitaldroog	94·1	2nd & 6th	99·2	1900
Madras Coast	Masulipatam	110·7	2nd & 14th	115·9	1878
Madras Deccan	Cuddapah	108·8	3rd	111·3	1894 and 1900
South India	Trichinopoly	104·0	2nd	110·5	1888

The above shows that in Chota Nagpur and Assam, the temperatures recorded in June 1905, were higher than had been previously registered in that area in June.

The highest temperature recorded was 123° at Jacobabad on the 21st. This reading was 3° higher than the highest reading recorded in June 1904, but was 3° lower than the absolute maximum registered in June.

The mean minimum or night temperatures were normal or in slight defect of the average over Sind, the extreme south of the Peninsula and in parts of Assam and of North Bengal, but exceeded the average elsewhere. The excess was large over parts of north-western, central and north-eastern India and amounted to more than 5° at the following considerable number of stations:—

Station.	Mean minimum temperature.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°	°
Hazaribagh	82·4	75·8	+ 6·6
Ranchi	81·4	74·6	+ 6·8
Jhansi	90·5	84·0	+ 6·5
Gaya	86·6	80·2	+ 6·4
Sutna	87·0	81·1	+ 5·9
Sirsa	88·4	83·1	+ 5·3
Chaibassa	84·1	78·8	+ 5·3
Raipur	83·5	78·4	+ 5·1
Mainpuri	86·6	81·5	+ 5·1

At most of the hill stations in the north-west the mean minimum temperature was lower than usual and the deficiency amounted to 2° or more at the following places :—

HILL STATION.	MEAN MINIMUM TEMPERATURE.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°	°
Gilgit	65·6	70·0	— 4·4
Chaman	68·6	71·6	— 3·0
Leh	42·1	44·6	— 2·5
Kabul	56·4	58·7	— 2·3
Quetta	56·8	59·1	— 2·3

At the remaining hill stations the mean night temperature was generally higher than usual, but, except at Cherat (+3°·2) and at Pachmarhi (+2°·6) the departures from normal were small.

The departures of mean temperature from normal showed that the mean temperature of the month was normal or in trifling defect over Lower Sind, the south-west and south coasts of the Peninsula, Central and Lower Burma and parts of Assam and of North Bengal and was more or less in excess elsewhere. The excess was greatest over west Bengal and the adjoining parts of Central India, of the Central Provinces and of the United Provinces and amounted to over 6° at the following stations :—

STATION.	MEAN TEMPERATURE.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°	°
Hazaribagh	92·6	84·2	+ 8·4
Ranchi	91·1	82·9	+ 8·2
Chaibassa	95·3	87·5	+ 7·8
Gaya	97·1	89·9	+ 7·2
Sutna	97·1	89·9	+ 7·2
Sambalpur	95·8	89·0	+ 6·8
Jhansi	100·1	93·4	+ 6·7
Raipur	94·4	87·8	+ 6·6
Hoshangabad	95·1	88·5	+ 6·6
Seoni	91·1	84·8	+ 6·3
Mainpuri	97·7	91·4	+ 6·3

On the hills the mean temperature was lower than usual in the extreme north-west and higher than usual elsewhere. The deficiency was greatest at Gilgit (—4°·1), the excess greatest at Pachmarhi (+5°·8).

The following gives temperature departure data for the extra-Indian stations :—

STATION.	MEAN TEMPERATURE.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°	°
Trincomalee	85·0	85·0	0
Colombo	81·9	81·6	+ 0·3
Kabul	73·2	74·0	— 0·8
Kashgar	78·5	77·7	+0·8
Ispahan	78·6	78·2	+0·4
Bushire	86·2	86·2	0
Jask	89·0	89·5	— 0·5
Muscat	94·1	90·6	+ 3·5
Baghdad	91·9	88·6	+ 3·3
Aden	89·1	88·6	+ 0·5
Perim	89·9	88·4	+ 1·5
Zanzibar	77·8	77·3	+ 0·5
Seychelles	79·0	77·6	+ 1·4
Mauritius	68·9	68·7	+0·2

The mean temperature exceeded the normal in Asiatic Turkey and Arabia, but was about the average elsewhere.

The following table gives the mean temperature data for the month for the 57 meteorological divisions of India :—

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE.					DEPARTURE FROM NORMAL OF MONTH OF		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
BURMA	Tenasserim	83·5	75·2	79·3	8·3	15·9	—1·6	+1·0	—2·6
	Lower Burma (Deltaic)	85·1	76·5	80·8	8·6	16·9	—1·1	+0·1	—1·2
	Central do.	90·1	75·6	82·9	14·5	23·4	—0·9	+0·3	—1·2
	Upper do.	92·5	77·9	85·2	14·7	24·9	—0·4	+1·0	—1·4
	Arakan	85·8	78·2	82·0	7·6	17·2	—0·2	+0·1	—0·3

Province.	Division.	Actual temperature.					Departure from normal of month of		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Bengal and Assam.	Eastern Bengal	89·6	77·7	83·7	11·8	22·0	+1·6	0	+1·6
	Assam (Surma)	88·8	75·4	82·1	13·4	24·2	−0·6	−0·8	+0·2
	Do. (Hills)	74·5	64·3	69·5	10·2	17·9	...	...	...
	Do. (Brahmaputra)	88·5	76·2	82·4	12·4	23·3	−0·1	−0·5	+0·4
	Deltaic Bengal	96·4	81.6	89·0	14·8	28·3	+4·2	+2·2	+2·0
	Central do.	97·0	80·5	88·8	16·5	29·3	+3·0	+1·3	+1·7
	North do.	88·4	76·3	82·4	12·1	23·2	+0·2	+0·2	0
	Bengal Hills	65·3	53·1	59·2	12·3	21·8	+2·3	+1·1	+1·2
	Orissa	96·7	82·5	89·7	14·2	30·2	+6·3	+2·8	+3·5
	Chota Nagpur	104·8	83·4	94·1	21·4	35·5	+10·0	+6·2	+3·8
	South Bihar	105·0	84·9	95·0	20·0	33·9	+6·1	+4·3	+1·8
	North do.	97·0	79·7	88·4	17·3	32·4	+1·8	+0·5	+1·3
United Provinces of Agra and Oudh.	United Provinces (East)	108·0	85·7	96·9	22·3	33·5	+7·1	+3·5	+3·6
	South Oudh	107·5	85·7	96·6	21·8	37·0	+7·0	+4·4	+2·6
	North do.	103·3	82·9	93·2	20·4	41·6	+5·9	+3·7	+2·2
	United Provinces (Central)	108·5	87·8	98·2	20·7	34·8	+6·8	+5·3	+1·5
	Do. do. (West)	105·3	85·4	95·4	19·9	33·3	+2·9	+3·0	−0·1
	Do. do. (East Submontane)	100·1	81·4	90·8	18·7	36·1	+3·2	+1·7	+1·5
	Do. do. (West Submontane)	100·4	79·3	89·9	21·0	33·4	+2·7	+1·7	+1·0
	Do. do (Hills)	78·0	60·9	69·5	17·1	33·4	+2·8	+0·6	+2·2
Punjab	Punjab (South-East)	105·7	87·4	96·6	18·3	31·9	+2·5	+4·1	−1·6
	Do. (South)	105·6	85·5	95·6	20·1	39·6	+1·4	+5·3	−3·9
	Do. (Central)	108·9	83·7	96·3	25·2	42·7	+1·5	+4·4	−2·9
	Do. (Submontane)	107·3	82·3	94·8	25·0	41·8	+3·6	+3·1	+0·5
	Do. (Hills)	78·2	53·6	65·9	24·6	42·4	−0·9	−1·9	+1·0
	Do. (West)	108·4	84·7	96·6	23·6	43·4	+0·1	+1·3	−1·2
N.-W. F. Province	North-west Frontier Province	108·3	80·8	94·6	27·5	43·4	+1·4	+1·6	−0·2
Bombay and Malabar Coast Districts (Madras).	Malabar	84·2	75·5	79·9	8·8	17·6	−0·2	+0·3	−0·5
	Madras (South Central)	92·1	74·2	83·1	17·9	26·7	−0·5	+1·3	−1·8
	Coorg	73·5	63·4	68·5	10·1	23·4	+0·6	+0·1	+0·5
	Mysore	85·7	68·2	77·0	17·5	27·7	+1·3	+0·6	+0·7
	Konkan	87·4	78·6	83·0	8·8	18·6	+1·1	+0·9	+0·2
	Bombay Deccan	92·8	72·4	82·6	20·4	30·1	+4·0	+0·9	+3·1
	Hyderabad (North)	98·2	75·9	87·0	22·3	34·9	...	...	...
	Khandesh	97·6	74·2	85·9	23·4	33·4	+5·2	+1·1	+4·1
Central Provinces and Berar.	Berar	104·3	81·1	92·7	23·2	35·7	+6·6	+3·8	+2·8
	Central Provinces (West)	105·1	82·1	93·6	23·0	37·2	+7·1	+3·4	+3·7
	Do. do. (Central)	104·5	81·4	93·0	23·1	36·6	+7·7	+3·7	+4·0
	Do. do. (East)	104·5	83·1	93·8	21·4	35·7	+8·4	+5·0	+3·4
Bombay (North)	Gujarat (East)	101·2	81·5	91·4	19·7	27·3	+4·0	+1·0	+3·0
	Kathiawar and Cutch	95·6	80·3	88·0	15·4	22·4	−0·5	+0·2	−0·7
	Sind	104·0	81·8	92·9	22·2	33·9	+0·3	−0·9	+1·2
	Baluchistan Hills	93·9	58·0	76·0	36·0	51·9	−0·6	−2·1	+1·5
Rajputana and Central India.	Central India	103·7	82·8	93·2	20·9	30·9	+5·4	+3·8	+1·6
	Rajputana (East)	105·7	84·6	95·2	21·1	34·0	+4·1	+2·9	+1·2
	Do. (West)	105·5	83·0	94·2	22·5	37·8	+0·3	+0·4	−0·1
Madras	East Coast (North)	95·1	81·7	88·5	13·4	30·7	+4·0	+1·4	+2·6
	Hyderabad (South)	98·4	77·7	88·1	20·6	35·3	+2·9	+2·2	+0·7
	Madras (Central)	98·6	78·0	88·3	20·6	34·7	+1·4	+0·2	+1·2
	East Coast (Central)	103·3	82·7	93·0	20·7	35·2	+3·6	+1·5	+2·1
	Do. (South)	98·5	79·9	89·2	18·6	30·7	+2·7	+0·7	+2·0
	Madras (South)	94·5	78·9	86·8	15·6	24·0	−0·5	−0·1	−0·4

The above shows that the mean maximum temperature of the month was 100° or more over west Bengal, the United Provinces, the Punjab, the North-west Frontier Province, Sind, Gujarat, Rajputana, the Central Provinces, Central India and the central division of the East Coast. The highest mean maximum (108°·9) was reported from the Central Punjab. The mean temperature was highest over the central division of the United Provinces.

The following summarises the chief features of the mean temperature conditions of the month :—

(1) The mean maximum, the mean minimum and consequently also the mean temperature were normal or slightly below the normal over parts of the western desert, of the south-west and south of the Peninsula, of Central and Lower Burma and of Assam and North Bengal.

(2) The mean maximum, the mean minimum and consequently also the mean temperature exceeded the normal elsewhere.

(3) The excess, both by day and night, was greatest over west Bengal and parts of Central India, of the Central Provinces and of the United Provinces.

(4) The temperature was lower than usual at the north-western, but was generally higher than the average, at the remaining, hill stations.

The following table gives mean comparative data of temperature for the eleven meteorological provinces or divisions of India for June 1905 :—

Meteorological Province.	Departure from normal of		
	Mean maximum temperature, June 1905.	Mean minimum temperature, June 1905.	Mean temperature June 1905.
	°	°	°
Burma Coast and Bay Islands	−0·9	+0·4	−0·4
Burma Inland	−0·5	+0·9	+0·2
Assam	−0·2	−0·6	−0·4
Bengal and Orissa	+2·9	+1·3	+2·1
Gangetic Plain and Chota Nagpur	+6·9	+4·1	+5·5
Upper Sub-Himalayas	+2·8	+3·0	+4·5
Indus Valley and North-West Rajputana	+0·5	+0·5	+0·5
East Rajputana, Central India and Gujarat.	+3·6	+2·5	+3·1
Deccan	+6·0	+3·0	+4·5
West Coast	+0·6	+0·6	+0·6
South India	+1·5	+0·7	+1·1

During the first five days of the month under review rain was more or less confined to Burma and north-east India and the mean temperature over those areas was generally lower than usual during that period. On the 6th and 7th local rain fell on the outer ranges of the Himalayas and snow on the inner and higher ranges, while on the 8th, 9th and 10th there was local rain over parts of the Punjab, Rajputana and the United Provinces. The result was a very considerable fall of temperature over north-west India. The following gives comparative data from the 6th to the 12th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of						
	6th June.	7th June.	8th June.	9th June.	10th June.	11th June.	12th June.
	°	°	°	°	°	°	°
Punjab	+3·6	−1·5	−4·1	−7·5	−7·9	−5·4	−1·5
North-west Frontier Province	+3·6	−4·8	−4·3	−11·1	−7·8	−5·9	−3·1
Sind	+1·8	−0·8	−0·4	−2·9	−2·6	−1·8	−0·9
Baluchistan	−6·3	−7·6	−10·5	−3·2	−2·4	−0·2	−1·0
Rajputana	+0·6	+0·9	−3·5	−6·0	−6·5	−1·9	+1·2

The deficiency was thus greatest on the 9th and 10th. The maximum or day temperature was most affected by these conditions and at the following places was more than 15° below the average :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
9th June	Multan	86·3	108·9	−22·6
	Montgomery	92·3	111·8	−19·5
	D. I. Khan	89·3	108·7	−19·4
	Khushab	92·9	108·3	−15·4
10th "	Montgomery	88·8	111·6	−22·8
	Lahore	92·4	108·8	−16·4

Except in the north-west the mean temperature was generally more or less excessive—especially over the Central Provinces—but local rainfall reduced temperature to slightly below the normal in the Peninsula on the 10th and

11th. The following gives data for the Peninsular divisions for these two days :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF	
	10th June.	11th June.
	°	°
West Coast	— 1·7	— 1·8
Bombay Deccan	+ 1·8	— 3·8
Mysore	+ 0·4	— 3·7
Madras Coast	+ 2·5	+ 2·0
Madras Deccan	— 0·3	— 3·2
South India	— 2·6	— 3·4

Between the 13th and the 26th, owing to changes in the pressure distribution, dry westerly and north-westerly winds set in over considerable parts of northern India which are ordinarily under the influence of monsoon conditions at this time. Rain was hence generally confined to Burma, Assam and East Bengal though there was local rain over the hill and submontane districts of the Punjab between the 17th and 19th and on the 23rd, and at the west coast stations on most days. The result of this drier weather was an excess of temperature over the greater part of India. The following gives departure data for all divisions for each alternate day from the 12th to the 26th :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF							
	12th June.	14th June.	16th June.	18th June	20th June.	22nd June.	24th June.	26th June.
	°	°	°	°	°	°	°	°
Burma	+2·3	— 1·9	— 0·6	— 0·3	+ 1·1	+ 1·8	+ 0·8	— 0·3
Assam	+1·6	+ 1·9	— 2·9	— 2·0	— 1·5	+ 0·3	— 2·8	— 3·7
Bengal	+5·4	+ 3·4	+ 1·2	+ 0·6	+ 1·8	+ 2·5	+ 1·2	+ 2·4
Orissa	+6·1	+ 6·9	+11·7	+ 9·3	+ 9·4	+ 6·1	+ 4·1	+ 5·1
Bihar	+5·9	+ 4·6	+ 3·0	+ 1·4	+ 5·1	+ 5·7	+ 4·2	+ 2·2
Chota Nagpur	+9·3	+12·3	+11·9	+12·6	+11·9	+10·3	+11·8	+12·5
United Provinces of Agra and Oudh.	+3·3	+ 8·2	+ 6·3	+ 1·9	+ 3·8	+ 6·5	+ 8·6	+ 7·4
Punjab	—1·5	+ 5·0	+ 2·1	— 0·3	+ 4·4	+ 6·5	+ 6·8	+ 2·2
North-west Frontier Province.	—3·1	+ 2·5	+ 3·2	+ 3·8	+ 3·9	+ 3·9	+ 4·8	+ 0·7
Sind	—0·9	— 0·7	+ 1·2	— 1·4	+ 0·3	+ 0·7	— 1·5	— 1·5
Rajputana	+1·2	+ 5·0	+ 1·6	+ 1·7	+ 3·8	+ 7·4	+ 3·6	+ 4·2
Gujarat, East	+0·2	+ 0·8	+ 1·1	+ 1·4	+ 2·7	+ 2·7	+ 2·7	+ 2·8
Central India	+2·2	+ 6·3	+ 4·6	+ 5·2	+ 6·6	+ 8·2	+ 9·2	+ 9·0
Central Provinces	+5·5	+ 7·6	+ 5·8	+ 7·1	+ 9·7	+12·2	+10·3	+ 6·7

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF							
	12th June.	14th June.	16th June.	18th June.	20th June.	22nd June.	24th June.	26th June.
	°	°	°	°	°	°	°	°
Berar	+5·2	+ 4·9	+ 5·9	+ 6·6	+ 9·3	+11·1	+ 8·5	+ 4·8
West Coast	+1·9	+ 2·1	+ 1·8	+ 2·0	— 1·1	— 0·2	+ 1·3	— 0·8
Bombay Deccan	—2·1	+ 3·6	+ 1·9	+ 4·4	+ 5·0	+ 5·3	+ 4·5	+ 3·2
Mysore	—0·7	+ 1·3	+ 1·2	+ 0·5	— 2·0	+ 0·1	+ 2·3	+ 0·8
Madras Coast	+2·9	+ 4·8	+ 3·5	+ 4·3	+ 4·1	+ 3·3	+ 4·5	+ 2·7
Madras Deccan	—1·6	+ 2·8	+ 0·5	+ 2·0	+ 2·4	+ 2·6	+ 2·8	— 0·4
South India	+0·1	+ 1·7	+ 1·7	+ 1·3	— 6·0	— 0·6	+ 0·2	— 0·3

The above shows the fall which occurred over the Punjab and Sind between the 17th and the 19th owing to the rain in that area, as well as the excessive temperatures which prevailed over the west Bengal and the more central parts of the country owing to the absence of rain. The area of greatest excess of temperature lay over west Bengal from the 13th to the 20th, moved into the Central Provinces on the 21st and was shown there till the 23rd, reached the United Provinces by the 24th and lay there till the 26th. Excess was shown both in the day and night temperatures, but was, on the whole, more marked by day than by night. The departures of day temperature from normal amounted to +17°·5 or more at the following places on the following dates :—

DATE.	STATION.	MAXIMUM TEMPERATURE.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
14th June	Chaibassa	113·4	95·7	+17·7
15th „	Do.	113·9	95·0	+18·9
16th „	False Point	108·5	90·5	+18·0
17th „	Balasore	111·5	90·9	+20·6
	Chaibassa	112·4	93·9	+18·5
18th „	Cuttack	112·5	93·8	+18·7
	Balasore	109·0	90·7	+18·3
19th „	Cuttack	112·0	93·5	+18·5
21st „	Seoni	107·9	89·9	+18·0
22nd „	Nagpur	111·2	93·6	+17·6
	Seoni	106·9	89·3	+17·6
23rd „	Do.	106·4	88·8	+17·6
	Hazaribagh	106·1	88·5	+17·6
24th „	Chaibassa	109·4	91·9	+17·5
25th „	Hazaribagh	107·6	87·7	+19·9
26th „	Do.	106·1	87·3	+18·8
	Gaya	113·0	94·3	+18·7
	Chaibassa	109·9	91·5	+18·4

Between the 27th and the 29th the principal feature in the weather was the extension of rain over the Peninsula and the consequent reduction of mean temperature over that area. The following gives comparative data for these three days for the Peninsular divisions:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	27th June.	28th June.	29th June.
	°	°	
West Coast	−2·5	−2·7	−0·4
Bombay Deccan	+1·4	+1·3	−0·1
Mysore	0	−1·8	−2·0
Madras Coast	+0·4	−1·6	+0·5
Madras Deccan	−3·5	−2·3	−1·1
South India	−2·8	−2·6	0

Over Upper India there was a steady excess of temperature during these three days—greatest over the Gangetic Plain but also great at the submontane stations of the Punjab. The following gives data for northern India:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	27th June.	28th June.	29th June.
	°	°	
Assam	−2·9	+0·2	+2·5
Bengal	+2·9	+1·5	+1·0
Orissa	+5·6	+5·3	+1·8
Bihar	+3·1	+3·8	+6·2
Chota Nagpur	+11·8	+9·9	+7·7
United Provinces of Agra and Oudh	+7·8	+9·7	+10·7
Punjab	+4·0	+6·2	+8·5
North-west Frontier Province	+1·0	+3·7	+6·5
Sind	−0·8	−0·3	+0·7
Rajputana	+5·6	+8·7	+10·2
Gujarat, East	+3·2	+3·3	+3·1
Central India	+6·9	+9·1	+10·7

On the 30th a change occurred. A barometric depression appeared over the north-west of the Bay increasing rainfall over north-east India and the Peninsula with the result that the mean temperature was reduced to below the normal over the north-east of the Peninsula, at the same time that the area of greatest excess was transferred north-westward to the Punjab and Rajputana. The following gives data for all divisions for this day:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 30th June.	Mean minimum temperature, 30th June.	Mean temperature, 30th June.
	°	°	°
Burma	+0·1	+0·4	+0·3
Assam	+1·2	−0·7	+0·3
Bengal	+1·6	−0·1	+0·8
Orissa	−0·1	−1·1	−0·6
Bihar	+5·3	+1·9	+3·6
Chota Nagpur	+1·8	−0·5	+0·7
United Provinces of Agra and Oudh	+10·7	+4·5	+7·6
Punjab	+12·1	+8·2	+10·2
North-west Frontier Province	+8·6	+1·8	+5·2
Sind	+3·3	−0·1	+1·6
Rajputana	+12·6	+10·5	+11·6
Gujarat, East	+4·9	+3·2	+4·1
Central India	+13·3	+1·4	+7·4
Central Provinces	+7·3	−0·5	+3·4
Berar	+6·5	−0·5	+3·0
West Coast	+0·6	−0·2	+0·2
Bombay Deccan	+3·8	+1·7	+2·8
Mysore	−0·8	+0·5	−0·2
Madras Coast	+1·6	+0·2	+0·9
Madras Deccan	−0·3	−0·3	−0·3
South India	+0·6	+0·5	+0·6

Winds.

The wind, on the mean of the month, blew from about the normal direction at the Bay Islands and on the south Pegu coast, while on the Arakan coast the mean direction was more easterly than the average and the wind

exceptionally steady. The velocity was higher than usual. The following gives data of the stations in this area :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, June 1905.	Normal, June.	Actual percentage, June 1905.	Normal percentage, June.	Departure from normal, June 1905.	Actual, June 1905.	Normal, June.	Departure from normal, June 1905.
	°	°						
Port BBlair . .	S 59 W	S 45 W	89	78	+11	423	250	+173
Cocos Island .	S 21 W	S 35 W	90	91	— 1	750	...	...
Rangoon . .	S 14 W	S 24 W	57	71	—14	37	122	— 85
Diamond Island .	S 66 W	S 36 W	73	76	— 3	289	230	+ 59
Akyab . .	S 11 E	S 3 E	85	58	+27	117	91	+ 26

The mean wind was about normal on the Orissa coast, but was more southerly than usual at the head of the Bay. The steadiness was greater and the velocity higher than the average. This is shown below :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	June Actual, 1905.	Normal, June.	Actual percentage June 1905.	Normal percentage, June.	Departure from normal, June 1905.	Actual, June 1905.	Normal, June.	Departure from normal, June 1905.
Chittagong . .	S 9 W	S 24 E	72	61	+11	173	168	+ 5
Calcutta . .	S 2 E	S 3 W	65	59	+ 6	141	142	— 1
Saugor Island .	S 3 W	S 12 W	76	70	+ 6	436	382	+54
False Point . .	S 37 W	S 36 W	78	65	+13	313	300	+13

In the Gangetic Plain the wind was more westerly and steadier than usual. The following gives data for Allahabad :—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, June 1905.	Normal, June.	Actual percentage, June 1905.	Normal percentage, June.	Departure from normal, June 1905.
	"	"	%	%	
Allahabad	N 49 W	N 10 W	52	16	+36

In the upper Sub-Himalayas the mean winds varied between south-west and north-west and were almost every where steadier than usual, while in the Indus Valley the winds were approximately normal in direction, steadiness and velocity. In east Rajputana the wind, on the mean of the month, was more southerly and in East Gujarat more westerly than the average, while in both regions the steadiness and velocity exceeded the normal. The following gives data for Jaipur and Deesa :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, June, 1905.	Normal, June.	Actual percentage, June, 1905.	Normal percentage, June.	Departure from normal, June, 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°						
Jaipur . .	S 51 W	N 70 W	80	43	+37	186	163	+23
Deesa . .	S 59 W	S 44 W	91	66	+25	460	401	+ 59

The following gives data of the mean air movement over northern India :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, June 1905.	Normal percentage, June.	Departure from normal, June 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
Bay Islands . .	90	85	+ 5	423	250	+173
Burma . .	72	68	+ 4	148	148	0
Bengal . .	71	63	+ 8	250	231	+19
Chota Nagpur .	48	13	+35	237	223	+14
Orissa . . .	78	65	+13	313	300	+13
United Provinces of Agra and Oudh .	26	14	+12	87	96	— 9
Punjab . .	19	8	+11	58	77	—19
North-west Frontier Province . .	30	31	—1	69	106	—37
Rajputana . .	86	55	+31	323	282	+41
Sind . . .	73	66	+7	301	274	+27

The preceding data show that there was increased steadiness of the winds over northern India, but that the velocity varied irregularly from the average.

The mean wind direction was somewhat more northerly than usual at the Deccan stations, while the steadiness and velocity both generally exceeded the average. The

following gives data for those stations at which the increased northing was most marked :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, June 1905.	Normal, June.	Actual percentage, June, 1905.	Normal percentage, June.	Departure from normal, June, 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°						
Sholapur .	N 78 W	S 84 W	79	76	+ 3	385	329	+56
Akola .	N 58 W	N 69 W	84	68	+16	296	235	+61
Khandwa .	N 49 W	N 78 W	67	71	— 4	...	247	...
Nagpur .	N 66 W	N 82 W	63	55	+ 8	217	216	+ 1

Along the West Coast the velocity was slightly lower than usual, while the mean direction and steadiness were about average. In South India the mean conditions were very nearly normal.

The following gives data of the mean air movement over the Peninsula :—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, June, 1905.	Normal percentage, June.	Departure from normal, June 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
Central Provinces .	65	63	+ 2	217	232	—15
Berar	84	69	+15	302	249	+53
Bombay Deccan . .	83	77	+ 6	405	440	—35
Madras Deccan . .	78	76	+ 2	204	236	—32
West Coast . .	75	68	+ 7	184	255	—71
Mysore . . .	85	80	+ 5	235	240	— 5
Madras Coast . .	64	63	+ 1	174	211	—37
South India . . .	75	73	+ 2	155	120	+35

The preceding data show greater steadiness and generally less velocity of the wind over the Peninsular divisions.

At Quetta the wind was more northerly and lighter than usual. This is shown below :—

HILL STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, June, 1905.	Normal, June.	Actual percentage, June, 1905.	Normal percentage, June.	Departure from normal June, 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°						
Quetta . .	N 60 W	N 72 W	37	39	— 2	27	72	—45

At the Himalayan hill stations the winds were generally steadier than usual, but the mean directions varied irregularly from the average. The following gives data :—

HILL STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.		
	Actual, June, 1905.	Normal, June.	Actual percentage, June, 1905.	Normal percentage, June.	Departure from normal, June, 1905.
	°	°			
Leh . . .	S 48 W	S 81 W	47	34	+13
Srinagar . .	N 34 E	N 9 E	12	7	+ 5
Simla . . .	N 21 W	N 17 W	32	20	+12
Chakrata . .	S 3 E	S 66 W	80	48	+32
Ranikhet . .	S 77 W	S 69 W	68	46	+22
Katmandu . .	N 57 W	N 87 W	23	20	+ 3
Darjeeling . .	S 87 W	S 15 W	52	8	+44

The wind was generally stronger and steadier than the average at the central hill stations, but the mean directions were about normal. On the hills in South India the mean winds varied between west-south-west and west-north-west.

At Aden the wind was slightly more easterly and at Perim slightly more southerly than usual, while at both

stations the steadiness and velocity of the wind were below the normal. The following gives data:—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, June, 1905.	Normal, June.	Actual percentage, June, 1905.	Normal percentage, June.	Departure from normal, June, 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°						
Aden	S 10 E	S	48	57	− 9	200	223	−23
Perim	S 41 W	N 75 W	15	38	−23	292	322	−30

In the South-East Trades region the mean direction of the winds was unusually easterly while the velocity was normal or below the normal. This is shown below:—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, June, 1905.	Normal, June.	Actual percentage, June, 1905.	Normal percentage, June.	Departure from normal, June, 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	°	°						
Zanzibar	S 11 E	S 4 E	72	87	−15	155	211	−56
Seychelles	S 38 E	S 24 E	94	83	+11	274	278	+ 4
Mauritius	S 67 E	S 61 E				201	261	−60

The following were the principal abnormal features of the air movement:—

(1) Accompanying the increased barometric gradient were stronger and steadier winds than usual over a large part of the country.

(2) The mean winds were somewhat more southerly and easterly than the average at the head of the Bay.

(3) In northern India the mean directions were more westerly and in the Deccan more northerly than usual.

(4) The South-East Trades were somewhat more easterly than the average.

Humidity and Cloud.

The absolute humidity, on the mean of the month, exceeded the average over Gujarat and the western desert, the south of the Peninsula, Deltaic Bengal and a large part of Burma, and the Assam Valley and North Bengal. The excess was more than 0·05″ at the following stations:—

Province or division.	Station.	Absolute humidity,		
		Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
		″	″	
Gujarat	Bhuj	·936	·873	+·063
Western Desert.	Sirsa	·793	·710	+·083
Peninsula.	Cuddapah	·831	·758	+·073
	Kurnool	·787	·726	+·061
	Bellary	·697	·640	+·057
	Masulipatam	1·042	·950	+·092
	Cocanada	·921	·866	+·055
Deltaic Bengal.	Saugor Island	1·087	1·014	+·073
	Burdwan	1·002	·932	+·070
	Calcutta	1·041	·972	+·069
	Barisal	1·053	·984	+·069
Burma	Thayetmyo	·942	·874	+·068

The mean absolute humidity was in defect elsewhere, *i.e.*, over the Punjab, the whole of the interior of the country, the Deccan and the east and west coasts of the Peninsula. The deficiency exceeded 0·10″ at the following considerable number of stations:—

Station.	Absolute humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	″	″	
Cawnpore	·642	·836	−·194
Hazaribagh	·559	·739	−·180
Lucknow	·663	·837	−·174
Rawalpindi	·464	·620	−·156
Ranchi	·621	·762	−·141
Saugor	·567	·707	−·140
Raipur	·626	·762	−·136
Agra	·631	·764	−·133
Ludhiana	·602	·726	−·124
Allahabad	·710	·825	−·115
Sutna	·600	·714	−·114
Ambala	·685	·799	−·114
Sambalpur	·750	·859	−·109
Nowgong	·649	·756	−·107

The departures of the mean relative humidity from the normal exhibited a distribution generally similar to that of the departures of the absolute humidity. There was a slight excess of relative humidity over Gujarat and a large part of the western desert. The following gives data:—

Station.	Relative humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	%	%	
Bhuj	79	71	+8
Jacobabad	57	51	+6
Multan	53	48	+5
Bikaner	58	54	+4
Veraval	88	84	+4

The mean relative humidity was also in excess over the south of the Peninsula and Ceylon. This is shown below:—

Station.	Relative humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	%	%	
Kurnool	73	66	+7
Trincomalee	83	76	+7
Bellary	66	61	+5
Cuddapah	66	61	+5
Madura	69	64	+5

Finally it was in excess over Burma, Assam and East Bengal, but in this area the departures from normal were small. The following gives data:—

Station.	Relative humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	%	%	
Thayetmyo	88	83	+5
Diamond Island	86	83	+3
Mergui	94	91	+3
Moulmein	94	92	+2
Minbu	84	82	+2
Mandalay	77	75	+2
Bhamo	91	89	+2

In all other parts of the country the mean relative humidity was more or less in defect. The greatest deficiency was reported from west Bengal, the Central Provinces and the Gangetic Plain where not only was the mean absolute humidity in defect, but the mean temperature was much higher than usual. The following gives comparative data for those stations at which the deficiency was more than 15:—

Station.	Relative humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	%	%	
Hazaribagh	43	72	−29
Ranchi	50	76	−26
Lucknow	44	69	−25
Benares	48	72	−24
Raipur	44	68	−24
Cawnpore	42	65	−23
Saugor	43	65	−22
Sambalpur	52	74	−22
Gaya	54	75	−21
Nowgong	41	61	−20
Mainpuri	47	66	−19
Jubbulpore	47	65	−18
Seoni	49	67	−18
Chaibassa	58	76	−18
Hoshangabad	54	71	−17
Rawalpindi	33	50	−17
Agra	41	57	−16

At all the outer hill stations on the Himalayas, as well as at Quetta, Mount Abu and Pachmarhi the mean relative humidity was below the normal, but at the inner stations of Gilgit and Leh the mean relative humidity exhibited some excess. The following shows the principal departures from normal:—

Hill station.	Relative humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	%	%	
Pachmarhi	54	72	−18
Chakrata	54	71	−17
Simla	52	66	−14
Cherat	37	51	−14
Murree	39	52	−13
Ranikhet	60	73	−13
Quetta	41	49	− 8

The mean relative humidity was more than 90% and less than 40% at the following stations which places consequently outline the areas of greatest and least humidity on the mean of the month :—

Station.	Relative humidity over 90%.	Station.	Relative humidity less than 40 %.
	%		%
Mergui	94	Montgomery	39
Moulmein	94	Sutna	39
Bassein	93	Peshawar	35
Akyab	93	Khushab	34
Sirajganj	93	Rawalpindi	33
Tavoy	92		
Sibsagar	92		
Dhubri	92		
Rangoon	91		
Myitkyina	91		
Bhamo	91		
Tezpur	91		
Dibrugarh	91		
Cooch Behar	91		

At Aden and Perim both the absolute and relative humidities were in excess of the average. The following gives comparative data :—

Station.	Absolute humidity.			Relative humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	"	"		%	%	
Aden	·975	·879	+·096	68	64	+4
Perim	·993	·942	+·051	69	68	+1

At the Seychelles the absolute humidity was about normal, but the mean temperature having been in slight excess the mean relative humidity was below the average. At Mauritius both the absolute and relative humidities were in excess. This is shown below :—

Station.	Absolute humidity.			Relative humidity.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
	"	"		%	%	
Seychelles	·772	·781	—·009	75	79	—4
Mauritius	·563	·538	+·025	80	76	+4

The following sums up the chief abnormal features of the humidity conditions of the month :—

(1) The air was drier than usual over the Punjab, the interior of India, the Deccan and the east and west coasts of the Peninsula.

(2) It was drier than usual at most of the hill stations.

(3) Owing partly to the above and partly to the high temperature prevailing, the mean relative humidity was in large defect over west Bengal, Central India, the Central and United Provinces and the submontane Punjab.

(4) The mean relative humidity was in trifling excess over the western desert, the south of the Peninsula, Burma, Assam, and East Bengal.

The following gives actual and departure data of the mean aqueous vapour pressure and mean relative humidity of the nine meteorological provinces for June, 1905 :—

Meteorological Province.	Mean absolute humidity.		Mean relative humidity.	
	Average actual, June, 1905.	Departure from normal, June, 1905.	Average actual, June, 1905.	Departure from normal, June, 1905.
	"	"	%	
Burma Coast and Bay Islands	·908	—·017	88	— 1
Bengal and Orissa	1·007	+·012	78	— 6
Gangetic Plain and Chota Nagpur	·602	—·138	40	—21
Upper Sub-Himalayas	·625	—·030	46	— 7
Indus Valley and North-West Rajputana	·703	—·034	49	— 3
East Rajputana, Central India and Gujarat.	·642	—·054	45	— 8
Deccan	·647	—·033	57	— 8
West Coast	·897	—·004	80	— 5
South India	·722	+·016	71	— 0

The mean 8 A.M. cloud amount of the month was generally in defect of the average, but there was slightly more cloud than usual over the interior of Burma and the south Burman coast, within a narrow band over the interior of the south of the Peninsula, over parts of Kathiawar and Lower Sind, over the centre of the

Gangetic plain and over North and Central Bengal. The following gives comparative data to illustrate these conditions :—

Province or division.	Station.	Mean cloud amount. Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
Burma	Yamethin	9·2	5·2	+4·0
	Minbu	7·1	5·7	+1·4
	Moulmein	9·3	7·9	+1·4
	Bassein	9·1	8·0	+1·1
	Mandalay	7·6	6·6	+1·0
Peninsula	Hyderabad (D)	7·2	6·2	+1·0
Kathiawar	Bhuj	6·9	5·0	+1·9
	Ahmedabad	7·7	6·2	+1·5
Lower Sind	Kurrachee	6·2	5·2	+1·0
Gangetic Plain	Mainpuri	8·0	4·9	+3·1
	Sutna	6·2	4·6	+1·6
Bengal	Jalpaiguri	7·2	5·2	+2·0
	Bogra	7·7	6·7	+1·0
Assam	Dhubri	9·1	8·1	+1·0

Over the whole of the remainder of the Indian area the mean cloud amount at 8 A.M. was in defect of the average. The deficiency was greatest and 2·0 or more in amount over Deltaic Bengal, across the head of the Peninsula and over a considerable area of upper India. This is shown below :—

Station.	Mean cloud amount. Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
Lucknow	0·7	5·8	—5·1
Benares	0·7	5·6	—4·9
Barisal	3·2	8·1	—4·9
Sirsa	0·1	4·5	—4·4
Veraval	2·5	6·9	—4·4
Ahmednagar	3·0	6·5	—3·5
Allahabad	2·4	5·8	—3·4
Bareilly	1·0	4·4	—3·4
Patna	2·5	5·8	—3·3
Jaipur	0·9	4·2	—3·3
Chittagong	4·6	7·8	—3·2
Ludhiana	0·2	3·3	—3·1
Dehra Dun	1·9	5·0	—3·1
Hyderabad (S)	0·7	3·8	—3·1
Gorakhpur	1·8	4·9	—3·1
Malegaon	3·1	6·2	—3·1
Hoshangabad	2·9	6·0	—3·1

At the hill stations except those in the north-east and south the mean cloud amount was smaller than usual. The departures from normal exceeded 2·0 at the following places :—

Hill Station.	Mean cloud amount. Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
Ranikhet	1·5	5·9	—4·4
Pachmarhi	3·7	6·5	—2·8
Simla	2·5	5·0	—2·5
Murree	1·1	3·5	—2·4
Wellington	9·7	6·5	+3·2

The following table gives data of the stations at which the mean cloud amount of the month was more than 9·0 and less than 0·8 :—

Station.	Mean cloud amount over 9·0	Station.	Mean cloud amount less than 0·8.
Myitkyina	9·9	Benares	0·7
Toungoo	9·8	Lucknow	0·7
Dehri	9·5	Sialkot	0·7
Moulmein	9·3	Ambala	0·7
Yamethin	9·2	Montgomery	0·7
Bassein	9·1	Hyderabad (Sind)	0·7
Dhubri	9·1	Patiala	0·6
		Multan	0·6
		Arrah	0·5
		Kotah	0·4
		Ludhiana	0·2
		Sirsa	0·1
		Jacobabad	0

The above stations hence define the areas of least and greatest serenity on the mean of the month.

At Aden the mean cloud amount was very small and less than the average. This is shown below:—

Station.	Mean cloud amount.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
Aden	0·8	1·7	—0·9

In the South-East Trades region the weather was also finer than usual and the mean cloud amount less than the average at the Seychelles. The following gives data:—

Station.	Mean cloud amount.		
	Actual, June, 1905.	Normal, June.	Departure from normal, June, 1905.
Seychelles	5·3	7·1	—1·8
Mauritius	5·2	5·0	+0·2

The principal features of the abnormal cloud distribution were as follows:—

(1) The mean 8 A.M. cloud amount of the month exceeded the normal over North and Central Bengal, the interior and south of Burma, the centre of the Gangetic Plain and parts of Kathiawar and of Lower Sind.

(2) The sky was clearer than usual of cloud in all other parts of the Indian land area.

(3) The deficiency was greatest over Deltaic Bengal, upper India and across the head of the Peninsula.

(4) The sky was also clearer than usual over the Gulf of Aden and generally in the South-East Trades region:—

The following table gives actual and departure data of the mean cloud amount of the nine meteorological provinces for June 1905:—

Meteorological Province.	Mean cloud amount.	
	Average actual, June, 1905.	Departure from normal, June, 1905.
Burma Coast and Bay Islands	8·6	+0·3
Bengal and Orissa	6·6	—1·2
Gangetic Plain and Chota Nagpur . . .	5·3	—1·2
Upper Sub-Himalayas	2·0	—1·3
Indus Valley and North-West Rajputana . .	2·1	—0·4
East Rajputana, Central India and Gujarat . .	2·1	—2·5
Deccan	5·3	—1·5
West Coast	5·4	—1·7
South India	7·1	—0·4

Rainfall.

During the first five days of the month the weather was generally rainless except over Burma and parts of north-east India where rain was falling. Between the 6th and the 9th local rain fell over a large part of the country, and on the 10th monsoon rainfall appeared on the Malabar and Kanara coasts. The monsoon current withdrew again quickly and generally dry weather prevailed except in Burma, East and North Bengal and the West Coast until the 18th. On the 19th monsoon rainfall again appeared in Malabar, but it was not till the 26th that rain in considerable amounts extended to Bombay. On the 29th and 30th a depression appeared over the north-west of the Bay and not only ushered in the rains over north-east India, but drew the currents into the central parts of the country and gave local rain to the Central Provinces and parts of Central India.

The principal periods of rainfall were hence as follows:—

(1) Rain fell almost daily in Burma.

(2) The 6th and 7th when rain fell on the submontane plains and snow and rain on the north-west hills.

(3) The 10th when heavy rain fell on the south-west coasts.

(4) The 15th to 19th when rain again fell in the north-west hill and submontane districts.

(5) The 19th to the 30th when moderate rain fell on the south-west and west coasts.

(6) The 28th to the 30th when scattered rain occurred except in the north-west, partly owing to a cyclonic storm which appeared over the north-west of the Bay.

The actual distribution of rain for the month, as shown by the meteorological observatories, is given in Plate VII. Actually or practically no rain fell during the month over the Kathiawar coast, Lower Sind, the Peshawar district, the Cawnpore district, parts of west Bengal and parts of the south Madras coasts. From these areas of

light precipitation the amounts increased and at Mangalore the rainfall of the month measured 51·78″, at Tavoy 71·30″ and at Cooch Behar 52·02″.

The following table gives comparative rainfall data for the eleven meteorological provinces:—

METEOROLOGICAL PROVINCE.	RAINFALL. Mean actual for June, 1905.	Mean normal, for June.	Departure from normal, June, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands	32·90	27·58	+8·36*	+30
Burma Inland	8·19	6·65	−0·40*	− 6
Assam	17·26	16·81	+0·45	+ 3
Bengal and Orissa	16·30	20·87	−4·57	−22
Gangetic Plain and Chota Nagpur.	1·05	7·36	−6·31	−86
Upper Sub-Himalayas	1·28	4·25	−2·95*	−70
Indus Valley and North-West Rajputana.	0·28	0·93	−0·65	−70
East Rajputana, Central India and Gujarat.	0·56	4·67	−4·11	−88
Deccan	3·10	6·55	−3·59*	−55
West Coast	28·29	27·94	+0·35	+ 1
South India	2·30	2·71	−0·41	−15

* A reference to Table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

The following table gives comparative rainfall data for the 57 rainfall divisions:—

PROVINCE.	DIVISION.	NUMBER OF RAINY DAYS. Average actual, June, 1905.	Average normal, June.	RAINFALL. Average actual, June, 1905.	Average normal, June.	Departure from normal, June, 1905.
				Inches.	Inches.	Inches.
BURMA	Tenasserim	28·4	25·3	52·57	38·48	+14·09
	Lower Burma (Deltaic)	23·3	22·8	24·28	20·43	+3·85
	Central do.	14·7	16·2	11·15	10·29	+0·86
	Upper do.	8·6	9·4	6·19	6·53	−0·34
	Arakan	22·1	24·1	39·15	40·64	−1·49
BENGAL AND ASSAM	Eastern Bengal	11·8	16·3	10·32	17·99	−7·67
	Assam (Surma)	23·9	20·8	30·73	24·33	+6·40
	Do. (Hills)	18·3	20·7	19·97	30·22	−10·25
	Do. (Brahmaputra)	17·1	16·0	15·54	15·31	+0·23
	Deltaic Bengal	6·2	12·9	3·46	11·06	−7·60
	Central do.	6·0	11·9	3·37	10·47	−7·10
	North do.	14·7	15·7	22·25	20·96	+1·29
	Bengal Hills	18·6	19·5	15·19	21·05	−5·85
	Orissa	5·4	10·5	3·75	9·34	−5·59
	Chota Nagpur	3·3	10·6	1·58	9·27	−7·69
	Bihar (South)	1·2	7·9	0·59	6·99	−6·40
	Do. (North)	4·1	9·0	2·96	8·82	−5·86
UNITED PROVINCES OF AGRA AND OUDH.	United Provinces (East)	1·0	6·0	0·26	5·04	−4·78
	Oudh (South)	1·5	5·3	0·40	4·87	−4·47
	Do. (North)	2·1	6·3	0·74	5·74	−5·00
	United Provinces (Central)	1·1	5·1	0·33	4·44	−4·11
	Do. (West)	1·7	3·6	0·52	2·67	−2·15
	Do. (Submontane, East)	2·1	7·1	1·13	6·59	−5·46
	Do. (Do., West)	3·4	6·1	1·54	5·71	−4·17
	Do. (Hills)	7·2	10·5	4·74	8·58	−3·84
PUNJAB	Punjab (South-East)	2·0	3·4	0·79	2·45	−1·66
	Do. (South)	1·8	2·6	0·81	1·88	−1·07
	Do. (Central)	1·8	2·4	0·46	1·67	−1·21
	Do. (Submontane)	2·2	3·6	0·84	2·79	−1·95
	Do. (Hills)	5·1	6·6	2·06	4·76	−2·70
	Do. (West)	1·5	1·4	0·50	0·75	−0·25
NORTH-WEST FRONTIER PROVINCE.	North-west Frontier Province	0·6	1·7	0·20	0·98	−0·78

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, June, 1905.	Average normal, June.	Average actual, June, 1905.	Average normal, June,	Departure from normal, June, 1905.
				Inches.	Inches.	Inches.
Bombay and Malabar Coast Districts (Madras).	Malabar	21·6	23·9	37·18	35·54	+ 1·64
	Travancore	20·4	...	25·04	...	...
	Madras (South Central)	3·3	3·8	1·64	1·96	−0·32
	Coorg	18·7	...	18·56	...	...
	Mysore	6·2	6·7	3·01	4·22	−1·21
	Konkan	12·4	18·6	11·56	26·62	−15·06
	Bombay Deccan	4·9	8·8	2·97	6·01	−3·04
	Hyderabad (North)	5·6	8·1	3·52	5·61	−2·09
	Khandesh	3·9	8·0	2·36	5·71	−3·35
Central Provinces and Berar.	Berar	4·4	8·2	2·56	5·69	−3·13
	Central Provinces (West)	5·8	8·7	3·22	7·13	−3·91
	Do. do. (Central)	3·6	9·0	1·88	7·80	−5·92
	Do. do. (East)	3·6	9·6	1·35	8·83	−7·48
Bombay (North).	Gujarat (East)	1·5	7·0	0·83	6·86	−6·03
	Kathiawar and Cutch	0·9	4·5	0·56	4·22	−3·65
	Sind	0	0·6	0	0·41	−0·41
	Baluchistan Hills	0·1	0·6	0·04	0·30	−0·26
Rajputana and Central India.	Central India (East)	2·0	7·0	0·97	6·78	−5·81
	Rajputana (East), Central India (West)	1·3	4·2	0·53	3·17	−2·64
	Rajputana (West)	0·5	2·1	0·19	1·39	−1·20
Madras	East Coast (North)	5·3	7·0	3·45	5·08	−1·63
	Hyderabad (South)	6·2	6·8	4·38	4·05	+0·33
	Madras (Central)	4·8	4·5	3·00	2·54	+0·46
	East Coast (Central)	4·2	2·8	2·71	1·51	+1·20
	East Coast (South)	3·3	3·3	1·65	1·94	−0·29
	Madras (South)	3·1	2·0	1·44	0·97	+0·47

The preceding data show that in 44 divisions the total rainfall of the month was below the normal and in 10 it was in excess. The excess amounted to more than 30% in the divisions for which comparative data are given below:—

Division.	Rainfall.			
	Average actual, June, 1905.	Average normal, June.	Departure from normal.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Tenasserim	52·57	38·48	+14·09	+37
East Coast Central	2·71	1·51	+1·20	+79
Madras South	1·44	0·97	+0·47	+48

The deficiency amounted to 80% in the following large number of divisions:—

Division.	Rainfall.			
	Average actual, June, 1905.	Average normal, June.	Departure from normal, June, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Chota Nagpur	1·58	9·27	−7·69	−83
South Bihar	0·59	6·99	−6·40	−92
United Provinces, East	0·26	5·04	−4·78	−95
South Oudh	0·40	4·87	−4·47	−92
North Oudh	0·74	5·74	−5·00	−87
United Provinces, Central	0·33	4·44	−4·11	−93
„ „ West	0·52	2·67	−2·15	−81
„ „ East Submontane	1·13	6·59	−5·46	−83
Central Provinces, East	1·35	8·83	−7·48	−85
Gujarat, East	0·83	6·86	−6·03	−88
Kathiawar and Cutch	0·56	4·22	−3·66	−87
Sind	0	0·41	−0·41	−100
Baluchistan Hills	0·04	0·30	−0·26	−87
Central India, East	0·97	6·78	−5·81	−86
Rajputana, East, Central India, West. West Rajputana	0·53	3·17	−2·64	−83
	0·19	1·39	−1·20	−86

The relative deficiency was thus greatest in Sind, the east of the United Provinces, the central division of the United Provinces, South Oudh and South Bihar and the departure of the rainfall of the whole Indian area (excluding the hill districts) from the normal as determined from the fifth figure column of the table on pp. 179 and 180 was—2·48″.

Rain fell practically daily over Lower Burma, Central Burma, Arakan and the hill districts, while in Upper Burma there was local rain during the first five days and scattered showers between the 13th and 30th. The rainfall of the month was in excess in Tenasserim and normal elsewhere.

There were no exceptionally heavy falls during the month, but at the following places on the following dates amounts exceeding 6″ in 24 hours were recorded:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Akyab	Rathedaung	1st June	6·05
	Maungdaw	3rd „	6·35
	Akyab	„ „	6·25
Sandoway	Sandoway	4th „	7·94
Upper Chindwin	Tamu	„ „	7·78
Akyab	Maungdaw	„ „	6·67
Thaton	Thaton	13th „	9·25
	Pa-an	„ „	6·80
	„	17th „	8·60
	Thaton	„ „	6·60
Tavoy	Thayetchaung	18th „	8·00
Thaton	Kyaikto	„ „	6·76
Tavoy	Tavoy	19th „	9·30
Akyab	Pabru	22nd „	7·28
Sandoway	Sandoway	24th „	7·76
	Taungup	„ „	7·23
	Gwa	26th „	10·27
Tavoy	Thayetchaung	„ „	8·00
Kyaukpyu	Kyaukpyu	28th „	7·04
Sandoway	Taungup	„ „	6·40

In Assam the periods of most general rain occurred between the 3rd and the 10th, the 15th and the 20th and the 22nd and the 30th. The total fall of the month was heavier than the normal in the Surma Valley, normal in the Brahmaputra Valley and lighter than usual on the hills. At Cherra Poonjee the total fall of the month was 88·01″ instead of the average 105·12″ and the heaviest amounts in 24 hours recorded at that station were 13·24″ on the 25th, 14·08″ on the 16th and 14·95″ on the 26th. On the plains the following falls of over 7″ in 24 hours were recorded during the month.—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches
Sylhet	Sephinjuri Bil	4th June	8·10
	Habiganj	5th „	8·60
Cachar	Koyah	„ „	7·03
Sylhet	Lala-Khal	24th „	9·95
Kamrup	Bajali	„ „	7·50
Sylhet	Lala-Khal	25th „	10·35

In Bengal the rainfall of the month was normal in the north division, but was deficient elsewhere. Showery periods prevailed between the 1st and the 10th, the 15th and the 21st, and the 24th to the 30th, but the only days of general rain were the 29th and 30th, when the cyclonic storm lay over the north-west of the Bay. Monsoon weather prevailed fairly continuously over North Bengal and the hill districts and intermittently over East Bengal, while it was hardly felt in Bihar and Chota Nagpur. There were consequently few heavy rainfalls except in the east and north where the following amounts exceeding 6·00″ in 24 hours were measured on the following dates:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Noakhali	Harishpur	5th June	6·12
Jalpaiguri	Alipur Duar	8th „	7·65
Noakhali	Harishpur	9th „	6·62
Jalpaiguri	Buxa	12th „	6·13
Cooch Behar	Mickliganj	13th „	6·05
	Cooch Behar	15th „	6·65
Jalpaiguri	Bhagatpur	20th „	6·12
Mymensingh	Durgapur	23rd „	6·37
	Netrakona	„ „	6·20
Cooch Behar	Fulbari	„ „	6·04
	Mickliganj	25th „	7·62
	Dinhatta	„ „	6·24

Local rain was received over the United Provinces between the 3rd and the 8th, the 17th and the 21st, the 23rd and the 26th, and on the 30th. Rain was general only in the submontane division and the total rainfall of the month throughout the whole of these provinces was largely below the average. The only amounts exceeding

3″ in 24 hours were recorded in the submontane division and were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Naini Tal	Haldwani	18th June	4·02
	Kathgodam	" "	3·87
	Naini Tal	" "	3·05
Almora	Chaukuri	29th "	4·52
Dehra Dun	Dehra (Asiyum)	" "	3·14

In the Punjab there was local rain between the 6th and the 9th, the 16th and the 19th, and on the 23rd, 26th and 30th. The rainfall was most general during the first two showery periods when the following amounts exceeding 1·20″ in 24 hours were recorded:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Patiálá State	Gujran	8th June	3·05
Sialkot	Zafarwal	" "	1·47
Ferozepore	Nathana	" "	1·28
Karnal	Gulah	17th "	1·65
	Thanesar	" "	1·30
Ambala	Náráingarh	18th "	1·64

The total fall of the month was largely below the normal in all parts of the Province.

There was practically no rain during the month in the Peshawar district of the North-west Frontier Province, but in the remaining districts local rain was received between the 21st and the 25th. The total rainfall of the month was only about one-fifth of the normal and there were no heavy falls.

Light local rain occurred in the Zhob Valley between the 6th and the 9th, but otherwise the month was rainless in Baluchistan.

In Kashmir the weather was less showery than usual, and the total rainfall of the month was considerably below the normal.

In Rajputana some local rain was received between the 1st and the 3rd, the 6th and the 10th, the 17th and the 19th and again at the end of the month. The total fall of the month was much less than usual, as is shown by the following comparative data for the larger states:—

State.	Rainfall. Average actual, June, 1905.	Average normal, June.	Departure from normal, June, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Jaisalmer	0·12	0·67	—0·55	— 82
Jodhpur	0·20	1·46	—1·26	— 86
Bikaner	0·24	1·65	—1·41	— 85
Jaipur	0·28	2·34	—2·06	— 88
Alwar	0·32	2·42	—2·10	— 87
Bharatpur	1·39	2·84	—1·45	— 51
Dholpur	0·65	2·95	—2·30	— 78
Karauli	0·44	3·87	—3·43	— 89
Kotah	0·37	5·42	—5·05	— 93
Jhalawar	2·17	5·38	—3·21	— 60
Ajmer-Merwara	0·20	2·60	—2·40	— 92
Udaipur	1·06	4·01	—2·95	— 74
Sirohi	0·24	3·71	—3·47	— 94

In Central India there was no general rain during the month though there were occasional scattered showers. The total for the month was very light and much below the normal. The following gives comparative data:—

State.	Rainfall. Average actual, June, 1905.	Average normal, June.	Departure from normal, June, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Indore	2·52	6·33	—3·81	— 60
Rutlam	1·46	5·22	—3·76	— 72
Bhopal Agency	1·17	8·32	—7·15	— 86
Gwalior	1·05	5·65	—4·60	— 81
Rewah	0·40	7·07	—6·67	— 94
Bundelkhand	0·49	7·75	—7·26	— 94

In the Central Provinces moderately general rain fell during the last few days of the month when the weather was influenced by the depression developing at the head of the Bay, but at other times the weather was dry with a few passing showers. The total fall for the month was everywhere below the normal, but especially so over the central and eastern divisions. Falls exceeding 3″ in 24

hours were recorded at the following places on the following dates:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Chhindwara	Tamia	14th June	4·04
Chanda	Allapalli	25th „	5·10
	Sirocha	26th „	3·52
	Allapalli	28th „	4·63
Wardha	Arvi	30th „	6·00
Feudatory States	Sonepur	„ „	4·38
Balaghat	Lanji	„ „	3·30

On the Bombay coast the weather was dry between the 1st and the 8th; showery between the 9th and the 11th; and the 20th and 24th, and rainy between the 15th and the 19th, and the 25th and the end of the month. The total fall for the division for the month was less than half the average and the only amounts exceeding 5″ in 24 hours were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
North Kanara	Karwar	10th June	5·65
Ratnagiri	Devgad	21st „	6·60
North Kanara	Karwar	„ „	5·66
	„	22nd „	5·44
	Ankola	„ „	5·42
Savantavadi	Banda	26th „	5·31

In the interior of the Bombay Presidency fairly steady local rain occurred between the 9th and the 12th, the 20th and 23rd, and the 26th and the 30th. As in the coast districts the total rainfall of the Deccan and Khandesh was only about half the average and the only heavy falls (exceeding 3″ in 24 hours) were as follows:

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Dharwar	Ron	11th June	4·60
Belgaum	Hukeri	„ „	4·18
Kolhapur, etc	Mudhol	„ „	3·33
Dharwar	Ron	22nd „	3·29
Sholapur	Karmala	29th „	3·75
Khandesh	Jamner	„ „	3·23

In Gujarat and Kathiawar there were showers between the 7th and 9th on the 17th, and between the 26th and the 30th. The last was the only important fall and during it the following amounts exceeding 1·50″ in 24 hours were registered:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Surat	Valod	28th June	2·69
Mahi Kantha	Mohanpur	„ „	2·52
Rewa Kantha	Wadasnior	„ „	1·75
Surat	Mandvi	„ „	1·70
Kathiawar	Chuda	„ „	1·70
Mahi Kantha	Sadra	29th „	1·52

The total fall in these areas was only about one-eighth of the normal and in Sind there was no rain throughout.

In Mysore moderately general rain fell between the 4th and the 11th, the 17th and the 19th, and the 22nd and the 30th. About three quarters of the average quantity was received during the month and the following falls exceeding 2″ in 24 hours were recorded:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Bangalore	Kankanhalli	4th June	3·40
	Anekal	„ „	2·25
Shimoga	Nagar	27th „	2·16
	„	28th „	3·08
	Sorab	„ „	2·46
Kadur	Koppa	„ „	2·16
Shimoga	Nagar	29th „	3·20
Kadur	Sringeri	„ „	2·40
Shimoga	Nagar	30th „	4·27

In Madras the rainfall, relatively to the average, was heavier than in other parts of the country. The month's fall was about normal in Malabar, south-central and central Madras, and the south division of the East Coast; was heavier than usual in the central division of the East Coast and in South Madras and was only deficient in the north division of the East Coast. The periods of most general rain were between the 4th and the 10th, the 17th and the 20th, and the 24th and the 30th. In Malabar and south Kanara rain set in on the 8th or 9th, and continued till the end of the month, but the falls were not heavy except on the 10th, the 19th and 20th and the 27th. The

following amounts exceeding 6″ in 24 hours were recorded in these areas during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A M. of date.
			Inches.
Nilgiris	Devala	10th June	6·25
Travancore State	Karunagapally	18th „	6·44
Travancore State	Peermade	19th „	7·85
Travancore State	Kanjerapalli	„ „	7·39
Malabar	Mankara	„ „	6·50
Travancore State	Arukutti	„ „	6·48
Malabar	Cannanore	20th „	7·61
Malabar	Manjeri	„ „	6·42
Malabar	Tirurangadi	„ „	6·30
Travancore State	Karunagapally	21st „	6·40
Coorg	Dunkeld Estate	26th „	6·03
Kistna	Pentapad	27th „	6·82
Kistna	Bhimavaram	28th „	7·20

The rainfall at the extra-Indian stations was as follows :—

Station.	Rainfall. Actual, June, 1905.	Normal, June.	Departure from normal.	Precentage departure from normal, June, 1905.
	Inches.	Inches.	Inches.	
Trincomalee	0·11	1·51	−1·40	− 93
Colombo	4·22	8·23	−4·01	− 49
Minicoy	15·78	8·60	+7·18	+ 83
Kabul	0·14	0·21	−0·07	− 33
Kashgar	0	0·31	−0·31	−100
Ispahan	0	0	0	0
Bushire	0	0	0	0
Jask	0	0·11	−0·11	−100
Muscat	0	0·36	−0·36	−100
Baghdad	0	0	0	0
Aden	0·50	0·01	+0·49	+4900
Perim	0	0	0	0
Zanzibar	1·89	1·07	+0·82	+ 77
Seychelles	0·89	6·42	−5·53	− 86
Mauritius	2·70	2·28	+0·42	+ 30

The month's rainfall was irregularly distributed in the South-East Trades region, Zanzibar and Mauritius reporting an excess and the Seychelles a deficiency. In Ceylon the rainfall was deficient while at Minicoy, on the contrary, it was in excess. In Kashgar, Persia and Asiatic Turkey there was no rain, and at Kabul only 0·14″ during the month. At Aden there was a fall of 0·50″ on the 4th while at Perim there was no rain.

Snowfall.

Reports received from Kashgaria, the Russian Pamirs, and parts of Kashmir where the past winter was unusually severe, show that there existed early in June an abnormally large accumulation of snow in the two last-named regions. During June the snowfall near Chitral was light, but on the higher ranges of the Punjab and Kashmir Himalayas there occurred one heavy fall and several lighter ones. During the storm of the 6th June the snowline descended to 9,000 feet in the Kulu Hills. In the Kumaon Himalayas there was no unusual snowfall during the month under review. The following gives details of the snowfall:—

I.—Kashmir and Punjab Himalayas.

(1.) *Kashmir* :—June was an exceptionally dry month in Kashmir. On the higher ranges near Gulmarg light snow fell on June 6th, 13th, 15th, and 22nd. From Sonemarg fresh snow was observed on the higher mountains on June 29th; while around Dras 2 feet of snow fell during June.

(2.) *Kulu* :—There was an unusual fall of snow in Kulu about the 6th of June when the snow descended to about 9,000 feet. In the Saraj Tehsil there were slight snowfalls in Kathi Shargarh on June 30th.

(3.) *Simla Bashahr Division* :—Snow fell as follows :—

1st	descending to	11,000 feet	where depth was	1″
6th	„	11,000 feet	„ „	½″
7th	„	10,000 feet	„ „	1″

The passes were all open, but the snowfall was generally heavier than last year.

(4.) *Chamba Division* :—The snowfall on the Sach pass during June was as follows :—

	feet.	inch.
June 13th	4	0
„ 21st	0	1
„ 24th	0	1

The accumulation of snow, owing to the heavy snow slides of the past winter, in the beds of deep nalas and along the banks of the Chenab River in Pangi and Lahoul was unusually large.

II.—UNITED PROVINCES HIMALAYAS.

(1.) *Garhwal*:—The usual light falls of snow occurred during June on the higher ranges in Garhwal.

(2.) *Almora*:—Falls of snow varying from three to six inches fell on the highest peaks on the 1st, 9th, 15th to 19th, 21st, 23rd, 24th and 30th June, and the snowfall is reported to have been greater this year than in past years.

The accumulated snow on the higher passes and ranges was as follows :—

	Feet	Inches
Unt Dhura Range	13	6
Ralam Dhura ,,	12	0
Millam Dhura ,,	6	0
Pindari Peak	0	4
Kapini	0	4
Kanchá	0	4
Nirwe Pass	15	0
Lympa ,,	16	0
Ligm ,,	11	0

Crop Report.

Madras :—At the close of the month the standing crops were generally fair, but required rain in parts of Chingleput, Coimbatore, Tanjore, and Madura. Fodder was scanty except in parts of the Circars, Cuddapah, south Arcot, the central, southern and West Coast districts and in the Nilgiris. The condition of the cattle was generally good.

Bombay :—At the end of the month more rain was needed particularly in parts of Kaira, Broach, Ratnagiri, the Deccan and the Karnatak. The standing crops had been damaged by grass hoppers in parts of the upper Sind Frontier. Cattle were in good condition except in parts of Thar and Parkar and Nasik.

Bengal :—More rain was required in Bihar, portions of Chota Nagpur and south-west Bengal for the young paddy and other standing crops, as well as for the progress of agricultural operations. In other parts of the Province the prospects of the crops at the close of the month were generally favourable.

United Provinces:—Although rain had fallen in most districts more was needed generally for the sowing of autumn crops, which were being retarded. Prospects at the end of June were reported to be good except in Bulandshahr, Ballia, and Ghazipur where the sugarcane crop had been damaged by insects and drought. The condition of agricultural stock was poor in Jalaun. Fodder was reported to be scarce in Jalaun and Banda, and the water-supply to be diminishing slightly in Bulandshahr, Jalaun and Banda.

Punjab :—Sowings for autumn crops continued during the month, but rain was urgently wanted at the close of the month for further sowings. The condition and prospects of the standing crops at the end of June were good to average, but cotton and sugarcane in Sialkot and the unirrigated melon crop in Mianwali were withering for want of rain. The cattle were, on the whole, in good condition.

North-west Frontier Province :—Rain had been partial but at the end of June the condition of the standing crops on irrigated land was generally good and up to that date average to good on rain fed lands. Fodder was sufficient except in parts of Peshawar and Dera Ismail Khan.

Burma :—Agricultural operations had been delayed owing to insufficient rain, but crop prospects were, on the whole, good.

Central Provinces:—The rainfall during June was sufficient for sowings to begin everywhere except in Damoh.

Assam:—Prospects of tea were good in Darrang; had been affected by heavy rain in Cachar and were fair in other districts. Prospects of early rice were good in Goalpara, and the Garo Hills, and generally fair in other places. The prospects of jute were good.

Mysore:—The standing crops, at the end of June were in good condition, and the prospects of the season were fair except in parts of the Kolar, Hassan and Kadur districts where the want of rain was felt.

Hyderabad:—The rainfall in the latter part of the month was satisfactory but more rain was wanted in parts and the fodder scarcity continued in 25 taluks.

Rajputana :—In Karauli the cotton and sugarcane crops were flourishing; in Alwar the cotton crop was thriving; in Jaipur cotton sowings continued but they had been damaged in parts by want of rain. Except in Jaisalmer agricultural stock was satisfactory and pasturage or fodder sufficient. Water for cattle was, however, falling in parts of Merwara and wells were drying up in the hill districts of Mewar.

Central India:—Preparation of land and the sowing of autumn crops were in progress at the end of the month throughout the Agency. Pasturage was fair to good throughout.

Kashmir Jummoo :—The condition of the standing crops was fair.

W. L. DALLAS.

Table I.—Abstract of Observations taken at 8 A.M. at 231 Stations in India, Burma, etc., in June, 1905.

Tab

Abstract of Observations taken at 8 A.M. at 231 Statio

Number of District.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma Coast and Bay Islands.			—·024								85·1	−0·9	76·1	+0·4	80·6	−0·4	9·0					16·
1	Car Nicobar†	25	29·796		29·748	29·866	7th	29·690	19th	·176	81·4	8·66		78·9		82·8		7·7	89·8	17th	75·1	20th	14·
	Port Blair	61	29·768	+·011	29·759	29·832	4th	29·685	20th	·147	80·7	84·9	−1·1	77·8	0	81·4	−0·6	7·1	87·1	1st	74·0	19th & 21st.	13·
	Mergui	96	29·765	−·005	29·792	29·880	3rd	29·663	17th	·217	78·7	84·7	−1·0	75·0	+1·9	79·9	+0·5	9·7	91·4	3rd	71·9	29th	19·
	Tavoy	26	29·826	−·012	29·779	29·919	30th	29·701	17th	·218	77·4	82·5	−2·3	75·5*	−0·8*	79·0*	−0·8	7·0	88·0	1st & 5th.	74·1	5 days	13·
	Moulmein	94	29·688	−·034	29·721	29·808	30th	29·563	17th	·245	77·8	83·2	−1·4	75·0	+0·2	79·1	−0·6	8·2	87·0	19th	72·8	1st	14·
2	Rangoon	57	29·709	−·031	29·704	29·819	30th	29·598	16th	·231	79·6	84·9	−1·6	76·7	+0·2	80·8	−0·7	8·2	89·1	9th	71·9	5th	17·
	Bassein	27?	29·724	−·025	29·689	29·837	30th	29·620	16th	·217	79·0	85·2	−1·1	76·1	−0·2	80·7	−0·7	9·1	89·7	11th	71·9	5th	17·
	Diamond Island	41	29·714	−·028	29·690	29·812	30th	29·604	17th	·208	81·8	85·1	−0·5	76·5	+0·1	80·8	−0·2	8·6	88·4	1st	72·7	12th	15·
5	Akyab	20	29·676	−·025	29·638	29·777	30th	29·575	16th	·202	81·0	85·8	0·2	78·2	+0·1	82·0	−0·1	7·6	89·9	4 days	72·7	6th	17·
3	Toungoo	182	29·561	−·030	29·685	29·696	30th	29·453	17th	·243	79·7	89·7	+0·6	74·1	?	81·9	?	15·6	94·4	11th & 12th.	71·6	26th	22·
	II.—Burma Inland.			—·048								91·6	−0·5	77·6	+0·9	84·6	+0·2	14·0					24·
3	Thayetmyo	121	29·573	−·052	29·636	29·729	30th	29·457	17th	·272	81·3	90·5	−0·9	77·1	+0·3	83·8	−0·3	13·4	98·5	12th	74·5	5th	24·
4	Minbu	*165*	29·508	−·058	29·617	29·668	30th	29·390	17th	·278	80·7	92·1	−0·9	78·0	+0·2	85·1	−0·4	14·1	100·7	12th	75·1	4th & 5th,	25·
	Yamethin	657	29·033	−·060	29·639	29·177	30th	28·915	17th	·262	80·7	91·1	−0·8	76·0	+0·7	83·6	−0·1	15·1	97·3	12th	74·2	5 days	23·
	Monywa	*280*	29·419		29·638	29·565	30th	29·312	16th	·253	83·0	93·8		78·8		86·3		15·0	99·3	12th	71·2	2nd	28·
	Mandalay	250	29·431	−·044	29·627	29·568	30th	29·305	17th	·263	84·1	95·8	+0·8	80·8	+2·3	88·3	+1·6	15·0	103·1	12th	78·3	29th	24·
	Myitkyina	458	29·202		29·617	29·365	1st	29·094	18th	·271	79·2	87·9		76·6		82·2		11·3	94·7	29th	7·5	1st	22·
	Bhamo	*381*	29·301	−·026	29·636	29·448	30th	29·181	18th	·267	79·6	89·8	−0·7	75·7	+0·8	82·8	+0·1	14·1	95·9	12th	73·1	1st	22·
4(*a*)	Maymyo	3,545	26·286		26·231	26·411	30th	26·190	16th	·221	72·0	78·2		68·3		73·3		9·9	81·4	18th	65·6	30th	15·
	Lashio	*2,751*	26·929	−·063	26·875	27·058	30th	26·828	17th	·230	75·0	85·0	−0·5	70·4	+1·1	77·7	+0·3	14·6	89·0	8th & 21st.	66·5	15th	22·
	III.—Assam.			—·034								88·6	−0·2	76·0	−0·6	82·3	−0·4	12·6					23·
7	Silchar	104	29·559	−·022	29·615	29·670	30th	29·464	15th	·206	80·0	88·8	−0·6	75·4	−0·8	82·1	−0·7	13·4	97·0	29th	72·8	7th & 20th,	24·
9	Sibsagar	333	29·309	−·042	29·599	29·442	30th	29·210	17th	·232	80·3	88·8	−0·5	77·0	+0·6	82·9	+0·1	11·8	94·7	29th	74·0	16th & 17th.	20·
	Dhubri	115	29·503	−·033	29·573	29·611	30th	29·383	16th	·228	78·4	86·1	+0·4	74·9	−1·5	80·5	−0·6	11·2	92·7	3rd	70·7	9th	22·
	Gauhati	195	29·448		29·598	29·574	30th	29·340	16th	·234	80·4	89·7		76·6		83·2		13·1	94·0	3rd & 12th.	71·0	17th	23·
	Tezpur	252	29·376		29·585	29·523	30th	29·282	16th	·241	79·7	89·0		77·3		83·2		11·7	94·1	3rd & 14th.	74·4	3rd, 4th & 5th.	19·
	Dibrugarh	353	29·305		29·617	29·424	1st	29·185	16th	·239	79·2	89·1		75·0		82·1		14·1	101·7	8th	70·5	1st	31·
	IV.—Bengal and Orissa.			—·028								93·6	+2·9	79·6	+1·3	86·6	+2·1	14·0					26·
6	Chittagong	87	29·567	−·030	29·602	29·652	8th	29·438	16th	·214	82·0	88·5	+1·9	76·7	+0·1	82·6	+1·0	11·8	92·5	13th	71·6	8th	20·
	Noakhali	43	29·596		29·585	29·705	7th	29·476	16th	·229	84·5	88·8		78·9		83·8		9·9	91·2	15th	69·9	8th	21·
	Comilla	36	29·603		29·586	29·696	8th	29·498	17th	·198	81·6	89·5		76·7		83·1		12·8	93·3	21st	70·3	8th & 9th,	23·
	Sirajganj	49	29·570		29·569	29·668	30th	29·450	16th	·218	80·7	89·4		76·9		83·2		12·5	94·3	12th	70·2	8th	24·
	Narayanganj	26	29·604	?	29·578	29·700	30th	29·480	16th	·220	83·1	90·8	+1·8	78·9	+0·6	84·9	+1·2	11·9	94·6	13th	72·3	8th & 17th.	22·
	Barisal	13	29·615	−·019	29·573	29·691	9th	29·507	16th	·187	85·3	91·1	+2·4	78·2	0	84·7	+1·2	12·9	93·8	27th	70·1	6th	23·
	Mymensingh	62	29·575	−·027	29·588	26·676	30th	29·466	16th	·210	80·1	87·4	+0·2	76·2	−0·7	81·8	−0·3	11·2	93·2	13th	72·1	15th & 17th.	21·
	Faridpur	46	29·573		29·589	29·655	9th	29·455	16th	·200	83·8	91·1		79·4		85·3		11·7	94·3	11th, 12th & 25th.	74·4	8th	19·
10	Jessore	33	29·556	−·033	29·535	29·648	9th	29·452	16th	·196	85·8	94·5	+3·0	80·6	+1·8	87·6	+2·4	13·9	100·0	12th	73·7	28th	26·
	Calcutta	21	29·561	−·025	29·527	29·646	9th	29·437	16th	·209	86·9	97·0	+5·9	81·0	+2·5	89·0	+4·2	16·0	106·1	17th	7·39	26th	32·
	Saugor Island	25	29·548	−·035	29·517	29·643	9th	29·430	16th	·213	87·8	94·0	+3·6	83·9	+2·2	89·0	+2·9	10·1	98·4	17th	78·1	15th	20·

N.B.—Elevations in italics indicate barometrical determinations.

* Mean of 26 days.

† Observation of 29 days.

Note 1.—When a query is inserted against any reading or in the returns of any station,

Note 2.—The data from which divisional means of the figure columns Nos. 40, 42 and 44

Note 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau

I.

in India, Burma, etc., in June, 1905.

Wind Direction. Number of winds from: Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June 1905.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														91	+ 1	·926	+ ·004	8·5	+ 0·2				35·94	27·58	+ 8·36					I.—Burma Coast and Bay Islands.
3						17	14		S 41° W	6·11			6·11	88		·940		9·6		13			5·52			15·21			1·17	Car Nicobar
					1	14		1	S 67° W	13·8	10·0	+ 38		89	+ 1	·937	− ·017	8·0	− 0·1	28	23·20	+4·80	24·76	18·65	+ 6·11	35·87	35·74	+ 0·13	3·74	Port Blair.
25				3	1				S 27° E	2·7	1·9	+ 42	2·4	94	+ 3	·918	+·024	5·9	− 1·4	29	24·20	+4·80	29·47	30·29	− 0·82	43·27	49·55	− 6·28	3·65	Mergui.
23					2	3	2		W	2·0				92	0	·876	−·012	8·1	+0·5	30	25·80	+4·20	71·30	39·88	+31·42	93·6	65·93	+27·33	8·71	Tavoy.
13	1		1	3	8	3	1		S	4·2	3·4	+ 24	4·7	94	+ 2	·892	+·002	9·3	+1·4	28	26·10	+1·90	49·13	36·38	+12·75	62·32	55·78	+ 6·54	4·19	Moulmein.
5			1	7	14		2	1	S 9° E	3·9	5·3	− 26	3·3	91	− 2	·915	−·013	8·7	?	27	24·80	+2·20	19·69	17·52	+ 2·17	30·03	28·74	+ 1·29	2·45	Rangoon.
	1			6	10	8	3	2	S 19° W	4·3	4·0	+ 8		93	+ 1	·942	+·003	9·1	+1·1	24	24·50	−0·50	30·51	23·42	+ 7·09	40·39	33·72	+ 6·67	4·39	Bassein.
		1		1	3	14	9	2	S 60° W	11·9	8·5	+ 40	8·5	86	+ 3	·947	+·044	8·7	+0·3	25	21·73	+3·27	35·26	23·17	+12·09	44·00	33·60	+10·40	4·16	Diamond Island.
		3		15	4	6		2	S 25° E	5·1	3·9	+ 31	4·9	93	0	·987	+·015	8·5	−0·5	21	24·40	−3·40	43·63	44·79	− 1·16	58·30	56·67	+ 1·63	6·25	Akyab.
3			1	25	1				S 45° E	9·3	4·8	+ 94	9·2	89	− 1	·919	−·007	9·8	+0·9	21	20·80	+0·20	19·70	14·15	+ 5·55	24·02	20·43	+ 3·59	2·50	Toungoo.
														84	+ 2	·898	+ 024	8·1	+ 1·4				8·19	6·65	- 0·40					II.—Burma Inland.
				4	25	1			S 4° E	8·7	8·2	+ 6		88	+ 5	·942	+·068	8·1	−0·2	12	13·90	−1·90	5·92	6·34	− 0·42	10·21	10·47	− 0·26	1·52	Thayetmyo.
				21	1	8			S 23° E	9·3			11·1	84	+ 2	·895	+ ·005	7·1	+1·4	10	9·10	+0·90	5·92	4·54	+ 1·38	10·22	10·55	− 0·33	1·54	Minbu.
2				19	9				S 31° E	1·2			1·3	82	+ 1	·849	−·001	9·2	+4·0	5	7·40	−2·40	4·55	4·26	+ 0·29	8·07	11·02	− 2·95	2·49	Yamethin.
11				4	9	6			S 4° W	2·5			2·6	78		·885		6·5		4	6·10	−2·80	2·67	5·26	− 2·59	11·29	8·80	+ 2·49	1·91	Monywa.
1				2	22	5			S 4° W	8·3			8·4	77	+ 2	·903	+ ·037	7·6	+1·0	4	6·50	−2·50	3·02	5·79	− 2·77	10·98	11·34	− 0·36	1·86	Mandalay.
9	3	7	7	3	1				N 70° E	3·2			3·3	91		·913		9·9		24			19·84			27·96			2·32	Myitkyina.
19	1	2	1			4		3	N 55° W	1·7			2·0	91	+ 2	·899	+ ·013	8·2	+0·6	22	19·10	+2·90	15·43	13·72	+ 1·71	19·78	20·18	− 0·40	2·86	Bhamo.
6	1	1	2	2	5	11	2		S 27° W	3·0				88		·695		8·1		13	11·80	+1·20	6·37	7·20	− 0·83	13·21	17·62	− 4·41	1·18	Maymyo.
26				1	1	2			S 13° W	2·3				85	− 2	·755	+·025	8·3	+0·1	14			8·84	10·70	− 1·86	12·24	16·83	− 4·59	1·46	Lashio.
														91	0	·921	0	8·2	−0·4				17·26	16·81	+ 0·45					III.—Assam.
30									Calm	0·8	3·1	− 74	1·4	88	− 1	·904	−·019	7·0	−2·0	23	21·10	+1·90	26·48	21·99	+ 4·49	33·27	39·23	− 5·96	5·50	Silchar.
6	3	13		1	1	4		2	N 34° E	3·0	2·6	+ 15	2·7	92	0	·956	+·018	8·7	−0·1	13	16·70	−3·70	10·39	13·59	− 3·20	17·52	26·21	− 8·69	2·81	Sibsagar.
17		1	7	4	1				S 75° E	1·6	4·9	− 67	1·9	92	+ 1	·903	+·001	9·1	+1·0	21	18·10	+2·90	40·38	23·17	+17·21	55·80	38·60	+17·20	6·11	Dhubri.
18	6	3	1		1		1		N 16° E	1·0			1·1	89		·934		8·7		15	14·50	+0·50	7·34	11·22	− 3·88	17·59	20·98	− 3·39	0·77	Gauhati.
15		7	8						N 69° E	2·8			3·0	91		·928		8·9		18	16·00	+2·00	9·99	11·87	− 1·88	18·51	21·99	− 3·48	1·30	Tezpur.
17	3	5	4		1				N 54° E	1·4			1·3	91		·900		6·6		21	18·10	+2·90	8·99	19·03	−10·04	15·45	33·63	−18·18	1·35	Dibrugarh.
														84	− 3	9·75	+·019	5·9	−1·2				16·30	20·87	—4·57					IV.—Bengal and Orissa.
		2	1	22	4	1			S 42° E	7·8	6·9	+ 13	7·1	85	− 1	·933	+·011	4·6	−3·2	14	16·74	−2·74	14·58	21·76	− 7·18	20·10	32·07	−11·97	3·41	Chittagong.
1	1		4	11	11	1	1		S 28° E	7·1			7·7	84		·999		5·1		11	18·39	−7·39	10·47	23·29	−12·82	22·37	33·35	−10·98	2·69	Noakhali.
1	1	1	1	13	11	1		1	S 28° E	7·2			6·0	89		·952		5·7		17	17·39	−9·39	12·39	17·91	− 5·52	20·07	28·92	− 8·85	1·65	Comilla.
20		2	3	3	2				S 67° E	0·8			0·8	93		·981		8·1		16	13·32	+2·68	8·03	11·57	− 3·54	21·37	19·52	+ 1·85	1·25	Sirajganj.
		3	4	12	7	3		1	S 39° E	7·6	7·2	+ 6	6·5	90	+ 1	1·026	+·044	8·7	+0·2	7	15·39	−8·39	5·14	12·64	− 7·50	16·54	22·08	− 5·54	1·32	Narayangan.
3		2	1	9	14	1			S 22° E	4·5			3·9	87	0	1·053	+·069	3·2	−4·9	8	16·52	−8·52	3·29	15·02	−11·73	10·67	24·21	−13·54	1·09	Barisal.
7	1	2	9	8	2	1			S 68° E	4·1			3·5	90	0	·930	−·007	8·1	+0·5	18	18·19	−0·19	19·03	17·34	+ 1·69	39·68	30·30	+ 9·38	4·25	Mymensingh.
	1	1	4	8	16				S 27° E	5·6			5·1	88		1·028		6·9		8	14·28	−6·28	5·23	12·75	− 7·52	14·56	21·05	− 6·49	1·20	Faridpur.
7			1	8	13		1		S 18° E	4·0	4·9	− 18	4·0	85	− 3	1·051	+·042	5·7	−2·2	7	14·55	−7·55	4·71	12·56	− 7·85	12·14	20·50	− 8·36	1·25	Jessore.
	1		3	5	17	4			S 10° E	5·9	6·2	− 5		82	− 3	1·041	+·069	5·8	−1·5	4	12·88	−8·88	1·60	11·35	− 9·75	11·61	17·03	− 5·42	0·78	Calcutta.
		1	1	5	13	9	1		S 5° W	18·1	14·6	+ 24		82	− 3	1·087	+·073	7·4	−1·1	3	12·10	−9·10	1·16	10·02	− 8·86	·86	15·11	− 8·25	0·55	Sauger Island.

e data for that station are not utilized in calculating the provincial departures from normal.
e derived are incomplete.
tions, the elevations of which exceed 3,200 feet.

‖ Mean of 28 days.

** Wind variable 9.

Tabl

Abstract of Observations taken at 8 A.M. at 231 Station

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10	Krishnagar	47	29·536		29·530	29·635	9th	29·413	16th	·222	85·1	96 5		80·9		88 7		15·6	101·1	12th & 27th.	74·0	9th	27·1
	Midnapore	149	29·426		29·520	29·511	9th	29·312	16th	·199	87·0	100·0		81·8		90·9		18·2	111·9	17th	75·3	5th	36·6
11	Bankura	298	29·252		29·511	29·346	9th	29·144	16th	·202	88·5	104·0		83·0		93·5		21·0	111·6	14th	78·2	1st	33·4
	Raniganj	334	29·248		29·529	29·338	9th	29·138	16th	·200	85·7	101·7		81·5		91·6		20·2	109·5	14th & 17th.	74·9	21st	34·6
	Burdwan	99	29·477	—·031	29·523	29·576	9th	29·352	16th	·224	85·6	99·3	+5·5	81·3	+2·0	90·3	+2·8	18·0	107·4	17th	78·3	22nd	29·1
	Naya Dumka	489	29·078		29·517	29·169	1st	28·971	16th	·198	85·2	99·2		80·6		90·0		18·6	108·4	13th	73·9	1st	34·5
	Berhampore	67	29·515	—·030	29·531	29·601	9th	29·388	16th	·213	84·3	95·8	+3·4	80·0	+1·5	87·9	+2·5	15·8	101·8	13th	75·8	21st	26·0
	Rampur Boalia.	70	29·520		29·538	29·611	30th	29·397	16th	·214	84·7	93·5		79·4		86·5		14·1	100·0	12th & 13th.	73·6	21st	26·4
	Malda	72	29·497		29·520	29·595	1st & 30th.	29·382	16th	·213	83·3	92·7		80·9*		86·9*		11·8	102·1	13th	76·1	17th	26·0
	Bogra	61	29·538	—·023	29·551	29·643	30th	29·443	16th	·200	81·2	89·8	0	77·6	+0·4	83·7	+0·2	12·2	96·2	11th	72·2	7th	24·0
12	Dinajpur	123	29·473	—·029	29·551	29·579	30th	29·362	16th	·217	80·9	89·9	+0·4	76·9	—0·6	83·4	—0·1	13·0	99·3	12th	72·0	18th	27·3
	Rangpur	123	29·502		29·580	29·611	30th	29·391	16th	·220	80·6	88·2		75·7		82·0		12·5	95·2	11th	70·8	7th & 18th.	24·4
	Jalpaiguri	284	29·338	—·030	29·575	29·433	30th	29·218	16th	·215	80·0	87·8	—0·1	76·1	+0·9	82·0	+0·4	11·7	94·4	3rd, 11th & 12th.	73·6	25th	20·8
	Cooch Behar	156	29·464		29·575	29·591	30th	29·336	16th	·255	79·6	87·5		76·5		82·0		11·0	93·4	3rd & 11th.	73·1	13th	20·3
17	Purnea	125	29·457	—·032	29·536	29·566	30th	29·350	16th	·216	82·2	92·2	+0·1	78·3	+1·0	85·3	+0·6	13·9	99·8	13th	72·6	15th	27·2
14	Balasore	50	29·526	—·037	29·517	29·628	9th	29·414	16th	·214	87·7	100·6	+8·7	81·3	+2·7	91·0	+5·7	19·3	111·5	17th	75·7	29th	35·8
	False Point	21	29·576	—·025	29·538	29·673	9th	29·393	30th	·280	86·8	92·9	+2·6	82·6	+2·5	87·8	+2·6	10·3	108·5	16th	76·1	2nd & 3rd.	32·4
	Cuttack	80	29·515	—·017	29·537	29·599	9th	29·388	30th	·211	87·4	103·0	+7·5	83·2	+3·1	93·2	+5·3	19·8	112·5	18th	76·7	3rd	35·8
	Puri	24	29·583		29·545	29·666	9th	29·488	30th	·178	85·0	90·2		83·0		86·6		7·2	93·2	20th	76·6	30th	16·6
	V.—Gangetic Plain and Chota Nagpur.			—·020								103·7	+6·9	83·4	+4·1	93·6	+5·5	20·3					34·9
15	Hazaribagh	2,007	27·594	—·013	29·495	27·675	9th	27·519	16th	·156	88·6	102·7	+10·2	82·4	+6·6	92·6	+8·4	20·3	107·6	15th & 25th.	75·3	30th	32·3
	Ranchi	2,128	27·502	?	29·524	27·590	9th	27·435	18th	·155	87·0	100·8	+9·7	81·4	+6·8	91·1	+8·2	19·4	106 3	15th	72·9	30th	33·4
	Daltonganj	*730*	28·841†		29·507†	28·928	9th	28·769	16th	·159	92·4	109·0		86·6		97·8		22·4	113·6	25th	78·0	3rd	35·6
	Purulia	*816*	28·757		29·502	28·814	9th	28·658	16th	·186	89·8	105·2		82·5		93·9		22·7	112·7	17th	74·4	5th	38·3
	Chaibassa	*760*	28·816	—·015	29·511	28·902	9th	28·712	16th	·190	88·5	106·4	+10·2	81·1	+5·3	95·3	+7·8	22·3	113·9	15th	76·0	30th	37·9
16	Gaya	375	29·175	—·027	29·492	29·277	1st	29·077	16th	·200	93·9	107·5	+7·9	86·6	+6·4	97·1	+7·2	20·9	113·0	26th	77·8	3rd	35·2
	Dehri	351	29·191		29·486	29·304	1st	29·095	16th	·209	94·3	108·2		87·8		98·0		20·4	112·5	14th, 23rd & 26th.	81·0	1st	31·5
	Patna	183	29·364	—·039	29·498	29·497	1st	29·251	16th	·246	87·2	100·7	+4·3	82·2	+2·2	91·5	+3·3	18·5	106·5	13th	68·7	3rd	37·8
	Arrah	190	29·364?		29·503?	29·482	1st	29·253	16th	·229	89·7	103·7		83·4		93·6		20·3	109·4	14th	74·1	3rd	35·3
	Buxar	239	29·307		29·497	29·432	1st	29·194	16th	·238	90·6	104·7		84·6		94·7		20·1	109·5	14th	79·6	20th	29·9
17	Bhagalpur	160	29·398		29·508	29·511	1st	29·286	16th	·225	87·4	98·8		81·1		90·0		17·7	107·8	12th & 13th.	75·1	9th	32·7
	Darbhanga	166	29·394	—·040	29·511	29·523	1st	29·281	16th	·242	84·1	95·9	+3·5	79·2	0	87·6	+1·8	16·7	104·1	13th	73·3	3rd & 4th.	30·6
	Muzaffarpur	178	29·388		29·520	29·518	1st	29·271	16th	·247	84·5	97·5		79·9		88·7		17·6	105·8	12th & 13th.	71·5	3rd	34·3
	Motihari	224	29·337		29·519	29·472	1st	29·229	17th	·243	82·4	96·0*		77·8*		86·8*		18·2	102·9	12th	68·3	4th	34·6
	Chapra	181	29·366*		29·499*	29·489	1st	29·245	16th	·244	87·5	101·7		81·8		91·8		19·9	108 5	14th	73·6	3rd	34·9
18	Benares	267	29·282	—·015	29·496	29·401	1st	29·171	15th	·230	93·8	107·4	+7·3	85·2	+3·3	96·3	+5·3	22·2	112·0	20th	80·1	5th & 9th.	31·9
	Allahabad	309	29·241	—·011	29·497	29·341	1st & 10th.	29·158	16th & 17th.	·183	93·2	108·5	+6·8	86·1	+3·6	97·4	+5·2	22·4	113·7	14th & 15th.	78·6	2nd	35·1
23	Gorakhpur	257	29·295	—·020	29·504	29·424	1st	29·172	16th	·252	87·0	100·1	+3·2	81·4	+1·7	90·8	+2·5	18·7	107·6	13th	71·5	5th	36·1
19	Lucknow	368	29·169	—·024	29·487	29·288	1st	29·068	16th	·220	92·5	107·5	+7·0	85·7	+4·4	96·6	+5·7	21·8	114·3	14th	77·3	20th	37·0
20	Bahraich	401	29·137	—·041	29·491	29·277	1st	29·020	16th	·257	88·5	103·2	+5·9	82·9	+3·7	93·2	+4·8	20·4	111·2?	15th	69·6	4th	41·6
21	Cawnpore	416	29·136	—·004	29·499	29·242	9th	29·047	17th	·195	93·0	107·2	+6·1	86·3	+4·3	96·8	+5·2	20·9	112·0	14th & 25th.	78·7	9th	33·3
	Mainpuri	516	29·047	+·007	29·507	29·156	8th & 9th.	28·944	20th	·212	92·6	108·7	+7·5	86·6	+5·1	97·7	+6·3	22·1	114·2	14th	76·2	8th	37·9

† Mean of 28 days. * Mean of 29 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any station

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42 and 44

—continued.

in India, Burma, etc., in June 1905—continued.

Wind Direction. Number of winds from. Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June 1905.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
2	1	2	4	8	11	2			S 32° E	4·4			4·9	85		1·026		5·8		6	12·19	− 6·19	4·74	9·88	− 5·14	16·26	16·43	− 0·17	1·48	Krishnagar.
5	2	1			3	17	1		1 S 4° E	3·3			2·9	77		·960		3·6		9	12·00	− 3·00	4·35	10·51	− 6·16	9·46	16·20	− 6·74	1·27	Midnapore.
8		3	3	9	1	4	2		S 41° E	4·6			4·0	70		·924		4·0		7	11·89	− 4·89	2·43	10·32	− 7·89	5·16	14·21	− 9·05	0·82	Bankura.
24			2		2	2			S 18° E	1·8			1·3	76		·935		4·1		8	12·21	− 4·21	4·22	9·93	− 5·71	9·49	13·79	− 4·21	2·02	Raniganj.
9		2	6		5	6	2		S 7° E	3·0	4·9	−39	2·9	82	0	1·002	+ ·070	4·5	−3·0	3	12·71	− 9·71	1·57	9·92	− 8·35	11·09	16·27	− 5·18	0·73	Burdwan.
22		1	3	3	1				S 72° E	1·8			2·0	76		·523		3·9		7	12·03	− 5·03	2·06	9·96	− 7·90	6·43	13·56	− 7·13	0·68	Naya Dumka
5			11	6	7	1			S 51° E	4·1	5·5	−25	3·5	86	−3	1·009	+ ·037	6·2	−1·9	6	12·00	− 6·00	2·68	9·54	− 6·86	11·69	14·95	− 3·26	1·49	Berhampore.
6			2	4	6	2			S 17° E	4·3			4·4	84		1·014		5·0		7	12·58	− 5·58	4·89	10·70	− 5·81	13·12	16·24	− 3·12	2·45	Rampur Boalia.
		6	7	13	3	1			S 56° E	6·9			6·4	85		·972		1·7		5	12·16	− 7·16	2·16	9·89	− 7·73	13·86	13·74	+ 0·12	0·86	Malda.
6			14						E	2·1			1·8	87	−1	·931	− ·021	7·7	+1·0	12	14·35	− 2·35	6·81	12·90	− 6·09	19·72	20·94	−1·22	1·50	Bogra.
1	2	8	11	4	4				N 87° E	3·8			3·6	85	−1	·892	− ·036	8·1	+0·1	7	13·45	− 6·45	4·79	13·17	− 8·38	16·34	21·62	− 5·28	1·05	Dinajpur.
2		6	10	6	5				S 72° E	3·5			3·2	89		·930		6·4		10	15·61	− 5·61	6·45	20·01	−13·56	26·63	30·32	− 3·69	2·33	Rangpur.
2	1	2	8	5	2				S 77° E	1·3			1·7	89	0	·914	+ ·007	7·2	+2·9	14	18·66	− 4·66	29·20	22·86	+ 6·34	38·10	34·90	+ 3·20	4·93	Jalpaiguri.
8		1	5	4	2				S 66° E	1·3			1·3	91		·916		8·3		23	19·24	+ 3·76	52·02	32·15	+19·87	64·42	47·41	+17·01	6·65	Cooch Behar
4		6	19	1					N 81° E	2·1	3·3	−36	1·8	85	−1	·945	+ ·008	4·9	−1·9	5	11·50	− 6·50	2·91	10·02	− 7·11	8·53	14·79	− 6·26	0·90	Purnea.
2	1	1	1	1	2	18	4		S 41° W	7·0			5·2	70	−15	·918	− ·064	5·8	−2·2	7	11·00	− 4·00	3·79	11·32	7·53	6·39	17·29	−10·90	1·25	Balasore.
1	1	1			1	15	8	3	S 68° W	12·5	11·5	+ 9	13·0	78	− 6	·991	− ·005	7·6	−0·4	4	9·27	−5·27	1·80	6·30	− 6·50	4·10	13·53	− 9·43	0·75	False Point.
8		1	1		4	10	5	1	S 48° W	3·9	4·0	− 3		70	−8	·913	0	6·5	−0·7	5	11·26	− 6·26	2·69	10·82	−8·13	7·73	15·06	−7·33	1·16	Cuttack.
4		1				1	23	1	S 45° W	17·5*			17·2*	86		1·043		5·7		3	8·11	− 5·11	2·68	7·99	− 5·31	4·58	10·88	− 6·30	1·41	Puri.
														58	−18	·780	− ·093	3·5	−2·1				1·05	7·36	−6·31					V.—Gangetic Plain and Chota Nagpur.
	2	1	1	1	3	7	6	9	N 88° W	11·0	8·9	+24	9·8	43	−29	·559	− ·180	7·9	+0·7	0	11·19	−11·19	0·02	9·11	− 9·09	0·88	11·44	−10·56	0·02	Hazaribagh.
	1	2	1	2	2	8	7	7	S 82° W	8·2			9·6	50	−26	·621	− ·141	4·2	−1·7	2	12·47	−10·47	0·94	10·36	− 9·42	4·50	12·44	− 7·94	0·45	Ranchi.
5		1	1			12	1		S 45° W	6·8			5·5	43		·647		2·9		2	8·48	− 6·48	0·50	6·10	− 5·60	0·70	7·14	− 6·44	0·19	Daltonganj.
2		3	3	3	4	4	8	3	S 50° W	4·1			5·0	59		·808		4·6		4	12·39	− 8·39	2·02	10·07	− 8·05	3·83	12·99	− 9·16	0·65	Purulia.
0			1			4	5		S 67° W	5·0			4·4	58	−18	·773	− ·097	3·9	−1·9	5	11·29	− 6·29	3·07	9·51	− 6·44	6·19	12·85	− 6·66	1·74	Chaibassa.
1		7	4	1	1	2	14		N 72° W	4·8	3·4	+41	3·8	54	−21	·844	− ·072	3·2	−2·1	1	8·32	− 7·32	0·41	7·43	− 7·02	0·89	8·41	− 7·52	0·30	Gaya.
1		2	9	1	2	4	10	1	S 34° W	9·4			8·4	42		·651		9·5		0	9·06	− 8·06	0	6·53	− 6·53	0·59	7·35	− 6·76	0	Dehri.
5		5	15	2			2	1	N 80° E	4·9	4·2	+17	5·5	73	− 4	·933	+ ·022	2·5	−3·3	1	7·81	− 6·81	1·69	8·54	− 6·85	3·04	10·47	− 7·43	1·58	Patna.
0	1	6	1			1	1		N 39° E	3·1			3·1	59		·808		0·5		2	7·90	− 5·90	0·51	6·95	− 6·44	1·75	8·42	− 6·67	0·23	Arrah.
2		2	14			2	9	1	N 76° E	8·5			8·0	53		·792		1·7		1	8·06	− 7·06	0·25	5·44	− 5·19	0·47	6·26	− 5·79	0·24	Buxar.
3	3	7	7	3	1	1			N 73° E	3·3			3·0	72		·932		3·1		3	9·90	− 6·90	1·18	8·28	− 7·10	5·75	11·07	− 5·32	0·58	Bhagalpur.
		9	19				1	1	N 74° E	5·2	3·3	+58	4·5	82	0	·963	+ ·039	4·5	−0·9	4	8·43	− 4·43	0·95	8·14	− 7·19	4·99	11·21	− 6·22	0·27	Darbhanga.
9		2	10	7			1	1	S 79° E	4·8				81		·956		2·4		2	8·06	− 6·06	1·76	7·25	− 5·49	5·06	9·65	− 4·59	0·87	Muzaffarpur
2	1	2	5						N 72° E	2·4			2·3	81		·875		4·3		7	9·39	− 2·39	4·17	8·90	− 4·73	8·37	11·55	− 3·18	1·23	Motihari.
5		6	10	4		3	1	1	E	2·7			2·4	70		·897		3·5		2	7·61	− 5·61	1·21	6·40	− 5·19	3·77	7·75	− 3·98	0·55	Chapra.
	1	3	6	1		3	10	5	N 60° W	3·6	5·1	−29	4·1	48	−24	·749	− ·098	0·7	−4·9	1	6·80	− 5·80	0·54	6·23	− 5·69	1·66	6·87	− 5·21	0·54	Benares.
		3	4	2	2	3	10	5	N 89° W	7·4	6·9	+ 7	6·1	47	−19	·710	− ·115	2·4	−3·4	2	6·20	− 4·20	0·59	6·42	− 5·63	0·59	6·71	− 6·12	0·37	Allahabad.
	11	5	2				2	4	N 46° E	2·9	3·6	−19		71	− 8	·890	− ·016	1·8	−3·1	4	7·70	− 3·70	1·03	9·09	− 8·06	2·30	10·43	− 8·13	0·40	Gorakhpur.
	2	4	4	1	4	11	3		S 68° W	3·5	4·2	−17	3·8	44	−25	·663	− ·174	0·7	−5·1	1	6·10	− 5·10	0·18	5·71	− 5·53	0·34	6·72	− 6·38	0·18	Lucknow.
2		8	7	1		1	8		N 75° E	4·6			4·3	?	?	?	?	1·3	−2·5	5	7·30	− 2·30	1·64	6·53	− 4·89	2·68	8·48	− 5·80	0·85	Bahraich.
2	1	5	4		6	9	1		S 56° W	5·9				42	−23	·642	− ·194	2·6	−2·8	0	5·00	− 5·00	0	4·09	− 4·09	0·29	4·40	− 4·11	0	Cawnpore.
2	2	3	3	1	5	9	5		N 88° W	4·6			4·6	47	−19	·726	− ·095	8·0	+3·1	3	9·60	− 1·60	0·41	4·73	− 4·32	0·43	5·16	− 4·72	0·2	Mainpuri.

e data for that station are not utilized in calculating the provincial departures from normal.
e derived are incomplete.

Abstract of Observations taken at 8 A.M. at 231 St

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.										
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	VI.—Upper Sub-Himalayas.			−·010								105·0	+2·8	82·7	+3·1	93·8	+2·9	22·3				
24	Bareilly	568	28·980	−·010	29·500	29·097	1st	28·878	15th	·219	89·1	104·0	+4·3	83·8	+4·0	93·9	+4·2	20·2	111·0	14th	74·6	19th
	Dehra Dun	2,233	27·382	−·011	29·527	27·488	30th	27·258	18th	·230	81·4	96·2	+3·2	74·9	+0·5	85·6	+1·9	21·3	104·5	14th	68·5	21st
	Roorkee	899	28·656	−·007	29·508	28·790	30th	28·563	24th	·227	86·6	101·1	+0·7	79·6	+1·0	90·4	+0·9	21·5	111·6	14th	67·7	2nd & 5th.
22	Meerut	738	28·808	−·009	29·497	28·943	30th	28·701	20th	·242	87·7	103·3	+2·7	82·3	+1·9	92·8	+2·3	20·9	108·7	2nd & 14th.	75·3	17th
26	Delhi	718	28·830	−·005	29·494	28·950	9th	28·721	20th	·229	91·3	105·7	+2·5	87·4	+4·1	96·6	+3·3	18·3	109·7	2nd	77·8	8th
28	Lahore	702	28·808	−·012	29·461	28·956	9th	28·668	20th	·288	91·4	108·9	+1·5	83·9	+4·6	96·4	+3·1	25·0	116·9	1st	74·2	8th & 9th
27	Sirsa	662	28·870	−·002	29·478	29·007	9th	28·748	20th	·259	94·0	108·1	+1·4	88·4	+5·3	98·3	+3·4	19·7	114·3	20th	73·6	11th
	Patiala	*818*	28·725		29·493	28·366	10th	28·611	20th	·755	88·8	103·1		82·6		92·8		20·5	110·5	14th	72·0	17th
29	Ludhiana	812	28·714	−·012	29·475	28·848	10th	28·596	20th	·252	90·7	106·3	+1·5	83·9	+3·2	95·1	+2·4	22·4	112·9	4th	75·1	17th
	Sialkot	830	28·686	−·013	29·465	28·829	10th	28·562	20th	·267	91·7	110·1	+4·6	84·6	+4·1	97·4	+4·4	25·5	117·0	30th	77·1	8th & 7th
	Ambala	892	28·651	−·016	29·492	28·777	10th	28·549	20th	·228	88·4	105·0	+3·6	82·2	+2·0	93·6	+2·8	22·8	112·4	14th	72·7	17th
	Rawalpindi	1,674	27·879	−·013	29·481	28·011	10th	27·756	20th	·255	90·8	107·6	+4·8	78·4	+3·1	93·0	+4·0	29·2	115·5	30th	67·6	11th
	VII—Indus Valley and N.-W. Rajputana.			+·017								106·4	+0·5	82·7	+0·5	94·6	+0·5	23·7				
32	Peshawar	1,110	28·429	−·012	29·489	28·590	9th	28·299	20th	·791	92·0	107·8	−1·9	78·8	+1·5	93·3	+1·7	28·0	117·0	29th	72·9	11th
	D. I. Khan	590	28·920	−·009	29·446	29·092	9th	28·785	20th	·307	90·9	109·0	+1·0	82·8	+1·6	95·9	+1·3	26·2	116·2	29th & 30th.	73·6	9th
31	Khushab	612	28·906	+·006	29·471	29·065	10th	28·763	20th	·302	93·6	109·0	+1·9	83·2	0·8	96·1	+1·4	25·8	115·8	30th	79·8	10th
	Montgomery	558	28·952	+·007	29·462	29·107	10th	28·811	20th	·298	93·0	108·4	−1·6	85·7	+1·6	97·1	0	22·7	116·8	22nd	70·0	9th & 10th.
	Multan	420	29·074	−·005	29·249	29·267	9th	28·931	20th	·336	90·0	107·7	−0·1	85·3	+1·6	96·5	+0·8	22·4	116·5	5th	74·0	9th
47	Jacobabad	186	29·328	+·015	29·472	29·489	10th	29·163	20th	·326	90·5	115·0	+2·3	82·9	−1·5	99·0	+0·4	32·1	123·0	21st	77·7	8th
	Hyderabad	96	29·491	+·043	29·539	29·644	10th	29·348	20th	·296	87·0	103·8	−0·4	81·2	−0·5	92·5	−0·5	22·6	114·2	3rd	78·5	9th
	Kurrachee	30	29·600	+·037	29·580	29·733	10th	29·491	21st	·242	85·2	93·2	−0·8	81·3	−0·8	87·3	−0·8	11·9	99·4	8th	78·7	3rd
51	Bikaner	*771*	28·807	+·031	29·530	28·919	9th	28·659	19th	·260	89·5	107·2	+0·7	85·7	+0·5	96·5	+0·6	21·5	113·9	30th	75·0	9th
	Pachpadra	*380*	29·250	+·057	29·582	29·366	10th	29·113	20th	·243	87·2	105·6	−0·1	81·5	+0·3	93·5	+0·1	24·1	111·7	30th	75·0	8th
	Jodhpur	782	28·856		29·609	28·971	1st	28·734	20th	·237	85·5	103·6		81·7		92·7		21·9	110·2	30th	72·3	8th
	VIII.—East Rajputana, Central India and Gujarat.			+·049								101·8	+3·6	82·9	+2·5	92·4	+3·1	19·0				
50	Jaipur	1,431	28·208	+·033	29·569	28·310	10th	28·104	20th	·206	89·9	107·8	+4·8	83·5	+2·4	95·5	+3·6	23·8	112·2	4th & 29th.	73·1	10th
	Bharatpur	585	28·992		29·522	29·054	8th	28·969	20th	·085	93·5	108·3		87·0		97·7		21·3	112·9	2nd	79·1	8th
	Kotah	819?	28·781		29·578	28·880	9th	28·690	20th	·190	92·6	108·7		89·0		98·9		19·7	113·1	3rd	82·2	10th
	Sambhar	1,254	28·378	+·045	29·570	28·474	10th	28·271	20th	·203	89·6	106·6	+4·3	85·1	+2·7	95·9	+3·5	21·5	112·0	22nd	74·9	10th
	Ajmer	1,611	28·060	+·046	29·604	28·146	10th	27·964	20th	·182	86·7	103·8	+3·3	84·3	+3·5	94·1	+3·4	19·5	107·9	9th & 29th.	78·6	10th
	Udaipur	1,925	27·778		29·624	27·859	1st	27·672	20th	·187	81·4	99·7		78·7		89·2		21·0	104·0	28th	70·3	30th
46	Bhuj	395	29·292	+·059	29·637	29·415	1st	29·181	20th	·234	84·3	96·8	−0·8	79·9	+0·1	88·4	−0·4	16·9	102·3	29th	77·0	10th & 11th.
	Jamnagar	61	29·645		29·651	29·771	1st	29·540	20th	·231	86·8	97·6		80·4		89·0		17·2	102·1	5th & 6th.	76·2	11th
	Rajkot*	429	29·293	+·065	29·670	29·414	1st	29·188	20th	·226	85·6	101·5	+1·7	77·2	?	89·4	?	24·3	104·4	2nd	71·3	10th
	Veraval	*18*	29·738	+·078	29·698	29·868	1st	29·637	20th	·231	83·0	86·3	−0·1	81·2	+0·2	83·8	+0·1	5·1	89·1	10th	79·3	1st & 12th
	Dwarka	37?	29·677		29·660	29·820	1st	29·585	20th	·235	84·8	89·2		82·0		85·6		7·2	90·9	30th	80·8	13th
	Bhavnagar Para	55	29·683	?	29·682	29·810	1st	29·575	20th	·235	87·1	102·9	?	81·3	+0·8	92·0	?	21·6	108·2	20th	78·0	11th
45	Nowgong	757	28·836	+·010	29·528	28·939	10th	28·733	20th	·206	93·9	108·2	+6·6	87·4	+5·0	97·8	+5·8	20·8	113·0	4th	79·4	23rd
	Indore	1,823	27·910	+·064	29·608	27·984	10th	27·816	20th	·168	82·1	98·9	+4·5	76·7	+1·4	87·8	+3·0	22·2	102·6	22nd	70·1	30th
	Neemuch	1,630	28·068	+·049	29·637	28·144	9th	27·947	20th	·197	83·9	100·4	+2·1	80·0	+2·7	90·2	+2·4	20·4	105·0	29th	75·2	6th
45	Surat	39	29·716	+·056	29·699	29·835	1st	29·617	20th	·218	86·3	94·2	?	81·2	+1·9	87·7	?	13·0	97·2	10th	74·5	28th

* Observations of 29 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any stati

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42 and

—continued.

India, Burma, etc., in June, 1905—continued.

Wind Direction. Number of winds from. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected	Normal. (uncorrected.)	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June 1905.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period 1st May to 30th June 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													49	−11	·665	−·061	1·4	−2·2				1·28	4·25	−2·95					VI.—Upper Sub-Himalayas.
		7	1			7	1	Calm	2·9	4·9	−41	2·8	59	−11	·793	−·031	1·0	−3·4	2	4·91	−2·91	0·62	5·96	−5·34	1·19	6·72	−5·53	0·27	Bareilly.
1	4	2	1	2	1	4	3	N 27° W	1·8	1·8	+13		55	−15	·587	−·091	1·9	−3·1	4	10·00	−6·00	5·24	10·26	−5·02	7·53	11·95	−4·42	2·65	Dehra Dun.
	1		9	2			5	S 40° E	4·4	3·9	+13		55	− 8	·684	−·044	1·7	−2·5	5	6·00	−1·00	2·02	5·31	−3·29	2·39	6·13	−3·74	0·69	Roorkee.
2		8			2	7	1	N 41° W	1·5	2·6	−42	1·5	53	− 9	·694	−·053	5·1	+0·9	4	4·00	0	2·39	3·49	−1·10	2·57	4·09	−1·52	1·65	Meerut.
2	1	2	4	1		13	6	N 76° W	5·8	4·9	+18	5·1	46	−10	·673	−·049	1·7	−2·3	3	4·10	−1·10	0·93	3·41	−2·48	0·99	4·13	−3·14	0·62	Delhi.
2	2	2	8	4	1	3		S 38° E	2·9	3·5	−17		47	− 5	·685	−·008	0·8	−2·0	2	2·30	−0·30	0·56	2·99	−1·53	0·59	2·91	− 2·32	0·30	Lahore.
	1	2	2	3	17	3	1	S 38° W	5·9	5·2	+13		51	0	·793	+·083	0·1	−4·4	0	3·20	−3·20	0	1·79	−1·79	0·23	2·50	− 2·27	0	Sirsa.
3		7	10	3	3	3	1	S 42° E	7·0			7·1	53		·706		0·6		2			1·00			1·14			0·71	Patiala.
	4		11		5		1	S 39° E	2·2	2·4	− 8	2·0	41	−15	·602	−·124	0·2	−3·1	1	3·50	−2·50	0·50	3·02	−2·52	0·50	3·63	− 3·13	0·28	Ludhiana.
3	10	8	5	1				N 73° E	3·8	2·4	+58	3·2	41	−11	·611	−·088	0·7	−1·3	3	3·60	−0·60	0·79	3·08	−2·29	1·30	4·11	− 2·81	0·22	Sialkot.
		2	12		3	1	3	S 32° E	3·5			3·1	52	−15	·685	−·114	0·7	−2·3	3	4·30	−1·30	0·91	6·29	−5·38	0·94	7·02	− 6·08	0·60	Ambala.
1	3	3	5	1	2	1	1	S 70° E	3·8	2·6	+46	3·5	33	−17	·464	−·166	2·2	−0·6	2	3·30	−1·30	0·35	2·01	−1·66	1·07	3·48	− 2·41	0·15	Rawalpindi.
													54	− 1	·738	−·021	1·6	· 1·0				0·28	0·93	− 0·65					VII.—Indus Valley and N.-W. Rajputana.
3	2	1	1	2		3	3	N 28° W	2·6	4·9	−47	2·8	35	− 9	·513	−·080	1·5	−0·4	0	0·90	−0·90	0	0·30	−0·30	1·84	1·05	+0·79	0	Peshawar.
1	5		3	2	1		1	N 81° E	2·5	2·4	+ 4	2·7	53	− 3?	·771	−·026	0·9	−0·5	1	1·30	−0·30	0·11	0·65	−0·54	0·41	0·99	−0·58	0·11	D. I. Khan.
	14	4	3	4	2	1		N 81° E	9·4			9·0	34	− 9	·531	−·063	0·8	−0·9	2	1·50	+0·50	1·17	1·72	−0·55	1·30	2·50	−1·20	0·98	Khushab.
1		1		9	14	2	3	S 40° W	9·8			9·1	35	− 4	·585	−·082	0·7	−0·8	1	2·00	−1·00	0·59	1·14	−0·55	0·64	1·41	−0·77	0·52	Montgomery
1	2		2	2	20		1	S 40° W	2·7	3·8	−29	2·4	53	+ 5	·740	+·038	0·6	−0·1	1	1·10	−0·10	0·20	0·62	−0·42	0·30	0·92	−0·62	0·18	Multan.
	2	6	10	9	2	1		S 37° E	6·9	4·7	+47	7·2	57	+ 6	·811	+·025	0	−1·1	0	0·30	−0·30	0	0·09	−0·09	0	0·25	−0·25	0	Jacobabad.
				9	18	3		S 36° W	17·6	15·2	+16	15·7	64	+ 3	·028	+·036	0·7	−3·1	0	0·70	−0·70	0	0·38	−0·38	0	0·56	−0·56	0	Hyderabad.
			1	1	4	21	3	S 84° W	18·0	18·5	− 3	17·8	76	− 1	·907	−·064	6·2	+1·9	0	0·50	−0·50	0	0·71	−0·71	0	0·71	−0·71	0	Kurrachee.
			1	6	16	6		S 43° W	15·0	7·8	+92		58	+ 4	·803	+·031	1·1	−1·2	1	2·10	−1·10	0·24	1·70	−1·46	0·24	2·58	−2·34	0·24	Bikaner.
				10	16	3	1	S 36° W	12·5	12·0	+ 4	10·9	69	− 3?	·898	−·013?	1·3	−2·7	1	2·50	−1·50	0·20	1·46	−1·26	0·20	2·12	−1·92	0·20	Pachpadra.
				1	21	8		S 55° W	12·0			10·8	60		·731		3·6		1	2·60	−1·60	0·60	1·49	−0·89	0·60	1·76	−1·16	0·60	Jodhpur.
													62	−5	·809	−·021	3·6	−1·2				0·56	4·67	−4·11					VIII—East Rajputana, Central India and Gujarat.
				2	18	7	2	S 58° W	7·7	7·3	+ 5		47	−10	·656	−·062	0·9	−3·3	1	4·40	3·40	0·37	2·66	−2·29	0·39	3·15	−2·76	0·28	Jaipur.
2		1	1		4	13	1	S 86° W	5·2			4·8	61		·958		2·2		2			0·47			0·49			0·20	Bharatpur.
					11	15	4	S 80° W	8·2			6·6	42		·644		0·4		1	6·20	−5·20	0·10	3·57	−3·47	0·10	4·68	−4·58	0·10	Kotah.
1				1	1	22	4	N 85° W	13·9	11·2	+24		55	− 2	·766	+·041	1·6	−2·4	1	3·60	−2·60	0·55	1·58	−1·03	0·56	2·34	−1·79	0·51	Sambhar.
					11	14	5	S 81° W	16·4	8·3	+98	14·3	59	− 2	·754	+·004	1·3	−2·3	1	3·90	−2·90	0·41	2·48	−2·07	0·41	3·09	−2·68	0·41	Ajmer.
					15	13	1	S 68° W	11·4			10·0	68		·810		1·5		3	5·10	−2·10	1·63			1·70			0·96	Udaipur.
					15	10	5	S 74° W	22·3	16·1	+39	18·7	79	+ 8	·936	+·063	6·9	+1·9	0	2·40	−2·40	0	2·03	−2·03	0	2·12	−2·12	0	Bhuj.
			1	1	19	8	1	S 56° W	24·5			29·6	63		·812		4·4		0			0·08			0·08			0·06	Jamnagar.
				1	13	13	1	S 68° W	16·7	15·6	+ 7	16·5	75	+ 1	·945	+·050	5·9	+0·3	2	5·30	−3·30	0·74	5·12	−4·38	0·74	5·34	−4·60	0·37	Rajkot.*
				3	14	13		S 60° W	12·5	10·6	+18	12·5	88	+ 1	·987	+·023	2·5	−1·4	0	4·60	−4·60	0·04	5·23	−5·19	0·04	5·25	−5·21	0·04	Veraval.
		1		7	17	5		S 40° W	18·3				82		·987		3·5		0			0·01			0·01			0·01	Dwarka.
				1	23	1	5	S 55° W	15·1			13·7	60	?	·778	?	6·3	+0·2	0	5·70	−5·70	0	5·02	−5·02	0	5·12	− 5·12	0	Bhavnagar Para.
1		2	1		1	21	3	N 86° W	3·9	4·4	−11	3·9	41	−20	·649	−·107	5·4	+0·7	1	7·30	−6·30	0·35	8·15	−7·80	0·52	8·48	− 7·96	0·33	Nowgong
					2	25	2	W	12·0	7·0	+71	9·7	70?	?	·769?	?	4·8	−1·2	4	7·60	−3·60	2·52	6·25	−3·83	2·90	6·94	− 4·04	1·02	Indore.
					14	16		S 69° W	18·5	14·2	+30	15·5	59	−11	·687	−·096	3·2	−1·2	0	6·20	−6·20	0·09	4·95	−4·86	0·19	5·40	− 5·21	0·09	Neemuch.
1			1	8	12	7	1	S 45° W	11·2	15·6	−28	10·5	76	− 3	·962	+·044	4·4	−2·5	3	8·70	−5·70	1·51	9·62	−8·11	1·51	9·75	− 8·24	0·85	Surat.

data for that station are not utilized in calculating the provincial departures from normal.
derived are incomplete.

Table

Abstract of Observations taken at 8 A.M. at 231 Stations

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
45	Ahmedabad .	163	29·557	+·062	29·667	29·658	1st	29·455	20th	·203	87·8	105·0*	+5·3*	82·6*	+1·9*	93·8*	+3·6*	22·4	107·3	1st & 20th.	77·1	28th	30·2
	Deesa . .	466	29·235	+·055	29·649	29·313	1st	29·117	20th	·226	86·1	104·5	+2·6	80·7	+0·1	92·6	+1·4	23·8	107·6	29th	78·6	9th	29·0
22	Agra . .	555	28·998	P	29·501	29·107	9th	28·913	20th	·194	93·1	107·3	+3·0	88·4	+3·9	97·9	+3·5	18·9	111·0	24th	77·9	8th	33·1
21	Jhansi . .	858	28·750	+·019	29·539	28·852	9th & 10th.	28·657	29th	·195	95·0	109·6	+6·8	90·5	+6·5	100·1	+6·7	19·1	114·1	4th	81·2	6th	33·2
	IX.—Deccan.			+·033								100·7	+6·0	78·7	+3·0	89·7	+4·5	21·9					34·6
22	Belgaum .	2,539	27·297	+·043	29·767	27·367	1st & 15th.	27·211	20th	·156	74·1	84·4	+3·6	68·5	+0·4	76·4	+2·0	15·9	93·3	3rd	66·8	11th, 12th & 28th.	26·5
	Sholapur .	1,590	28·201	+·036	29·733	28·260	8th	28·096	20th	·164	80·7	93·5	+3·7	75·4	+2·2	87·0	+3·0	23·1	105·2	3rd	72·0	22nd	33·2
	Poona . .	1,840	27·951	+·050	29·744	28·049	1st	27·865	20th	·184	78·8	93·5	+4·3	73·3	+0·7	83·4	+2·5	20·2	98·0	17th	70·4	8th & 13th.	27·6
	Bijapur . .	*1,948*	27·857	+·045	29·743	27·919	15th	27·765	20th	·154	78·2	94·9	+4·4	72·4	+0·2	83·7	+2·3	22·5	102·9	1st	69·7	11th	33·2
40	Malegaon .	1,430	28·317	+·042	29·688	28·398	10th	28·214	20th	·184	83·1	100·1	+5·2	76·1	+1·1	88·1	+3·2	24·0	104·9	21st	72·0	29th	32·9
	Ahmednagar .	2,154	27·651	+·058	29·735	27·716	1st	27·550	20th	·166	79·6	95·0	+4·6	72·2	?	83·6	P	22·8	102·9	21st	69·0	8th & 19th.	32·9
41	Akola . .	930	28·789	+·044	29·656	28 860	10th	28·680	29th	·180	86·5	104·1	+5·9	80·5	+2·8	92·3	+4·4	23·6	108·2	21st	72·8	26th	35·4
	Amraoti .	1,215	28·488	+·035	29·638	28·539	8th	28·385	29th	·154	86·8	104·5	+7·3	81·5	+4·7	93·0	+6·0	23·0	110·4	1st	74·5	30th	35·9
42	Khandwa .	1,044	28·665	+·044	29·657	28·738	8th	28 572	20th	·166	84·7	102·6	+5·0	80·6	+1·9	91·6	+3·5	22·0	106·7	5th	72·6	27th	34·1
	Hoshangabad.	1,006	28·682	+·041	29·629	28·763	9th	28·585	20th	·178	89·7	106·3	+8·2	83·9	+4·9	95·1	+6·6	22·4	111·0	1st	75·2	14th	35·8
	Nagpur . .	1,025	28·649	+·032	29·611	28·739	9th	28·552	20th	·187	89·4	106·5	+8·2	81·9	+3·4	94·2	+5·8	24·6	115·2	2nd	73·6	30th	41·6
43	Chanda . .	*634*	29·074	P	29·642	29·123	14th	28·973	20th	·150	89·5	106·4	+7·9	82·4	+2·8	94·4	+5·4	24·0	112·2	1st & 2nd.	72·5	25th	39·7
	Seoni . .	2,033	27·655	+·031	29·591	27·723	10th	27·564	20th	·159	87·0	102·8	+8·6	79·4	+3·9	91·1	+6·3	23·4	108·9	1st	72·5	26th	36·4
	Jubbulpore .	1,327	28·320	+·033	29·577	28·399	8th	28·217	20th	·182	89·2	104·9	+8·0	81·6	+3·2	93·3	+5·6	23·3	110·0	4th	73·6	15th	36·4
	Saugor . .	1,807	27·855	+·031	29·577	27·936	10th	27·746	20th	·190	87·7	103·9	+6·1	82·3	+4·7	93·1	+5·4	21·6	109·0	4th	75·1	6th	33·9
49	Sutna . .	1,040	28·543	+·007	29·517	28·648	10th	28·470	20th	·178	93·5	107·1	+8·4	87·0	+5·9	97·1	+7·2	20·1	110·6	4th, 14th, 15th.	80·1	9th	30·5
44	Raipur . .	970	28·652	+·001	29·547	28·716	7th	28·561	20th	·155	91·5	105·2	+8·0	83·5	+5·1	94·4	+6·6	21·7	110·8	1st & 2nd.	74·4	29th	36·4
	Pendra . .	2,123?	27·614		29·533	27·692	8th	27·539	20th	·153	88·8	102·2		80·4		91·3		21·8	105·8	23rd	71·1	17th	34·7
	Sambalpur .	486	29·109	−·020	29·533	29·193	9th	29·015	20th	·178	91·2	106·1	+8·8	85·5	+4·8	95·8	+6·8	20·6	112·1	14th & 15th.	76·1	30th	36·0
39	Aurangabad .	1,905	27·863		29·698	27·948	10th	27·762	20th	·186	80·0	97·2		73·1		85·1		24·1	103·0	1st & 21st.	70·2	29th	32·8
	Indur . .	1,260	28·510?		29·708	28·562	13th	28·401	21st	·161	85·2	101·6		78·9		90·1		22·7	108·6	2nd	70·2	29th	38·4
	Bidar . .	*2,165*	27·631		29·719	27·713	14th	27·508	11th	·205	80·5	95·8		75·6		85·8		20·2	103 8	3rd	70·4	28th	33·4
53	Gulbarga .	1,503	28·274	+·025	29·722	28·330	8th	28·186	20th	·144	79·9	97·9	+3·4	75·9	+2·5	86·9	+3·0	22·0	106·8	3rd	71·2	28th	35·6
	Raichur . .	1,326?	28·468	+·045	29·741	28·526	8th	28·377	28th	·149	79·6	96·6	+1·9	75·3	+0·5	86·0	+1·2	21·3	105·0	1st	70·1	10th16th & 22nd.	34·9
	Hyderabad (Deccan).	1,690	28·069	+·031	29·690	28·124	8th	27·982	20th & 21st.	·142	82·0	97·6	+3·2	78·0	+3·6	87·8	+3·5	19·6	104·9	2nd	70·7	27th	34·2
	Hanumkonda .	871	28·823		29·626	28·901	15th	28·735	21st	·166	87·2	101·3		81·7		91·5		19·6	107·7	1st	71·3	26th & 27th.	36·4
	X.—West Coast.			+·039								86·0	+0·6	77·2	+0·6	81·6	+0·6	8·8					18·1
37	Bombay .	37	29·754	+·045	29·731	29·870	1st	29·657	29th	·213	85·0	91·6	+4·0	82·0	+2·5	86·9	+3·3	9·6	94·0	23rd	76·5	26th	17·5
	Ratnagiri .	110	29·711	+·051	29·759	29·801	1st	29·614	20th	·187	82·6	89·3	+2·7	78·0	+0·8	83·7	+1·8	11·3	92·8	3rd	71·9	30th	20·9
	Mormugao .	*60*	29·782	+·053	29·783	29·859	1st	29·700	21st	·159	81·7	86·8	−0·2	77·4	−0·5	82·1	−0·4	9·4	93·0	8th	73·4	28th	19·6
	Goa . .	199	29·635	P	29·774	29·728	1st	29·541	29th	·187	81·6	84·5	−0·7	73·8	+1·0	81·7	+0·2	5·7	89·0	6th	71·0	11th	18·0
	Karwar . .	44	29·809	+·043	29·787	29·872	14th	29·720	21st	·152	80·5	85·0	−0·3	76·7	+0·6	80·9	+0·2	8·2	89·8	4 days	73·0	10th	16·8
33	Cochin . .	10	29·897	+·026	29·834	29·940	10th	29·847	21st	·093	79·2	85·7	+0·7	75·5	+0·8	80·7	+0·8	10·2	89·8	4th	71·2	19th	18·6
	Calicut . .	27	29·866	+·028	29·823	29·919	15th	29·797	21st	·122	79·0	84·6	0	76·1	+1·4	80·4	+0·7	8·5	90·3	6th	73·2	10th & 27th.	17·1
	Mangalore .	65	29·813	+·030	29·810	29·876	14th	29·729	20th	·147	79·1	83·9	−1·1	75·1	+0·1	79·5	−0·5	8·8	90·2	6th	69·0	27th	21·2
	Trivandrum .	198	29·712	+·038	29·842	29·771	23rd	29·655	3rd	·116	77·6	82·7	−0·2	75·2	−1·0	79·0	−0·6	7·5	85·5	3rd	72·0	10th	13·1

N. B.—Elevations in italics indicate barometrical determinations.

* Mean of 29 days.

NOTE 1.—When a query is inserted against any reading or in the returns of a

NOTE 2.—The data from which divisional means of the figure columns N

continued.

ndia, Burma, etc., in June, 1905—continued.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June 1905.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
			3	15	7	2	S 58° W	9·0				63	— 9	·818	—·058	7·7	+1·5	1	4·80	— 3·80	0·69	6·76	— 6·07	0·69	6·77	— 6·08	0·69	Ahmedabad†
				21	6	3	S 61° W	19·2	16·8	+14		64	— 4	·798	—·022	5·9	0	0	2·18	—2·18	0·03	2·27	—2·24	0·03	2·52	— 2·49	0·03	Deesa.
2		2		19		6	S 58° W	6·8	5·7	+19	8·0	41	—16	·631	—·133	1·4	—2·4	4	3·90	+0·10	0·90	2·90	— 2·00	0·93	3·46	— 2·53	0·38	Agra.
	1		1	8	11	7	S 88° W	7·2	5·8	+24	8·8	54?	?	·893?	?	1·2	—2·3	2	5·80	— 3·80	0·75	6·06	— 5·31	0·98	6·47	— 5·49	0·50	Jhansi.
												59	—12	·685	—·056	4·6	—1·5				3·10	6·55	— 3·59					IX.—Deccan.
				16	13	1	S 67° W	17·5	24·3	—28		82	— 5	·683	— ·012	7·2	—1·0	6	14·00	— 8·00	3·81	8·44	— 4·63	7·08	10·93	— 3·85	1·45	Belgaum
				4	12	14	N 74° W	13·2	12·2	+ 8	16·0	62	— 4	·647	—·023	5·1	—1·6	7	6·20	+0·80	3·24	4·36	— 1·12	3·45	5·36	— 1·91	1·14	Sholapur.
					25	5	N 83° W	17·5	16·0	+ 9		68	— 5	·667	—·039	6·2	—1·1	3	8·50	— 5·50	3·23	4·73	— 1·50	4·92	6·06	— 1·14	1·69	Poona.
			1	7	20	2	S 80° W	12·1			11·9	76	— 1?	·728	+ ·007	5·3	—1·7	5	6·20	—1·20	1·93	3·55	— 1·62	2·30	5·34	— 3·04	0·73	Bijapur.
				5	19	2	S 85° W	11·9	11·9	0	13·7	61	—10	·690	— ·067	3·1	— 3·1	4	7·70	— 3·70	2·38	4·44	— 2·06	2·38	5·17	— 2·79	1·32	Malegaon.
1				1	8	20	N 58° W	9·5			11·6	72	— 6?	·730	— ·005	3·0	— 3·5	7	7·40	— 0·40	3·05	5·14	— 2·09	3·09	6·02	— 2·93	0·97	Ahmednagar.
					10	20	N 60° W	14·2	8·9	+60	12·5	60	— 8	·740	— ·018	4·0	— 2·2	3	8·10	— 5·10	2·23	5·20	— 2·97	2·73	5·63	— 3·40	1·48	Akola.
			1	4	20	5	S 89° W	10·4*	7·4	+41	9·1*	59	—12	·743	— ·011	3·4	— 2·6	5	9·00	— 4·00	1·70	6·82	— 5·12	1·78	7·45	— 5·67	0·65	Amraoti
				1	8	19	N 58° W	11·9	9·2	+29	11·3	60	— 8	·706	— ·043	3·4	— 2·1	3	7·50	— 4·50	3·08	5·81	— 2·73	3·08	6·16	— 3·08	2·03	Khandwa.
				14	11	5	S 75° W	6·1	4·6	+33	6·2	54	—17	·742	— ·066	2·9	— 3·1	1	8·20	— 7·20	0·54	6·78	— 6·24	0·81	7·33	— 6·52	0·49	Hoshangabad.
					8	16	N 48° W	11·1	10·0	+14	9·0	51	—13	·684	— ·068	4·0	— 2·6	10	9·70	+ 0·30	7·48	8·52	— 1·04	7·85	9·24	— 1·39	1·77	Nagpur.
				5	16	7	N 87° W	10·1	6·3	+60	9·0	61	?	·837	?	4·4	— 2·2	4	9·40	— 5·40	3·73	7·68	— 3·95	4·22	8·42	— 4·20	2·16	Chanda.
1				3	7	12	N 47° W	7·4	5·7	+30	6·2	49	—18	·602	— ·098	4·6	— 0·5	6	12·30	— 6·30	3·08	9·95	— 5·97	5·44	10·63	— 5·19	1·17	Seoni.
		1	3	4	13	7	N 85° W	5·3	5·3	0	4·7	47	—18	·629	— ·093	3·7	— 1·5	5	10·40	— 5·40	2·36	9·50	— 7·14	2·44	10·05	— 7·61	0·65	Jubbulpore.
				4	23	2	S 89° W	10·5	5·2	+102	9·3	43	—22	·567	— ·110	3·6	— 1·4	3	8·90	— 5·90	0·65	8·79	— 8·14	0·65	9·29	— 8·64	0·29	Saugor.
1	1	1	1	9	13	2	S 72° W	6·4	9·6	—33	5·9	39	—21?	·600	— ·114	6·2	+1·6	3	7·20	— 4·20	0·69	7·32	— 6·63	0·69	7·70	— 7·01	0·31	Sutna.
			1	15	10		S 67° W	9·2	8·7	+ 6	11·0	44	—24	·636	— ·136	6·0	—0·4	3	10·40	— 7·40	0·86	8·88	— 8·02	1·94	9·82	— 7·88	0·55	Raipur.
																		5			1·59			5·35			0·50	Pendra.
	1		2	3	5	13	N 62° W	7·0			6·0	41		·551		3·9												
	2	2	1	18	6	1	S 48° W	5·8	3·4	+71	5·7	52	—22	·750	— ·109	5·8	—0·8	5	10·40	— 5·40	2·57	11·35	— 8·78	4·76	12·97	— 8·21	0·97	Sambalpur.
	3			4	19	4	W	18·8			18·6	65		·673		3·8		5	8·10	—3·10	1·82	6·25	— 4·43	1·87	6·99	— 5·12	0·56	Aurangabad
						29	N 45° W	5·0			4·2	55		·662		4·0		5	8·90	—3·90	2·69	4·65	— 1·96	2·79	5·04	— 2·25	1·47	Indur.
			3	10	11	4	S 77° W	8·1			6·8	81?		·859?		3·0		7	7·80	—0·80	4·25	5·74	— 1·49	5·46	6·74	— 1·28	1·42	Bidar.
				1	16	11	N 70° W	10·1			8·9	70	— 6	·707	—·034	5·2	—1·1	7	7·40	— 0·40	4·16	5·71	— 1·55	5·44	6·87	— 1·43	1·21	Gulbarga.
				18	4	7	S 70° W	15·4			14·6	70	0	·714	— ·004	4·9	—1·5	7	6·20	+0·80	8·93	3·12	+ 5·81	8·93	3·84	+ 5·09	2·65	Raichur.
					23	6	N 82° W	7·8			7·6	62	— 9	·639	—·054	7·2	+1·0	4			1·59	4·37	— 2·78	5·64	5·36	+ 0·28	0·67	Hyderabad (Deccan)
				3	13	13	N 74° W	12·3			10·8	50		·618		4·6		7	6·70	+0·30	8·02			8·40			2·80	Hanumkonda
												85	— 1	·885	—·001	7·2	—0·7				28·29	27·94	+ 0·35					X.—West Coast.
		1	4	6	12	7	S 80° W	9·6	16·2	—41		76	— 7	·919	— ·010	6·0	—1·9	7	14·70	—7·70	4·68	19·63	—14·95	4·68	20·34	—15·66	3·13	Bombay.
2	5	7		2	1	2	S 86° E	9·1	12·0	—24	9·0	80	— 3	·887	— ·014	6·2	—1·4	17	20·50	—3·50	11·81	30·20	—18·39	11·85	31·65	—19·80	2·83	Ratnagiri.
1	1		3	1	5	9	N 48° W	7·7				86	+ 1	·928	— ·007	7·1	+0·3	18			32·02	23·63	+ 8·39	33·17	26·20	+ 6·97	6·27	Mormugao.
2	1	1	1	8	4	4	S 83° W	9·2				83	— 2	·899	— ·011	7·8	—0·3	22			26·58	28·72	— 2·14	27·81	31·05	— 3·24	7·30	Goa.
		2	15	3	1		S 68° W	5·7				83	0	·843	—·024	5·7	—2·3	22	23·30	—1·30	36·05	35·98	+ 0·07	38·44	39·26	— 0·82	5·28	Karwar.
	7	9	2	3	5	2	S 31° E	7·6				87	0	·873	+ ·011	7·8	+0·2	24	24·20	—0·20	26·08	28·99	— 2·91	40·08	41·38	— 1·30	4·15	Cochin.
6	4	4	1	2	3	3	N 65° E	7·7			7·7	89	+ 1	·881	+ ·023	7·9	—0·2	23	24·30	—1·30	36·45	35·61	+ 0·84	45·42	43·39	+ 2·03	4·82	Calicut.
2	5	4	2	2	2	2	S 84° E	5·3	3·7	+43		90	+ 1	·891	+ ·018	8·2	—0·6	24	24·60	—0·60	51·78	36·22	+15·56	59·57	42·88	+16·69	5·15	Mangalore.
					3	18	N 39° W	6·5				88	+ 1	·842	+ ·002	8·2	+0·1	20	16·50	+3·50	29·16	12·45	+16·71	42·05	21·50	+20·55	5·33	Trivandrum.

tion, the data for that station are not utilized in calculating the provincial departures from normal.

4 are derived are incomplete.

† Wind observations of 28 days.

Table

Abstract of Observations taken at 8 A.M. at 231 Stations

Number of district.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XI.—South India.			+·018								94·8	+1·5	77·2	+0·7	85·9	+1·1	18·0					29·9
57	Pamban .	37	29·804	+·026	29·767	29·863	8th	29·747	21st	·116	84·6	90·8	+1·1	80·9	+0·6	85·9	+0·9	9·9	93·3	4th & 26th.	78·2	1st	15·1
	Tinnevelly .	168	29·691	+·036	29·788	29·750	10th	29·631	3rd	·119	85·6	95·6	−1·5	78·9	−0·7	87·3	−1·1	16·7	101·4	3rd & 6th.	73·9	20th	27·5
	Madura .	447	29·394	+·038	29·774	29·446	8th	29·337	21st	·109	84·1	97·2	−1·0	76·9	−0·2	87·1	−0·6	20·3	101·5	3rd & 11th.	72·0	1st	29·5
	Periyakulam .	945	28·896		29·779	28·942	10th	28·828	21st	·113	80·0	93·3		72·9		81·8		20·4	100·8	6th	68·6	16th	32·2
34	Salem . .	940	28·914	+·014	29·794	28·970	14th	28·840	21st	·130	80·9	95·5	+0·3	75·7	+1·5		+0·9	19·8	101·2	4th	73·4	3 days	27·8
	Coimbatore .	1,348	28·497	+·022	29·793	28·551	14th	28·425	21st	·126	78·0	88·7	−1·2	72·7	+1·1		−0·1	16·0	93·9	6th.	69·3	10th	24·6
35	Mercara .	3,781	26·190	+·032	26·123	26·244	1st	26·113	21st	·131	66·3	73·5	+0·6	63·4	+0·1	68·5	+0·4	10·1	81·0	7th	57·6	30th	23·4
36	Chitaldroog .	2,405	27·438	+·032	29·775	27·504	1st	27·349	21st	·155	74·7	87·8	+2·0	70·1	+0·6	79·0	+1·3	17·7	94·1	2nd & 6th.	67·4	28th	26·7
	Bangalore .	3,021	26·872	+·022	29·803	26·927	8th	26·800	20th	·127	72·5	86·1	+1·4	67·6	+0·8	76·9	+1·1	18·5	93·3	3rd	61·3	12th	29·0
	Hassan . .	3,091	26·819	+·034	29·816	26·877	11th	26·738	21st	·139	72·6	83·7	?	66·5	+0·4	75·1		17·2	91·4	3rd	63·4	11th	28·0
	Mysore . .	2,518	27·374	+·029	29·827	27·429	14th	27·295	21st	·134	73·9	85·0	+0·4	68·5	+0·3	76·8	+0·4	16·5	92·5	1st & 3rd	65·5	11th & 12th.	27·0
56	Negapatam .	31	29·781	+·014	29·740	29·839	8th	29·719	21st	·120	85·6	100·0	+2·9	79·6	+0·4	89·8	+1·7	20·4	105·4	19th	73·5	1st	31·9
	Cuddalore .	37	29·760	+·020	29·726	29·827	8th	29·688	21st	·139	87·7	105·7?	?	81·5	?	93·6?	?	24·2	109·2	4th	79·2	1st & 4th.	30·0
	Trichinopoly .	255	29·565	+·014	29·752	29·622	8th & 10th.	29·501	21st	·121	84·0	99·1	+0·1	78·5	+0·1	88·8	+0·1	20·6	104·0	2nd	72·4	1st	31·6
	Madras . .	22	29·747	+·001	29·699	29·810	8th	29·663	21st	·147	88·1	102·6	+4·1	82·4	+1·7	92·5	+2·9	20·2	108·0	3rd	77·5	17th	30·5
	Vellore . .	707	29·079		29·721	29·136	14th	28·999	21st	·137	84·4	92·3		79·1		85·7		13·2	103·4	2nd	73·6	9th	29·8
55	Nellore . .	52	29·700	+·023	29·685	29·790	14th	29·610	20th & 21st.	·180	89·5	104·0	+2·2	83·3	+1·1	93·7	+1·7	20·7	110·3	4th	75·6	27th	34·7
	Masulipatam .	15	29·701	+·010	29·651	29·776	9th	29·613	21st	·163	88·3	102·6	+4·9	82·0	+1·8	92·3	+3·4	20·6	110·7	2nd	75·1	28th	35·6
54	Cuddapah .	433	29·355	+·023	29·722	29·424	14th	29·278	20th	·146	86·5	102·1	+1·8	80·6	0	91·4	+0·9	21·5	108·8	14th. 3rd	73·8	17th	35·0
	Kurnool .	945	28·855	+·023	29·720	28·927	14th	28·775	20th	·152	81·7	97·5	+0·8	77·3	+0·4	87·4	+0·6	20·2	106·3	1st & 3rd	70·6	13th & 17th.	35·7
	Bellary . .	1,475	28·326	+·027	28·741	28·394	15th	28·238	20th	·156	80·7	96·1	+1·6	76·0	+0·3	86·1	+1·0	20·1	102·0	4 days	68·7	9th	33·3
52	Cocanada .	26	29·655	−·011	29·617	29·736	9th	29·554	20th	·182	87·3	101·5	+6·3	82·7	+1·7	92·1	+4·6	18·8	109·0	14th	76·0	28th	33·0
	Waltair (Vizag.)	*226*	29·424	−·005	29·587	29·516	8th	29·311	20th	·205	85·7	93·0	?	80·9	?	87·0	?	12·1	104·9	16th	71·9	3rd	33·0
	Gopalpur .	72	29·534	−·021	29·547	29·611	8th	29·456	20th	·155	85·2	90·9	+1·7	81·6	+1·0	86·3	+1·4	9·3	100·2	16th	74·0	2nd	26·2
	XII.—Hill Stations.																						
48	Pishin . .	...										94·6		58·5		76·6		36·1	100·4	29th	52·1	8th.	48·3
	Quetta . .	5,502	24·498	+·018	24·458	24·631	1st	24·416	16th	·215	75·2	91·1	+0·5	56·8	−2·3	74·0	−0·9	34·3	96·1	19th & 29th.	50·4	8th	45·7
	Kalat . .	...									76·7	91·8	−0·3	47·6	−1·4	69·7	−0·9	44·2	101·9	23rd	42·0	11th	59·9
	Chaman . .	4,311	25·514	+·026	25·476	25·662	1st	25·411	18th	·251	82·3	98·2	−2·0	68·6	−3·0	83·4	−2·5	29·6	104·7	28th, & 29th.	51·1	6th	53·6
30	Leh . .	11,503	19·703	+·023	19·671	19·766	30th	19·601	16th	·165	51·4	69·3	−3·8	42·1	−2·5	55·7	−3·2	27·2	77·6	25th	37·4	4th	40·2
	Srinagar . .	5,204	24·756	+·025	24·727	24·901	7th	24·608	17th	·293	67·7	83·7	+0·6	57·0	−1·8	70·4	−0·6	26·7	93·3	30th	51·2	10th	42·1
	Gulmarg .	*8,569*	21·814		21·782	21·905	1st	21·697	17th	·208	59·7	68·1		43·1		55·6		25·0	76·6	29th	37·7	10th	38·9
	Sonemarg .	*8,764*	21·812		21·780	21·926	30th	21·700	17th	·226	48·6	69·4		39·9		54·7		29·5	78·3	30th	36·1	26th	42·8
	Skardu . .	*7,505*	22·774		22·744	22·892	7th	22·642	19th	·250	64·9	76·2		54·6		65·4		21·6	90·9	29th	41·6	10th	49·3
	Dras . .	*10,059*	20·790		20·758	20·868	1st	20·680	16th	·188	56·8	74·5		42·9		58·7		31·6	85·0	30th	39·1	2nd & 17th.	45·9
	Gilgit . .	4,890	24·968		24·971	25·162	1st	24·859	17th	·303	75·5	90·8	−3·8	65·6	−4·4	78·2	−4·1	25·2	104·2	29th	55·1	6th	49·1
32	Chitral . .	*5,486*									72·3	92·7		62·1		77·5		30·6	100·2	28th & 29th.	49·5	7th	50·7
	Killa Drosh .	4,700 ?									74·4	92·3		68·4		80·4		23·9	101·2	29th	55·1	7th	46·1
	Para Chinar .	6,000	24·303		24·270	24·421	12th	24·200	17th	·221	78·5	90·3		63·7		77·0		26·6	96·9	29th, & 30th.	56·2	10th	40·7

N. B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading, or in the returns of any station

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42 and 44 are

NOTE 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau

I—*continued.*

in India, Burma, etc., in June, 1905—continued.

Wind Direction. Number of winds from: Calm.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1905.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June, 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														71	−1	·786	+·018	5·8	−0·7				2·30	2·71	−0·41					XI.—South India.
					4	24	2		S 43° W	19·3			20·5	81		·958		2·7		0	0·50	−0·50	0·02	0·12	− 0·10	1·03	0·67	+ 0·36	0·02	Pamban.
	2		1	2	2	8	12	3	S 74° W	6·5			6·2	59	?	·715	?	6·4	−0·1	2	1·20	+0 80	0·39	0·56	− 0·17	3·61	1·93	+ 1·68	0·20	Tinnevelly.
2	1		1			10	9	7	S 87° W	8·0	4·8	+·07	9·2	69	+ 5	·800	+·037	5·1	−0·3	2	2·50	−0·50	1·56	1·25	+ 0·31	4·58	3·90	+ 0·68	1·19	Madura.
14	8	2	1	1		1	1	2	N	4·0			4·3	69		·703		5·3		6	2·50	+3·50	1·82	1·05	+ 0·77	4·84	3 78		0·93	Periyakulam.
					8	15	7		S 44° W	7·4	4·9	+51	6·5	75	+ 1	·802	+·021	6·5	+0·5	7	4·80	+2·20	3·86	2·97	+ 0·89	7·80	7 98	− 0·18	2·00	Salem.
					2	14	14		S 63° W	10·7	7·7	+39	9·9	82	+ 1	·787	+·023	5·2	−0·7	5	4·90	+0·10	1 38	1·65	− 0·27	4·29	3·93	+ 0·36	0·66	Coimbatore.
	3				1	5	16	5	N 85° W	1·9	9·0	−79	1·8	92	− 1	·595	−·011	8·8	− 0·2	22	24·80	−2·80	23 25	27·35	− 4·10	29 61	33·13	− 3·52	3·83	Mercara.
						6	20	4	S 87° W	11·4			9·9	78	− 4	·677	+·002	5·6	−5·0	5	6·00	−1 00	3·79	3·80	− 0·01	5·89	7·54	− 1·65	1·91	Chitaldroog.
						16	13	1	S 67° W	12·4	8·4	+48	11·0	79	− 2	·636	?	7·5	+0·6	6	5·70	+0·30	2·39	3·05	− 0·66	5·96	7·27	− 1·31	1·14	Bangalore.
	1					10	13	6	S 85° W	5·1			4·5	81	− 2	·649	+·009	8·0	−0·7	7	10·40	−3·40	2·22	5 01	− 2·79	6·04	10·18	− 4·14	0·52	Hassan.
						17	13		S 64° W	12·5			13·5	89	0	·663	+·006	7·9	−0·2	4	6·00	−2·00	1·45	3·81	− 2·36	7·60	7·18	+ 0·42	0·62	Mysore.
					4	11	14	1	S 63° W	11·5	8·3	+ 39	10·1	65	+ 1	·811	+·021	4·5	−0·3	1	3·20	−2·20	0·32	1·50	− 1·18	2·23	3·11	− 0·88	0·24	Negapatam.
					4	23	3		S 44° W	6·5			8·1	63	− 9	·832	−·050?	3·9	−1·5	0	3·10	−3·10	0·01	2·00	− 1·99	2·67	2·28	+ 0·39	0·01	Cuddalore.
6				1	3	7	11	2	S 72° W	9·7	9·2	+ 5		64	+ 1	·740	+·008	4·9	−1·1	3	1·90	+1·10	1·47	1·50	− 0·03	2·73	4·44	− 1·71	0·89	Trichinopoly.
					6	7	17		S 63° W	9·2	9·0	+ 2		58	− 5	·778	−·023	4·9	−1·3	2	8·10	−6·10	0·84	2·21	− 1·37	0·90	3·11	− 2 21	0·49	Madras.
		4	7	6	1	6	3	3	S 45° E	5·0			5·0	61		·726		4·4		7	4·60	+2·40	5·45	2·62	+ 2·83	7·49	5·64	+ 1·85	1·97	Vellore.
2		1				5	20	2	S 87° W	7·9				57	− 5	·753	−·069	6·5	−0·1	3	3·00	0	2·40	1·20	+ 1·20	2·57	1·59	+ 0·98	1·23	Nellore.
2	1			2	1	1	10	13	N 59° W	11·7	9·4	+24	10·3	78	+ 1	1·042	+·092	6·5	−0·1	5	6·00	−1·00	5·44	4·83	+ 0·61	6·57	6·10	+ 0·47	1·78	Masulipatam.
						3	17	10	N 79° W					66	+ 5	·831	+·073	6·1	−0·3	5	4·60	+0·40	3·56	3·35	+ 0·21	3·85	5·15	− 1·30	1·34	Cuddapah.
						11	8	11	W	13·5				73	+ 7	·787	+·061	6·8	+0·4	6	5·90	+0·10	5·67	3·36	+ 2·31	7·41	4·31	+ 3·10	1·54	Kurnool.
1				1	3	15	10		N 81° W	10·6	10·5	+ 1	9·3	66	+ 5	·697	+·057	6·4	−1·2	4	4·20	−0·20	3·41	1·78	+ 1·63	4·40	3·76	+ 0·64	2·30	Bellary.
2				2	18	13			S 63° W	7·8			6·6	71	− 1	·921	+·055	5·2	−1·8	2	6·20	−4·20	0·96	4·76	− 3·80	2·67	5·69	− 3·02	0·62	Cocanada.
				1	21	8			S 55° W	14·4				69	− 5	·843	−·096	7·9	+0·5	7	5·70	+1·30	3·60	3·82	− 0·23	8·95	6·30	+ 2·65	1·18	Waltair (Vizag.).
1	2	2			8	15	2		S 36° W	15·7	11·6	+35	15·4	79	− 5	·944	−·019	4·2	−3·0	4	7·10	−3·10	0·98	6·14	− 5·16	6·79	8·24	−1·45	0·45	Gopalpur
																														XII.—Hill Stations.
																				0	0·20	−0·20	0	0·03	− 0·03	0·02	0·22	− 0·20	0	Pishin.
30									Calm	1·2	4·7	−74	1·3	41	− 8	·365	−·090	0	−0·6	0	0·80	−0·80	0	0·19	− 0·19	0	0·59	− 0·59	0	Quetta.
	9		5		15		1		S 34° E					27		·250				0	0·50	−0·50	0	0·46	− 0·46	0	0·72	− 0·72	0	Kalat.
			2	4	7	11	6		S 27° W	7·3			8·0	31	+ 2	·339	−·023	0·1	−0·4	0	0·10	−0·10	0	0·09	− 0·09	0	0·14	− 0·14	0	Chaman.
	2	4	6	4	7	4	3		S 37° E	2·3				46	+ 4	·176	−·008	4·6	+1·0	0	0·60	−0·60	0·02	0·17	− 0·15	0·34	0·39	− 0·05	0·02	Leh.
9	2	1	2	10	5	1			S 42° E	4·1			3·8	77	− 4	·527	−·047	2·2	−1·0	3	3·80	−0·80	0·96	1·79	− 0·83	3·98	4·39	− 0·41	0·39	Srinagar.
14	1	8	3	1	1		1	1	N 54° E	3·7			4·3	78		·406		2·2		10			3·49		?				0·78	Gulmarg
19	8	2	1						N 14° E	3·7			3·4	82		·284		2·5		7			9·16		16·11				1·20	Sonemarg.
2	2	6	7		5	4	3	1	S 79° E	7·1			7·2	43		·255		3·8		0	1·10	−1·10	0·21	0·40	− 0·19	1·47	1·44	+ 0·03	0·07	Skardu.
23		1			1	1	3	1	S 74° W	6·5			5·2	58		·266		2·5		0	1·70	−1·70	0·32	0·71	− 0·39	6·50	3·53	+ 2·97	0·09	Dras.
22		2	1			3	1	1	W	3·2			2·8	42	+ 4	·358	+·003	2·5	−0·3	1	0·80	+0·20	0·39	0·35	+ 0·04	2·40	0·92	+ 1·48	0·31	Gilgit.
25	3	1	1						N 27° E	3·5			3·1	44		·337		1·1		1			0·20			3·07			0·20	Chitral.
15	1		12			1	1		N 88° E					70		·615		1·2		1			0·19			2·25			0·14	Killa Drosh.
27			2		1				S 63° E	4·7			4·2	32		·307		4·3		1	3·40	−2·40	0·60	1·43	− 0·83	3·72	3·45	+ 0·27	0·51	Para Chinar.

the data for that station are not utilized in calculating the provincial departures from normal.
lerived are incomplete.
tations, the elevations of which exceed 3,200 feet.

Table

Abstract of Observations taken at 8 A.M. at 231 Stations

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
32	Cherat	*4,256*	25·505	−·003	25·473	25·616	1st	25·408	17th & 20th.	·208	82·3	96·2	+1·9	76·2	+3·2	86·3	+2·6	19·9	106·5	30th	66·1	9th, 10th & 11th.	40·4
29	Murree	6,333	23·744	+·012	23·712	23·841	1st	23·645	17th	·196	73·4	83·7	+2·0	63·3	−1·2	73·5	+0·4	20·4	90·1	30th	49·4	7th	40·7
	Kailang	*10,087*	20·912		20·867	20·998	1st	20·810	24th	·188	51·4	69·4	−2·3	44·1	−1·3	56·8	−1·8	25·3	76·8	29th	37·3	7th	39·5
	Poo	...										70·0		52·4		61·2		17·6	77·2	30th	42·7	7th	34·5
	Simla	7,224	23·020	+·015	22·982	23·094	1st	22·908	17th	·186	67·2	76·3	+1·9	61·1	+0·1	68·7	+1·0	15·2	80·4	29th & 30th.	49·7	7th	30·7
	Sarain	...	23·057			23·153		22·944	17th	·209	67·4	75·9		55·6		65·8		20·3	79·6	1st	48·7	7th	30·9
	Kalabagh		22·088			20·176	1st	19·983	18th	·193	50·3	56·4		45·3*		50·9*		11·1	59·1	13th	37·9	6th	21·2
	Chakrata	7,022	23·180	+·008	23·140	23·274	1st	23·076	17th	·198	67·3	76·0	+1·7	60·4	+0·4	68·2	+1·1	15·6	82·6	14th & 15th.	52·8	7th	29·8
25	Ranikhet	6,069	23·972	+·008	23·931	24·066	1st	23·882	18th	·184	70·0	81·3	+3·4	63·4	+0·4	72·4	+1·9	17·9	87·1	14th & 15th.	53·0	2nd	34·1
	Muktesar	7,600	22·737		22·695	22·821	1st	22·642	17th	·179	63·9	76·3		58·7		67·5		17·6	81·5	14th	51·2	2nd	30·3
13	Yatung	10,480										63·1		48·8		56·0		14·3	67·1	3rd 8th & 11th.	42·2	2nd	24·9
	Darjeeling	7,376	22·902	−·023	22·857	22·997	30th	22·804	16th	·193	60·9	67·5	+2·3	57·3	+1·1	62·4	+1·7	10·2	72·7	12th	54·1	3rd	18·6
8	Shillong	4,900	25·027		24·979	25·135	30th	24·932	17th	·203	68·6	76·2		63·9		70·1		12·3	80·1	13th	59·5	2nd	20·6
	Cherra Poonjee	4,309	25·540		25·491	25·664	30th	25·446	16th	·218	67·0	72·8		64·7		68·8		8·1	76·7	21st	61·5	7th & 26th	15·2
50	Mount Abu	3,945	25·900	+·040	25·850	25·985	1st & 10th	25·787	20th	·198	72·3	85·2	+1·9	67·4	−0·7	76·3	+0·6	17·8	89·2	29th	64·3	6th	24·9
42	Pachmarhi	3,528									78·8	94·8	+8·9	74·6	+2·6	84·7	+5·8	20·2	100·2	1st	69·2	26th & 30th	31·10
34	Wellington	6,200	24·200	+·016	24·133	24·250	4th	24·115	21st	·135	66·2	73·4	+1·2	58·7	+0·7	66·1	+1·0	14·7	79·2	2nd	52·2	12th & 13th.	27·0
	Ootacamund	*7,322*	23·003		22·941	23·053	15th	22·951	29th	·102	59·1	64·9		53·3		59·1		11·6	72·5	2nd & 3rd.	50·3	16th	22·2
37	Kodaikanal	7,688	22·796		22·731	22·840	14th	22·711	20th	·129	59·4	65·6		54·2		58·5		11·4	70·9	4th	49·7	12th	21·2
	XIII.—Extra India.																						
	Trincomalee	12	29·827	+·032	29·765	29·889	8th	29·774	3rd	·115	81·2	91·4	−0·2	78·6	+0·2	85·0	0	12·8	94·0	7th	75·0	6th	19·0
	Colombo	40	29·878	+·018	29·844	29·924	8th	29·838	21st	·086	81·1	85·8	+0·1	78·0	+0·5	81·9	+0·3	7·8	88·0	16th, 17th & 18th.	74·5	20th	13·5
	Meshed	3,104									Imperfect.												
	Teheran‡	*4,002*																					
	Ispahan‡	*5,817*	24·256			24·460	4th	24·120	10th	·340	74·8	94·0	−0·2	62·9	+1·0	78·6	+0·4	31·3	101·5	25th	55·3	2nd	46·2
	Bushire	14	29·627	+·053	29·600	29·762	1st	29·513	28th	·249	89·3	91·4	−0·5	81·0	+0·5	86·2	0	10·4	99·0	15th	72·5	3rd	26·5
	Bahrein	30	29·657			29·775	2nd	29·567	30th	·208	87·1	94·5		83·5		89·0		11·0	101·0	10th	74·3	2nd	26·7
	Jask*	13	29·594	+·027	29·564	29·752	1st	29·500	21st	·252	88·0	95·3	−0·5	82·7	−0·4	89·0	−0·5	12·6	104·2	10th	74·2	1st	30·0
	Muscat*	20	29·596	+·043	29·563	29·758	1st	29·500	17th	·258	93·6	100·1	+6·3	88·7	+0·6	94·1	+3·5	11·4	107·7	5th	85·0	13th	22·7
	Baghdad	220	29·608	+·029	29·798 (b)	29·753	4th	29·512	7th	·242	86·9	106·6	+4·8	77·1	+1·7	91·9	+3·3	29·5	119·2	7th	70·9	16th	48·3
	Busrah	...	29·675		29·634 (b)	29·774	2 d	29·588	29th	·186		99·4		82·2		90·8		17·2	107·9	9th	79·6	6 days	28·3
	Aden	94	29·697	+·050	29·721	29·803	1st	29·638	17th	·165	90·0	94·7	0	84·5	+0·8	89·6	+0·4	10·2	97·3	25th	81·3	12th	16·0
	Perim	201	29·592	+·055	29·724	29·633	15th	29·539	30th	·094	89·4	95·6*	+0·4	85·4	+2·7	90·5*	+1·6	10·2	98·3	11th	83·1	1st	15·2
	Kabul	...	24·187		24·156	24·312	30th	24·026	18th	·286	77·2	90·0	+0·7	56·4	−2·3	73·2	−0·8	33·6	99·1	30th	48·4	7th	50·7
	Kashgar	4,255	25·443§			25·620	10th & 23rd.	25·200	20th	·420	77·1	91·1	+1·2	65·9	+0·3	78·5	+0·8	25·2	99·1	15th	57·5	5th	41·6
	Amini Divi	13									83·4	88·2	+2·1	77·9	−0·1	83·1	+1·0	10·3	94·4	6th	74·7	20th	19·7
	Minicoy	7	29·911		29·844	29·955	14th	29·855	21st	·100	82·4	87·4	+1·8						91·4	5th			
	Zanzibar	73	30·038	−·038	30·037	30·102	26th	29·965	4th	·137	76·2	82·7	+1·3	73·9	−0·2	78·3	+0·6	8·8	84·6	6th	71·9	15th	12·7
	Do. Dunga	*154*	29·987		30·072	30·058	27th	29·918	4th	·140	74·3	83·4		69·6		75·6		13·8	85·9	1st	67·6	3 days	18·3
	Penang(a)	20	29·888		29·833	29·921	4th	29·857	15th	·064	81·4	90·3		73·9		82·1		16·4	92·0	5 days	72·0	11th & 19th.	20·0
	Singapore(a)	10	29·944		29·875	29·955	4 days.	29·909	10th	·046	85·3	90·7		75·5		83·1		15·2	94·4		72·6	28th	21·8

‡ Aneroid uncorrected. * Mean of 29 days. § Aneroid corrected. NOTE.—The barometric readings are not reduced to sea-level in the cases of hill

(a) 9 hours' observations.

(b) Reduced to gravity only.

N.B.—Elevations in italics indicate barometrical determinations.

oncluded.

ndia, Burma, etc., in June, 1905—concluded.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected	Normal (uncorrected)	Percentage departure from normal	Mean velocity corrected (where possible)	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal	Mean vapour tension at 8 A.M.	Departure from normal	Cloud. Mean cloud amount at 8 A.M.	Departure from normal	Rainfall. Number of rainy days	Normal number of rainy days	Departure from normal	Rainfall of month	Normal rainfall of month	Departure from normal	Total rainfall from 1st May to 30th June 1905	Normal rainfall for period 1st May to 30th June	Departure from normal of period, 1st May to 30th June 1905	Heaviest rainfall during month	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
1				1	4	5	N 22° W	9·7			9·0	37	−14	·415	−·088	1·2	−1·5	1			0·38	0·73	− 0·35	1·44	1·94	− 0·50	0·38	Cherat.
	3	1	1	1	2	1	S 11° E	6·4	6·6	− 3	6·9	39	−13	·321	−·062	1·1	−2·4	5	8·00	−3·00	1·27	3·52	− 2·25	2·92	6·49	− 3·57	0·45	Murree.
	1	1	4	16	5	3	S 51° W	2·2				64		·241		2·9		2			1·72	1·34	+ 0·38	1·72	3·92	− 2·20	1·30	Kailang.
1					2		N 45° W									3·9		1			0·78	0·27	+ 0·51	2·85	0·98	+ 1·87	0·69	Poo.
5			6	1	1	4	N 6° W	4·5	2·3	−96	4·3	52	−14	·344	−·058	2·5	−2·5	5	9·80	−4·80	1·09	7·85	− 6·76	1·68	10·91	− 9·23	0·26	Simla.
1			4	4	2		S 39° W	2·5			2·5	51		·333		3·5		7			2·33			3·12			0·57	Sarain.
2		3	1	2	1	8	N 36° W	10·3			8·9	67		·242		4·1		9			3·04			?			1·05	Kalabagh.
			7				S	8·3	5·7	−46	10·0	54	−17	·360	−·077	2·6	−1·4	8	10·60	−2·60	1·69	8·77	− 7·08	3·81	11·20	− 7·39	0·48	Chakrata.
1	1			8	7	4	S 8° W	4·0	3·2	−25	4·6	60	−13	·442	−·056	1·5	−4·4	7	10·40	−3·40	3·93	6·47	− 2·54	5·66	8·75	− 3·09	1·06	Ranikhet.
	1	1	1	4	17	2	S 81° W	10·4			9·5	63		·374		3·0		6			1·50			3·87			0·44	Muktesar.
																		16	17·00	−1·00	4·53	7·17	− 2·64	8·12	12·05	− 3·93	0·60	Yatung.
3		2		1	4	2	N 72° W	4·3	4·7	− 8	3·9	93	− 2	·503	+·005	9·2	+0·6	21	20·81	+0·19	15·05	23·77	− 8·72	25·91	32·55	− 6·64	1·83	Darjeeling.
		1	2	8			S 32° W	2·5			2·8	81		·568		7·6		18	20·40	−2·40	15·30	15·87	− 0·57	28·63	26·02	+ 2·61	2·65	Shillong.
6	2		1	8	8	1	S 85° W	7·9			7·0	94		·626		9·3		26	24·70	+1·30	87·78	101·56	−13·78	129·45	151·49	−22·04	15·01	Cherra Poonjee.
	1	1	4	22	2		S 38° W	14·7	10·1	+46	14·8	70	− 3	·542	−·029	4·6	−0·7	1	6·70	−5·70	0·42	6·21	− 5·79	0·42	7·29	− 6·78	0·42	Mount Abu.
			1	3	16	9	N 80° W	11·0	7·7	+43	11·3	54	−18	·517	−·104	3·7	−2·8	5	11·00	−6·00	1·86	10·92	− 9·06	2·09	11·42	− 9·33	0·75	Pachmarhi.
1	1	2	2	14	4		S 41° W	4·4	5·1	−14		70	0	·452	+·006	9·7	−3·2	5	8·00	−3·00	1·60	3·61	− 2·01	8·40	7·37	+ 1·03	0·49	Wellington.
1		2	3	9	13	1	S 66° W	5·0			4·7	68		·336		6·9		13	13·30	−0·30	9·40	6·18	+ 3·22	18·27	12·11	+ 6·16	1·76	Ootacamund
		1	2	2	13	11	N 77° W	16·3				74		·375		6·5		11	8·50	+2·50	3·38	4·01	− 0·63	9·90	10·48	− 0·58	0·56	Kodaikanal.
																												XIII—Extra India.
			30				S 45° W	17·0				83	+ 7	·890	+·014	1·9	−1·6	1			0·11	1·51	− 1·40	1·40	3·97	−2·57	0·10	Trincomalee
		1	19	9	1		S 60° W	11·2	10·2	+10		84	+ 3	·905	+·019	6·7	−0·5	11			4·22	8·23	− 4·01	17·79	19·35	−1·56	0·89	Colombo.
																					?	0·23	?	?	0·97	?	?	Meshed.
																						0·04			0·37			Teheran.
				1	1		N 63° W	2·3			2·9	49		·432		0		0			0	0	0	0·17	0·11	+0·06	0	Ispahan.
4	1			1	1	13	N 20° W	12·4	10·8	+15	13·6	70	+ 8	·853	+·068	0	−0·2	0			0	0	0	0·24	0	+0·24	0	Bushire.
1					3	18	N 37° W	8·8*			7·5*	73		·919				0			0			0			0	Bahrein.
	15	3				6	N 78° E	9·0			7·5	71	+ 4	·917	−·020	1·9	+0·8	0			0	0·11	−0·11	0	0·11	−0·11	0	Jask.
	1	5			1	4	N 12° E	3·6			3·7	60	− 7	·901	−·047	1·8	+0·3	0			0	0·36	−0·36	0	0·36	−0·36	0	Muscat.
1		1	1		2	12	N 31° W	5·6*	5·3	+ 6	7·4*	40	0	·519	+·021	0·5	+0·4	0			0	0	0	0·03	0·24	−0·21	0	Baghdad.
	1					26	N 39° W											0			0			0·66			0	Busrah.
11	7	5		5		1	N 80° E	9·9	7·6	+30	8·0	70	− 2	·984	+·046	1·5	−1·5	1			0·50	0·01	+ 0·49	0·50	0·20	+0·30	0·50	Aden.
2	11		3	2	3	6	N 45° E	12·0			12·1	73	0	1·010	+·055	0·3?	−3·2?	0			0	0	0	0	0·37	−0·37	0	Perim.
12	10	3	1		1		N 68° E					68		·634		0·5	+0·1	1			0·14	0·21	−0·07	0·47	0·75	−0·28	0·14	Kabul.
					1	7	N 50° W	4·3*			3·8*	47		·434		1·5		0			0	0·31	−0·31	1·77	1·19	−0·58	0	Kashgar.
												83		·946		7·2		20			17·04	13·14	+3·90	28·05	17·24	+10·81	3·21	Amini Divi.
				5	9	11	N 73° W																					
			6	13	9		N 81° W	14·5			15·5	83	0	·920	+·029	6·8	+0·1	19			15·78	8·60	+7·18	22·35	15·00	+7·35	2·26	Minicoy.
		2	9	16	1		S 29° W	6·9			6·5	87		·778		5·4		6			1·89	1·07	+0·82	12·09	11·69	+0·40	0·52	Zanzibar.
			2	8	1		S 41° W	4·6			4·5	92		·780		5·7		7			2·63			10·24			0·79	Do. Dunga
																0		6			3·53			10·11			1·60	Penang.
6	7	6	5				S 72° E	10·1																				
		5	1	18		6	S 46° W									4·4		9			5·95			15·31			2·26	Singapore.

u stations, the elevations of which exceed 3,200 feet.

* Mean of 29 days.

TABLE II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 65 Stations in India, Burma, etc., in June, 1905.

Tabl

Abstract of Observations recorded at 10 A.M. and 4 P.M

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours	Mean of three preceding columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Burma Coast and Bay Islands.	Port Blair	61	29·777	29·714	·063	29·750	+·017	29·742	85·0	77·4	7·6	88·5	73·9	14·6	82·9	82·0	80·0	−0·7	75·0	79·3	78·5	77·
	Rangoon	57	·718	·632	·086	·680	−·031	·675	85·0	76·8	8·2	89·2	72·0	17·2	81·9	80·8	78·9	−0·6	74·4	78·4	77·6	76·
	Diamond Island	41	·735	·664	·071	·704	−·018	·679	85·0	76·5	8·5	86·0	72·7	15·3	83·4	82·6	80·9	−0·2	73·7	78·8	78·3	76·
	Cocos Island	119	·659	·593	·066	·630		·679†	85·6	76·9	8·7	89·3	71·6	17·7	82·4	82·3	80·1		74·7‡	78·6§	78·2‖	77·
	Akyab	20	·690	·603	·087	·651	−·026	·614	85·9	77·6	8·3	90·0	72·6	17·4	82·6	82·9	81·9	−0·3		80·1	80·0	
Bengal and Orissa.	Chittagong	87	·577	·487	·090	·534	−·030	·567	88·5	76·8	11·7	92·7	71·8	20·9	85·3	84·8	82·5	+1·0		80·3	80·6	
	Calcutta (Alipore)	21	·571	·475	·096	·529	−·020	·495	96·7	81·0	15·7	106·1	74·1	32·0	91·6	93·9	88·6	+4·1	77·4	83·0	83·1	81·
	Saugor Island	25	·556	·468	·088	·519	−·034	·487	94·0	83·9	10·1	98·6	78·1	20·5	90·3	90·8	87·9	+2·9	79·7	84·4	84·6	82·
	False Point	21	·584	·493	·091	·546	−·026	·508	92·6	82·6	10·0	108·5	76·1	32·4	89·6	88·9	86·6	+2·5	78·4	82·1	82·7	81·
Gangetic Plain and Chota Nagpur.	Hazaribagh	2,007	27·602	27·514	·088	27·560	−·012	·430	102·7	82·3	20·4	107·6	75·3	32·3	94·3	99·1	91·0	+8·3	70·1	72·0	72·0	71·
	Allahabad	309	29·247	29·135	·112	29·194	−·006	·442	108·5	86·1	22·4	113·6	78·5	35·1	99·9	106·7	96·0	+5·2	73·7	78·4	78·6	76·
Upper Sub-Himalayas.	Dehra Dun	2,233	27·391	27·307	·084	27·346	−·006	·467	95·8	74·7	21·1	104·6	68·4	36·2	87·2	91·2	83·8	+1·6	65·4‡	70·8	71·3	69·
	Roorkee	899	28·658	28·557	·101	28·605	−·008	·439	100·6	79·4	21·2	111·6	67·8	43·8	92·4	98·7	89·0	+0·6	69·5	75·2	76·4	73·
	Meerut	738	·816	·711	·105	·761	−·008	·436	103·0	82·1	20·9	108·7	75·3	33·4	93·7	100·2	91·5	+2·1	72·1	76·1	77·2	75·
	Lahore	702	·814	·720	·094	·759	−·014	·395	108·7	83·9	24·8	115·6	74·2	41·4	98·4	106·4	95·9	+2·9	71·6	77·8	78·9	76·
	Ludhiana	812	·725	·628	·097	·669	−·098	·411	106·0	84·0	22·0	112·9	75·1	37·8	98·7	104·0	94·3	+2·3	72·8	75·7	76·7	75·
Indus Valley and N.W. Rajputana.	Peshawar	1,110	·435	·337	·098	·378	−·008	·417	108·0	78·9	29·1	117·0	73·1	43·9	99·6	106·3	93·0	+1·8	63·8	72·5	74·0	70·
	Jacobabad	186	29·325	29·208	·117	29·270	+·007	·406	115·0	83·0	32·0	123·0	77·7	45·3	101·3	112·9	98·0	+0·3	73·1	80·6	80·1	77·
	Kurrachee	30	·608	·530	·078	·572	+·035	·552	93·3	81·3	12·0	99·5	78·8	20·7	89·4	89·9	86·0	−0·8	77·3	80·8	81·6	79·
E. Rajputana, Central India and Gujrat.	Jaipur	1,431	28·209	28·103	·106	28·155	+·022	·486	107·2	83·5	23·7	112·2	73·3	38·9	95·9	101·7	94·2	+3·6	70·3	76·3	75·6	74·
	Udaipur	1,925?	27·780	27·692	·088	27·740		·555	99·5	78·6	20·9	103·9	79·3	33·6	90·1	96·1	88·2		72·2	78·1	79·3	76·
	Deesa	466	29·225	29·097	·128	29·165	+·041	·568	104·3	80·7	23·6	107·8	78·5	29·3	92·1	102·7	91·7	+1·2	74·1	76·3	76·9	75·
	Jamnagar	61	·640	·552	·088	·598		·604	97·7	80·0	17·7	102·1	76·2	25·9	92·6	94·0	87·6		75·8	77·7	78·9	77·
Deccan.	Belgaum	2,539	27·360	27·225	·075	27·266	+·034	707	83·9	68·4	15·5	93·3	66·7	26·6	77·9	80·0	74·4	+1·6	67·7	70·8	71·1	69·
	Sholapur	1,590	28·197	28·061	·136	28·137	+·024	·636	98·0	75·3	22·7	105·2	72·1	33·1	86·2	94·9	84·4	+2·6	69·5	72·7	74·0	72·
	Akola	930	·785	·643	·142	·720	+·028	·567	103·2	80·5	22·7	108·4	73·0	35·4	92·4	100·9	90·1	+3·9	71·4	77·0	77·7	75·
	Buldana	2,132	27·627	27·512	·115	27·571	+·022	·583	96·4	74·5	21·9	101·6	69·0	32·6	85·7	94·5	83·4	+2·8	68·1	72·9	72·7	71·
	Khandwa	1,044	28·661	28·521	·140	28·597	+·023	·566	102·0	80·6	21·4	106·7	72·6	34·1	90·7	100·6	90·0	+3·1		75·4	75·8	
	Nagpur	1,025	·644	·513	·131	·585	+·015	·528	105·4	81·9	23·5	115·0	73·8	41·2	95·5	100·5	91·9	+5·3	71·0	76·5	76·3	74·
	Do. (Sanitary Commr.'s Office)	1,013	·646	·518	·128	·588		·520	106·2	83·2	23·0	114·6	74·8	39·8	96·7	102·0	92·9		71·3	76·1	76·3	74·
	Hyderabad (Deccan)	1,690	·070	27·950	·120	·017	+·017	·609	97·0	78·1	18·9	104·9	70·7	34·2	87·1	94·8	85·8	+3·2	70·5	72·9	75·1	72·
West Coast.	Bombay	37	29·762	29·686	·076	29·725	+·052	·701	91·3	82·0	9·3	93·9	76·6	17·3	87·1	88·5	85·5	+3·1	77·3	79·8	80·2	79·
	Karwar	44	·823	·751	·072	·790	+·040	·767	84·8	76·8	8·0	89·9	72·9	17·0	82·4	83·6	79·6	+0·1	74·4	77·3	77·5	76·

† Mean of 28 days. ‡ Mean of 29 days. § Mean of 25 days. ‖ Mean of 23 days.

65 Stations in India, Burma, etc., for June, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
													Total number of 10 hours and 16 hours winds from																	
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																								%	%						
·952	·928	·923	—·012	89	84	85	88	0	7·8	8·3	8·1	+0·3						3	37	17	3	S 59° W	S 45° W	89	78	423*	250	24·84	3·74	Port Blair.	Burma Coast and Bay Islands.
·928	·908	·903	—·018	89	85	86	91	— 2	7·8	8·5	8·2	−0·6	4			1	14	19	8	12	2	S 14° W	S 24° W	57	71	37*	122	19·69	2·45	Rangoon.	
·928	·917	·894	—·014	87	81	82	85	— 2	8·8	9·1	9·0	+0·8		1			1	6	28	13	11	S 66° W	S 36° W	73	76	289*	230	35·26	4·16	Diamond Island	
·9405	·9180	·913	—·025	90‡	86§	84‖	89	+ 2	9·4	9·5	9·5	+1·3						34	23	3		S 21° W	S 35° W	90	91	750		28·59	4·15	Cocos Island.	
1·002	·996				89	88			8·0	7·9	8·0	−0·3					26	22	12			S 11° E	S 3° E	85	58	117*	91	43·63	6·25	Akyab.	
·973	·975				80	81			6·6	5·6	6·1	−1·9				1	1	17	13	26	1	1	S 5° W	S 24° E	72	61	173*	168	14·58	3·41	Chittagong.	Bengal and Orissa.
1·026	·990	·982	+·011	84	71	63	75	— 8	6·2	6·5	6·4	−1·1		1	3	3	10	28	12	1	2	S 2° E	S 3° W	65	59	141	142	1·60	0·78	Calcutta (Alipore)	
1·068	1·077	1·045	+·021	83	77	77	80	— 3	7·0	7·0	7·0	−1·1		1		2	9	34	11	2	1	S 3° W	S 12° W	76	70	436	382	1·16	0·55	Saugor Island.	
·988	1·029	·995	+·005	82	73	76	78	— 6	6·5	6·9	6·7	−0·6			3		1	14	36	5	1	S 37° W	S 36° W	78	65	313*	300	1·80	0·75	False Point.	
·512	·451	·534	—·171	54	33	25	39	—26	7·9	8·5	8·2	+0·4		10	4	5	2	3	4	10	22	N 41° W	S 42° W	48	13	237*	223	0·02	0·02	Hazaribagh.	Gangetic Plain and Chota Nagpur.
·686	·604	·669	—·104	54	37	26	40	—16	2·1	2·6	2·4	−2·7		5	6	6	1	1	2	19	20	N 49° W	N 10° W	52	16	178*	192	0·59	0·37	Allahabad.	
·551	·539	·547	—·089	61‡	43	37	50	—12	0·9	2·5	1·7	−2·5	8	4	6	5	7	6	12	11	1	S 30° W	S 51° W	20	14	42	41	5·24	3·65	Dehra Dun.	Upper Sub-Himalayas.
·646	·613	·631	—·080	60	44	35	49	—	1·2	1·0	1·1	−2·0	7		2	3	20	1	1	5	21	S 78° W	S 12° E	3	17	90	86	2·02	0·69	Roorkee.	
·669	·631	·666	—·033	61	43	34	49	— 6	4·8	4·9	4·9	+1·4	14	3	4	6	3	1	3	15	11	N 59° W	N 18° W	27	7	37*	65	2·39	1·65	Meerut.	
·682	·622	·657	+·030	53	38	28	41	— 3	1·2	1·1	1·2	−1·7	10	4	5	7	7	5		21	1	S 75° W	N 18° E	12	7	72	86	0·56	0·30	Lahore.	
·595	·568	·624	—·029	57	32	27	41	— 8	0·4	2·2	1·3	−1·6	9		8		12		3	4	24	N 37° W	S 54° W	25	8	44	67	0·48	0·28	Ludhiana.	
·468	·445	·459	—·070	42	25	20	30	— 8	1·1	1·3	1·2	−1·1	12	8	14	7	4	2	3	3	6	N 34° E	N 36° E	30	31	69*	106	0	0	Peshawar.	Indus Valley and N.-W. Rajputana.
·772	·593	·703	—·002	61	40	21	42	+ 1	0	0·2	0·1	−0·8	7	1	3	6	14	21	5	2	1	S 21° E	S 30° E	55	44	172*	127	0	0	Jacobabad.	
·936	·972	·946	—·030	83	68	70	76	— 2	5·1	4·7	4·9	+0·7						1	25	33	1	S 71° W	S 63° W	91	87	430*	420	0	0	Kurrachee.	
·664	·519	·595	—·061	51	39	25	40	—12	0·5	2·5	1·5	−2·9		1	1	1	1	5	38	12	1	S 51° W	N 70° W	80	43	186	163	0·37	0·28	Jaipur.	
·822	·803	·789		73	58	48	61		0·8	1·8	1·3		2			2	1	7	27	18	3	S 56° W		73		242*		1·63	0·96	Udaipur.	E. Rajputana, C. India and Gujarat.
·697	·579	·689	—·046	72	46	28	50	— 4	3·6	1·5	2·6	−2·1						2	38	19	1	S 59° W	S 44° W	91	66	460	401	0·03	0·03	Deesa.	
·752	·787	·809		82	49	50	63		3·0	1·9	2·5			1			1	3	24	25	6	S 72° W		80		657*		0·08	0·06	Jamnagar.	
·666	·652	·663	—·003	96	71	66	82	— 4	7·1	7·1	7·1	−0·8		1				1	31	22	3	S 67° W	S 63° W	86	78	424†	550	3·81	1·45	Belgaum.	Deccan.
·635	·578	·634	—·007	75	52	37	57	— 5	5·2	7·0	6·1	−1·2		1	1			1	12	20	25	N 78° W	S 84° W	79	76	385*	329	3·24	1·14	Sholapur.	
·726	·644	·683	—·017	63	48	34	49	— 9	3·3	5·2	4·3	−2·2	1	1		1			4	13	40	N 58° W	N 69° W	84	68	296*	235	2·23	1·48	Akola.	
·657	·537	·605	—·044	72	54	34	53	—10	2·9	5·4	4·2	−2·1		2	1				7	28	22	N 74° W	N 75° W	84	70	307*	262	3·14	1·35	Buldana.	
·688	·582				48	31			3·1	3·9	3·5	−2·5	15	5					1	8	31	N 49° W	N 78° W	67	71	417?	247	3·08	2·03	Khandwa.	
·675	·603	·644	—·074	59	42	33	46	—13	3·4	6·9	5·2	−2·0		8	3	1		4	4	23	17	N 66° W	N 82° W	63	55	217*	216	7·48	1·77	Nagpur.	
·647	·589	·629		56	39	31	43		3·3	6·5	4·9		1		2		8		28		21	S 72° W		48		104*		7·01	1·82	Do. (Sanitary Commr.'s Office).	
·635	·628	·654	—·054	70	51	40	56	— 8	6·2	6·6	6·4	+0·1	13							42	5	N 86° W	N 84° W	77	72	183*	218	1·59	0·67	Hyderabad (Deccan).	
·920	·925	·923	—·015	80	72	69	76	— 7	5·1	5·4	5·3	−1·8					1	8	11	31	9	S 77° W	S 63° W	77	64	229	365	4·68	3·13	Bombay.	West Coast.
·871	·873	·871	+·008	89	79	76	83	— 2	5·4	5·5	5·5	−1·6	2	4				1	32	12	9	S 72° W	S 88° W	72	72	139	144	36·05	5·28	Karwar.	

* Corrected.

Tal

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 65 Stati

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level, in feet	Pressure.						Temperature of Air.									Temperature, Wet-bulb.		
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
South India.	Periyakulam	944	28·901	28·791	·110	28·856		29·725	93·3	72·9	20·4	100·8	67·8	33·0	85·9	88·3	81·8		70·1	74·3	74·3
	Salem	940	·911	·800	·111	·868	+·015	·731	95·5	75·8	19·7	101·2	73·4	27·8	85·8	91·9	83·9	+1·0	72·6	76·9	78·6
	Chitaldroog	2,405	27·445	27·352	·093	27·407	+·038	·710	87·3	70·2	17·1	94·3	67·3	27·0	79·4	83·5	77·0	+1·1	68·0	71·1	72·2
	Bangalore	3,021	26·877	26·787	·090	26·839	+·016	·723	85·9	67·5	18·4	93·3	64·3	29·0	78·0	81·9	74·9	+0·9	65·9	69·5	70·4
	Hassan	3,091	·831	·755	·076	·800	+·050	·765	83·4	66·5	16·9	91·4	63·4	28·0	77·6	77·6	73·2	+2·2	65·3	69·9	70·1
	Mysore	2,518	27·379	27·293	·086	27·343	+·033	·763	84·6	68·5	16·1	92·7	65·5	27·2	78·6	81·0	74·8	+0·2	67·1	70·5	71·7
	Madras	22	29·749	29·630	·126	29·700	+·001	·649	102·4	82·1	20·3	108·2	77·2	31·0	94·0	92·2	89·2	+0·8		78·1	80·3
	Bellary	1,475	28·325	28·208	·117	28·275	+·002	·667	95·8	75·7	20·1	102·0	68·7	33·3	86·0	92·0	84·1	+0·7	69·2	73·7	76·1
	Waltair	*226*	29·429	29·343	·086	29·392	−·003	·555	92·9	80·9	12·0	101·9	72·1	32·8	88·4	87·4	85·7	+1·1	75·1	79·0	79·2
Hill Station Baluchistan.	Quetta	5,502	24·498	24·437	·061	24·461	+·019	24·421	91·2	56·8	34·4	96·3	50·3	46·0	83·5	89·3	73·2	−0·9	49·1	59·6	59·9
Hill Stations Northern, India.	Leh	11,503	19·694	19·622	·072	19·660	+·022	19·628	69·4	42·1	27·3	77·8	37·4	40·4	59·7	65·1	54·7	−3·1	38·0	45·1	47·6
	Srinagar	5,204	24·750	24·676	·074	24·715	+·019	24·686	83·7	57·1	26·6	93·3	51·0	42·3	72·4	81·3	69·3	−0·6	54·2	67·1	73·3
	Sarain		23·067	23·015	·052	23·036			75·8	55·5	20·3	79·2	48·7	30·5	70·4	71·7	64·9			56·9	57·4
	Kalabagh		20·105	20·078	·027	20·047			56·4	45·3‖	11·1	59·1	37·9	21·2	52·1	54·2	50·1‖			45·4	46·4
	Simla (Ridge)	7,224	23·033	22·988	·045	23·004	+·011	22·966	76·1	61·1	15·0	80·4	49·7	30·7	69·9	73·0	67·8	+0·9	52·9	57·9	59·8
	Chakrata	7,022	·191	23·147	·044	·167	+·010	23·127	75·9	60·3	15·6	82·6	52·8	29·8	71·9	71·2	67·3	+0·9	53·0	57·9	59·5
	Ranikhet	6,069	·976	·917	·059	·940	0	·899	81·3	63·4	17·9	87·3	53·1	34·2	75·6	77·3	71·6	+1·9	57·1	63·1	63·9
	Muktesar	7,600	22·746	22·692	·054	22·712	**	22·670	76·3	58·8	17·5	81·5	51·2	30·3	67·6	73·1	66·8	**	52·9	58·3	60·4
	Katmandu	4,388	25·455	25·366	·089	25·407	+·004	25·361	86·5	67·2	19·3	92·4	63·1	29·3	81·4	82·8	76·1	+2·2	66·3	71·2	71·4
	Darjeeling	7,376	22·906	22·870	·036	22·884	−·012	22·839	67·5	57·3	10·2	72·6	54·1	18·5	64·2	65·8	61·6	+1·7	57·0	62·5	64·1
Hill Stations, Central India.	Mount Abu	3,945	25·911	25·851	·060	25·882	+·036	25·832	85·0	67·3	17·7	89·4	64·5	24·9	76·3	83·7	75·3	+0·4	62·2	67·2	67·7
	Pachmarhi	3,528	Not recorded						94·0	74·5	19·5	98·2	6·2	29·0	83·7	91·1	83·5	+5·3	64·6	67·6	69·2
	Chikalda	3,612	26·208	26·121	·087	26·166	+·039	26·110	90·3	70·6	19·7	95·9	64·1	31·8	80·9	87·2	79·7	+4·2	64·2	68·5	69·7
Hill Stations, S. India.	Kodaikanal	7,688	22·810	22·754	·056	22·778		22·713	65·5	54·2	11·3	70·9	49·7	21·2	62·5	60·4	58·4		50·7	56·5	56·9
	Ootacamund	*7,322*	23·015	·962	·053	·986		·922	64·6	53·2	11·4	72·7	50·3	22·4	61·9	59·8	58·1		48·9	54·5	54·0
	Dodabetta	*8,539*	22·016	21·962	·054	21·984		21·923	59·0	48·8	10·2	65·9	43·9	22·0	56·9	55·0	53·1			53·0	52·2
Extra India.	Aden		29·709	29·587	·122	29·644	+·046	29·667	94·8	84·5	10·3	97·1	81·4	15·7	92·2	93·7	89·1	+0·5	77·4	83·6	81·9
	Perim	201	·599	·483	·116	·537	+·059	·666	95·7	85·4	10·3	98·3	83·1	15·2	92·0	93·3	89·9	+1·5	78·0	82·6	83·3
	Minicoy	7	·924	·878	·046	·906		·839	87·2			91·4			84·0	83·7				78·8	78·8
	Zanzibar‡	73	30·055	·962	·093	30·014	−·029‖ **	30·013	82·9‖	74·0	8·9	84·6	71·9	12·7		82·4‖	77·8‖	+0·5 **	70·9		75·0‖
	Port Victoria (Seychelles).	15	·012	·935	·077	29·976	+·029	29·915	82·5	77·6	4·9	84·2	75·3	8·9	80·8	81·5	79·0	+1·4	71·8	74·6	74·8
	Mauritius (Pamplemouses).	181				·969	−·007	30·099				78·7	53·0	25·7			68·9	+0·2			

N. B.—Elevations in italics indicate barometric determinations.

‡ Observations of 16 hours only except barometer.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

—concluded.

India, Burma, etc., for June, 1905—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province
From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																									%	%						
03	·695	·661	·673		87	57	50	62		5·1	6·5	5·8		3	12	6	1	2	18	10	2	6	S 49° W		15		106*		1·82	0·93	Periyakulam.	South India.
59	·811	·809	·790	+·033	85	63	54	68	− 1	5·7	8·1	6·9	+0·6	2			2		11	22	22	1	S 55° W	S 54° W	75	73	155*	120	3·86	2·00	Salem,	
61	·660	·651	·664	+·017	89	66	59	73	+ 1	6·1	6·8	6·5	−1·4						1	19	29	11	S 83° W	S 75° W	85	76	238*	266	3·79	1·91	Chitaldroog.	
20	·622	·608	·624	+·001	91	65	58	73	− 1	7·1	6·9	7·0							2	32	20	6	S 67° W	S 72° W	85	81	266*	223	2·39	1·14	Bangalore.	
12	·645	·652	·643	+·021	94	69	71	80	0	7·8	8·5	8·2	−0·3		1					21	30	8	S 81° W	S 82° W	85	84	108*	120	2·22	0·52	Hassan.	
50	·650	·667	·663	+·027	93	66	64	76	+ 1	8·1	8·6	8·4	−0·1					1	5	17	35	2	S 71° W	S 75° W	84	79	329*	350	1·45	0·62	Mysore,	
	·747	·873	·826	−·007		47	59	60	− 6	4·4	6·3	5·4	−0·8				4	11	7	4	27	7	S 61° W	S 37° W	43	57	214	211	0·84	0·49	Madras.	
39	·724	·705	·705	+·058	71	58	48	62	+ 3	6·5	6·9	6·7	−1·4	2	2			1		10	30	15	N 84° W	S 35° W	78	80	224*	254	3·41	2·30	Bellary.	
96	·861	·885	·861	−·015	76	65	69	72	+ 3	6·7	8·0	7·4	+0·7		1			1	21	30	7		S 33° W	S 35° W	84	69	134		3·60	1·18	Waltair.	
70	·255	·211	·244	−·097	59	21	14	31	− 8	0	0·7	0·4	−0·7	28	6	1	1			2	14	8	N 60° W	N 72° W	37	39	27*	72	0	0	Quetta.	Hill Station, Baluchistan.
96	·177	·183	·181	+·013	72	34	29	46	+ 7	4·7	6·4	5·6	+0·6		2	2	6	4	10	16	17	3	S 48° W	S 81° W	47	34	56	62	0·02	0·02	Leh.	
91	611	742	·533	−·002	84	76	69	76	− 3	1·8	4·6	3·2	−0·4	12	8	5	2	6	6	2	5	8	N 34° E	N 9° E	12	7	91*	91	0·96	0·39	Srinagar.	
	·326	·326				45	43			3·3	4·8	4·1		11	3	3	2		11	21	8	1	S 44° W		47		60*		2·33	0·57	Sarain.	
	·247	·250				63	59			4·5	5·5	5·0		10	7	1		13	4	3	4	18	N 60° W		17		287*		3·04	1·05	Kalabagh.	
20	·353	·380	·352	−·045	60	49	47	52	− 9	3·3	4·7	4·0	−1·7	3	24	5			15	1	4	8	N 21° W	N 17° W	32	20	103*	108	1·09	0·26	Simla (Ridge).	Hill Stations Northern India.
29	·340	·388	·351	−·059	64	44	51	53	-13	2·2	4·6	3·4	−1·7	6	2			5	46	1			S 3° E	S 66° W	80	48	240*	178	1·69	0·48	Chakrata.	
05	·448	·456	·435	−·081	70	51	49	57	− 8	1·9	2·3	2·1	−3·2	4	3	2		1	1	21	24	4	S 77° W	S 69° W	68	46	108*	91	3·93	1·06	Ranikhet.	
44	·396	·392	·376		69	58	48	58		3·8	4·4	4·1		2						18	38	2	S 78° W		89		226*		1·50	0·44	Muktesar.	
44	·649	·638	·643	+·033	96	61	58	72	− 4	3·6	4·5	4·1	−2·1	5	3	3	16	1			27	5	N 57° W	N 87° W	23	20	27	31	6·99	2·00	Katmandu.	
66	·519	·582	·531	+·039	98	91	91	93	− 1	7·5	7·4	7·5	−1·3	9		4	2		1	16	17	11	S 87° W	S 15° W	52	8	94*	122	15·05	1·83	Darjeeling.	
07	·564	·496	·525	−·041	76	63	43	61	− 5	3·4	2·0	2·7	−2·1						9	50	1		S 39° W	S 48° W	96	66	357*	274	0·42	0·42	Mount Abu.	
96	·488	·459	·484	−·130	59	43	32	45	−20	3·3	4·8	4·1	−2·7		1		1	3	1	10	27	17	N 86° W	N 81° W	72	63	271*	221	1·83	0·75	Pachmarhi.	Hill Stations, Central India.
36	·555	·523	·541	−·056	71	54	43	56	-14	4·5	6·1	5·3	−1·4	8	20	2				3		27	N 27° W	N 42° W	72	58	214*	242	5·11	2·23	Chikalda.	
37	·400	·431	·389		80	71	82	78		6·0	8·2	7·1			4		1		7	2	18	25	N 70° W		65		398		3·38	0·56	Kodaikanal.†	Hill Stations, S. India.
04	·354	·362	·336		74	64	70	69		7·2	8·6	7·9		1	2	2	2	2	2	15	30	4	S 79° W		65		124*		9·40	1·76	Ootacamund.	
	·366	·366				79	84			4·3	4·4	4·3			1	3	3	1	10	21	20	1	S 54° W		62		376		5·80	1·54	Dodabetta.	
45	1·038	·928	·975	+·096	71	69	59	68	+ 4	1·2	0·3	0·8	−0·9	1		3	6	19	9	15	4	3	S 10° E	S	48	57	200* §	23	0·50	0·50	Aden.	Extra India.
65	·993	1·007	·993	+·051	71	66	64	69	+ 1						7	2	2	13	12	5	5	14	S 41° W	N 75° W	15	38	292*	322	0	0	Perim.	
	·918	·923				79	80			6·2	7·0	6·6			1					13	30	16	N 86° W		85		380*		15·78	2·26	Minicoy.	
18		·777			85		70‡				4·1		**		3			8	16	2			S 11° E	S 4° E	72	87	155	211	1·89	0·52	Zanzibar.‡	
08	·781	·779	·772	−·009	74	74	72	75	− 4	5·7	4·9	5·3	−1·8				1	49	9	1			S 38° E	S 24° E	94	83	274	278	0·89	0·31	Port Victoria (Seychelles).	
			·563	+·025				80	+ 4			5·2	+0·2										S 67° E	S 61° E			201	261	2·70	0·69	Mauritius (Pamplemousses).	

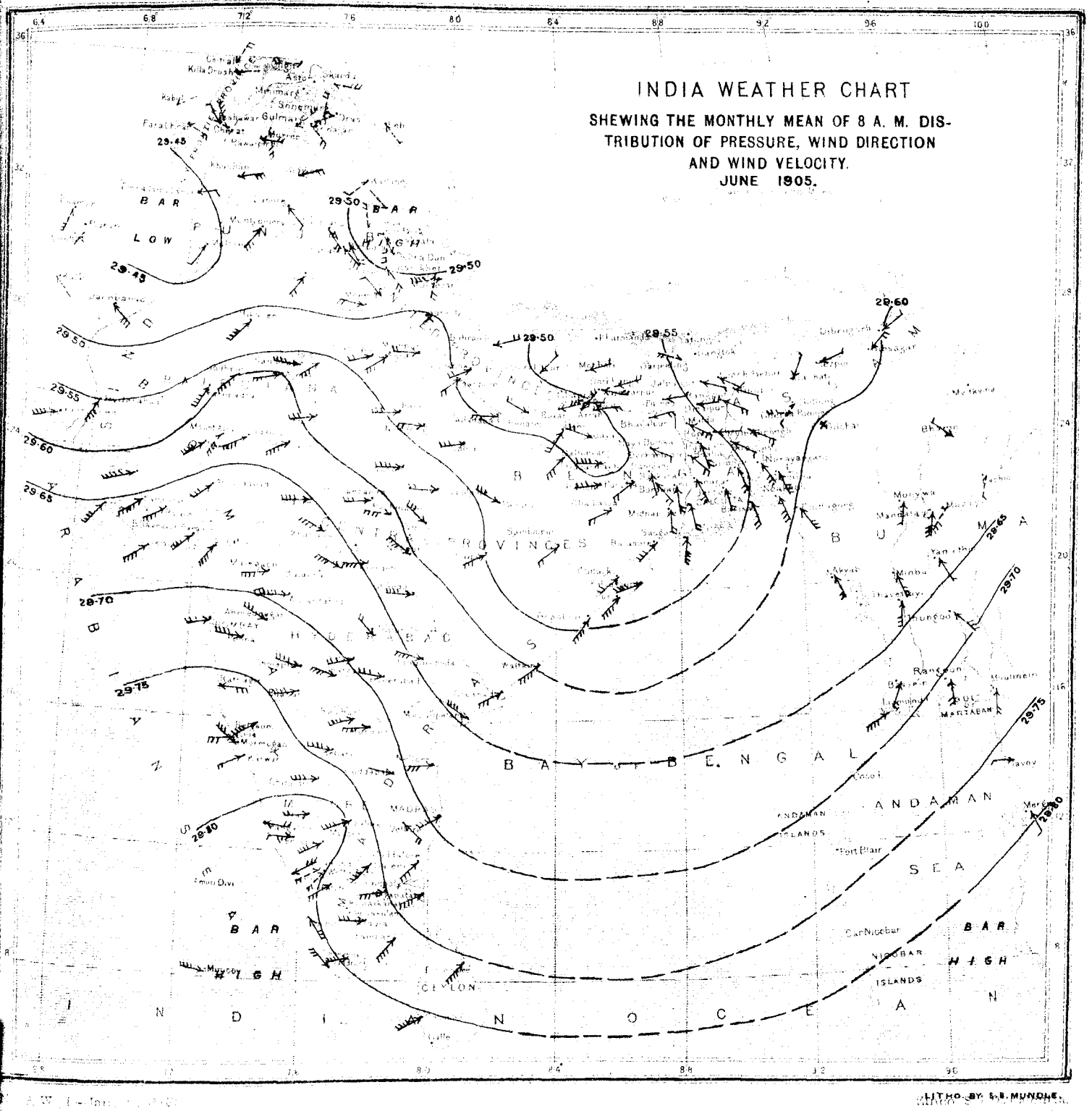
* Corrected.

‖ Mean of 29 days.
§ Mean of 28¼ days.
** Departures from old normals.

† Wind variable 3.

†† Mean of three previous columns.

G. I. C. P. O.—No. 142 Meteor.—14-12-05—385.

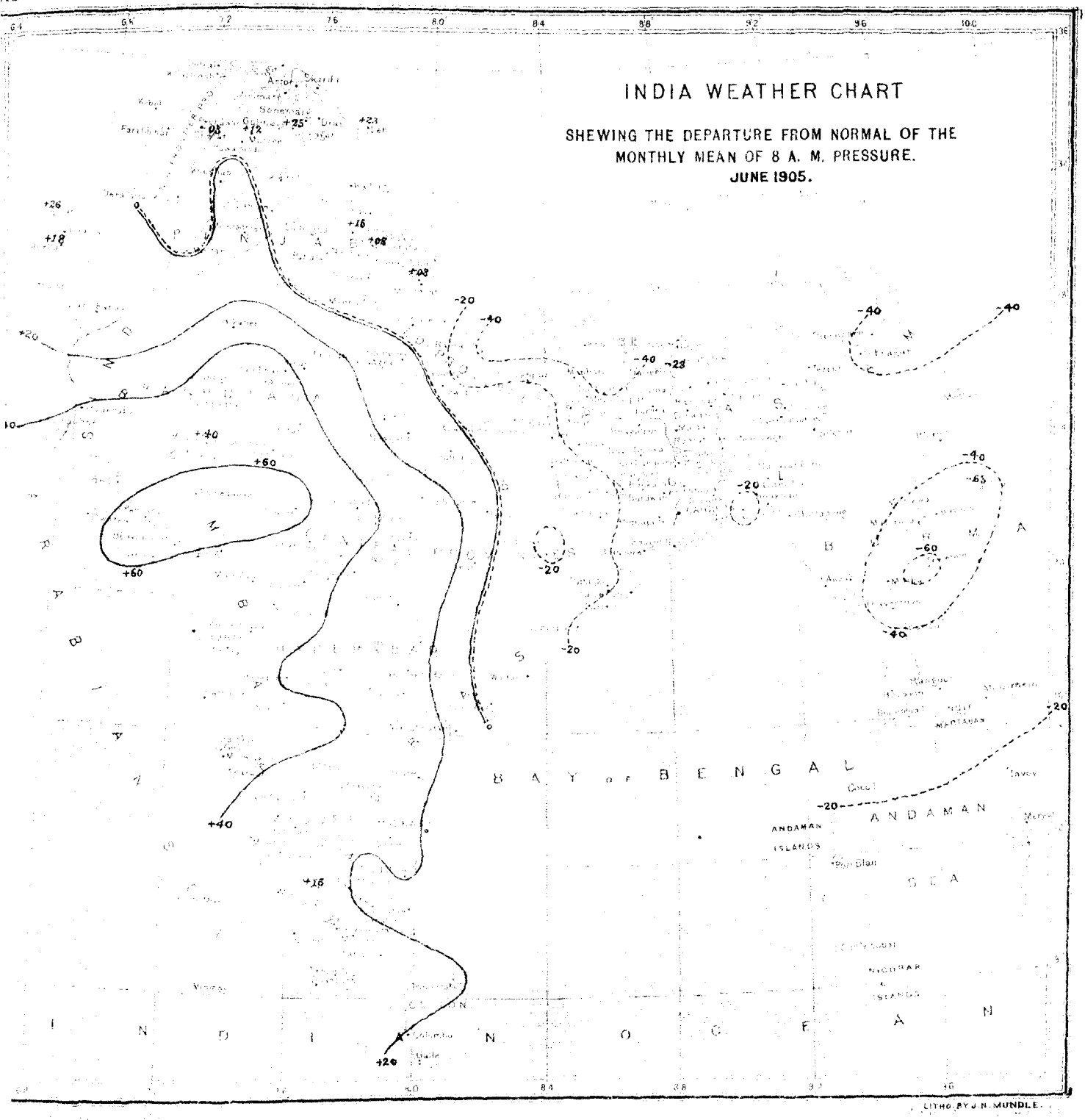


LITHO. BY S.S. MUNDLE.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of Lambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are indicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the month is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added to the wind arrow.						
,,	,, 2 to 5	,,	,,	,,	...	two	feathers	,,	,,	,,	,,	
,,	,, 5 to 10	,,	,,	,,	...	three	,,	,,	,,	,,	,,	
,,	,, 10 to 20	,,	,,	,,	...	four	,,	,,	,,	,,	,,	
	over 20	,,	,,	,,	...	five	,,	,,	,,	,,	,,	



The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal mounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020 or two hundredths of an inch, &c. ontinuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted nes that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuus and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative epartures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

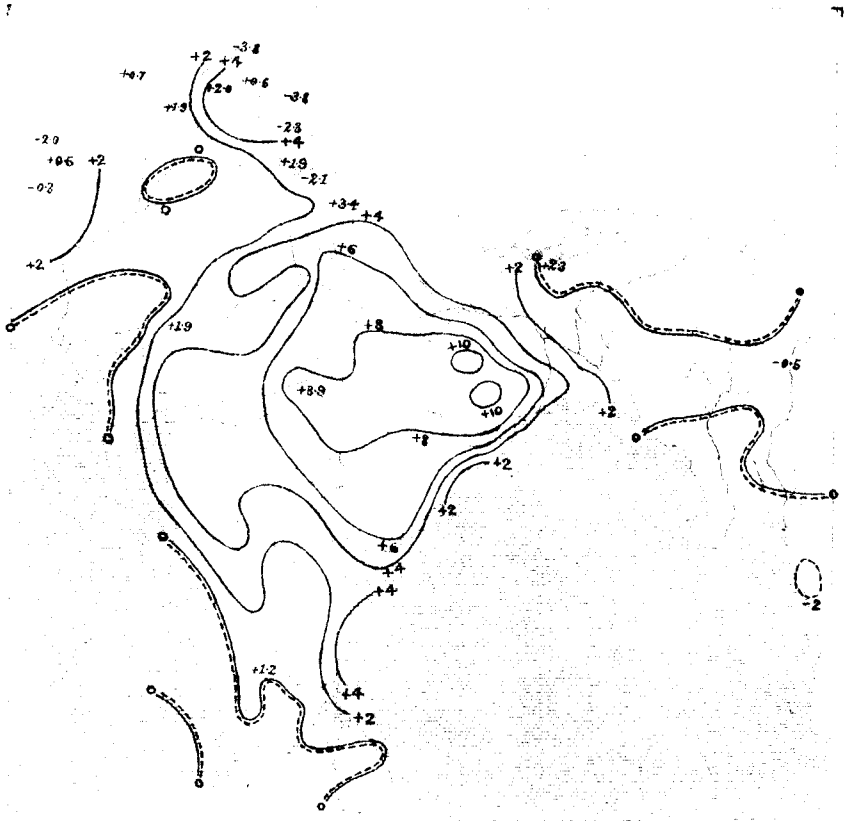
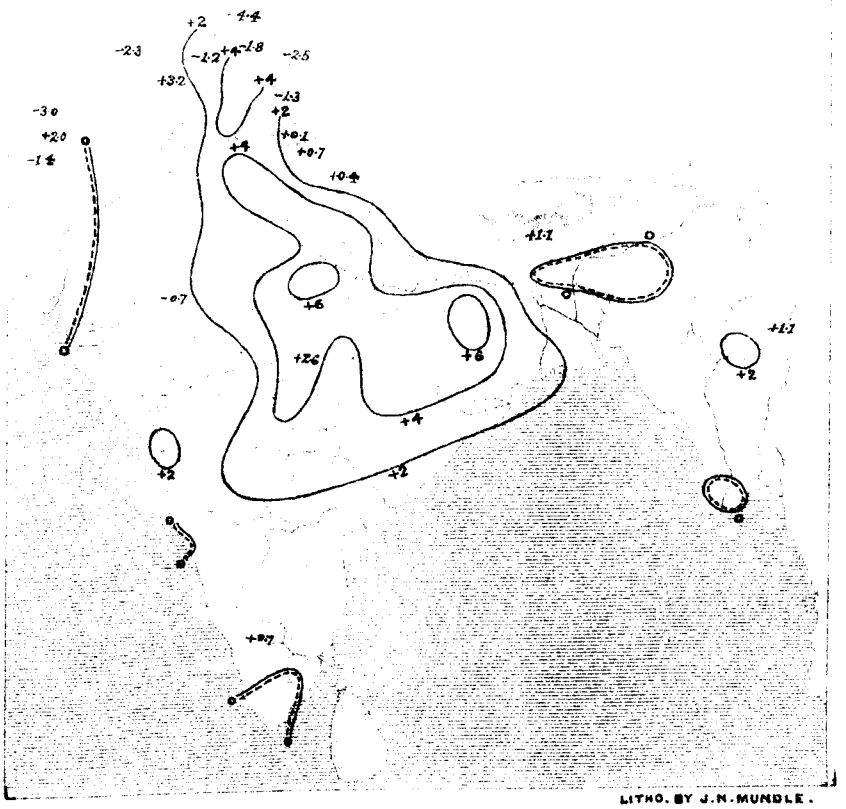


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY J.N. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF DAILY
MEAN TEMPERATURE.

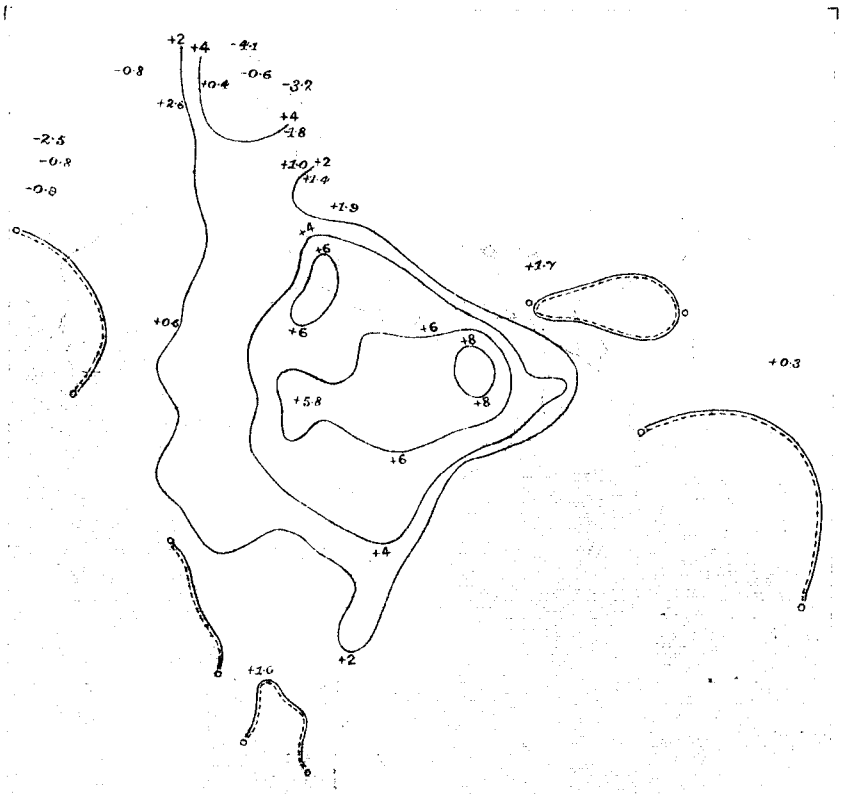
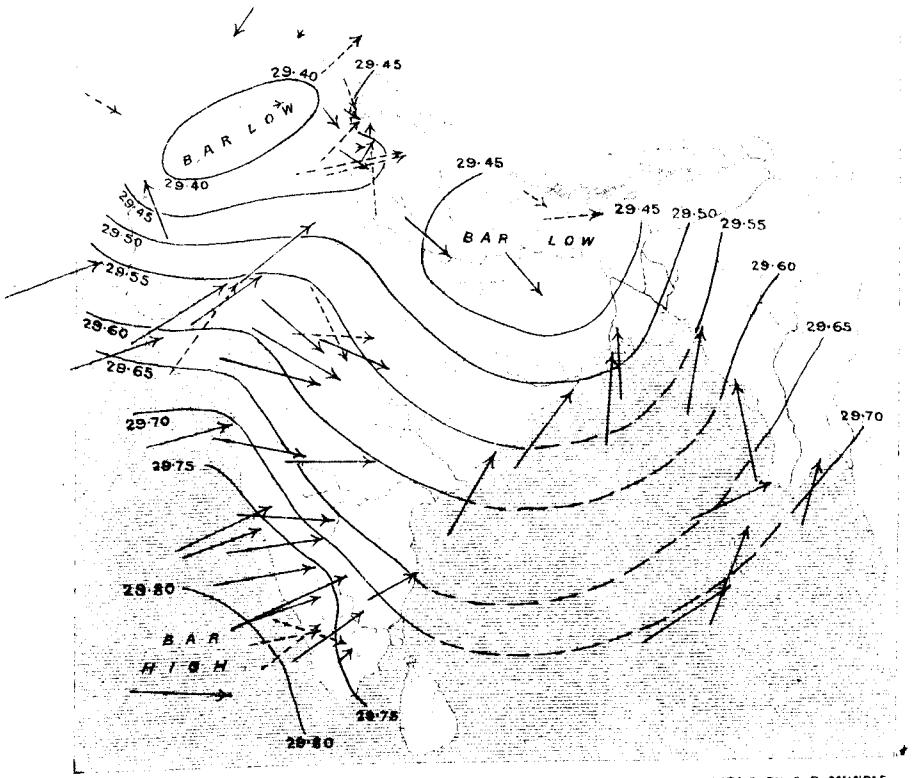


CHART SHEWING THE MONTHLY MEAN OF
PRESSURE AND RESULTANT
WIND DIRECTION.



LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 A. M.

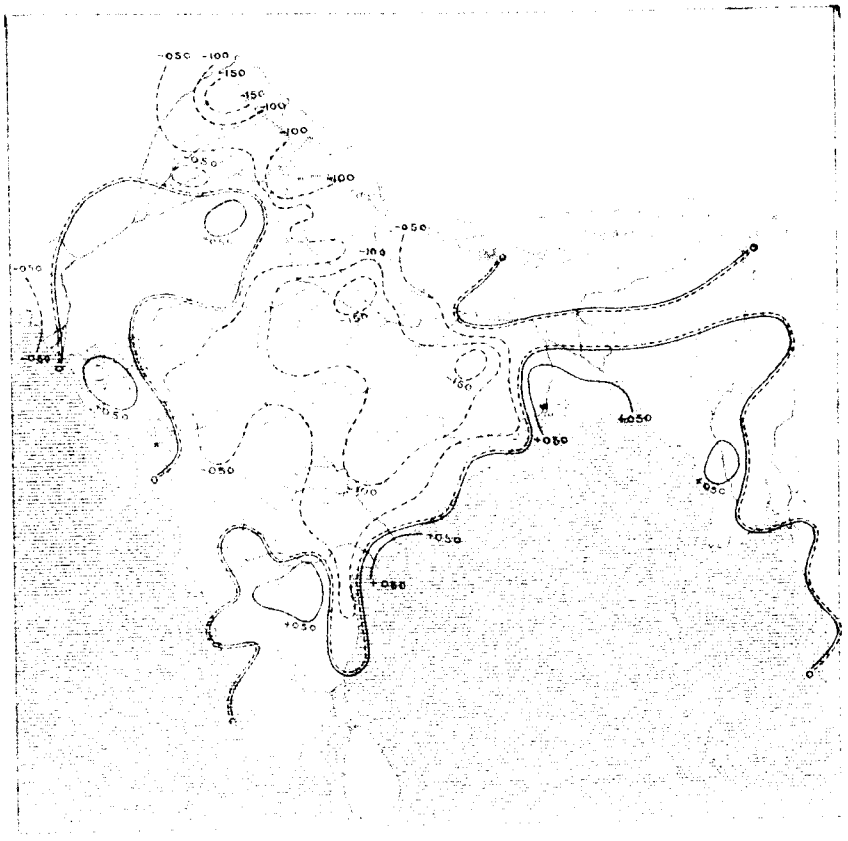
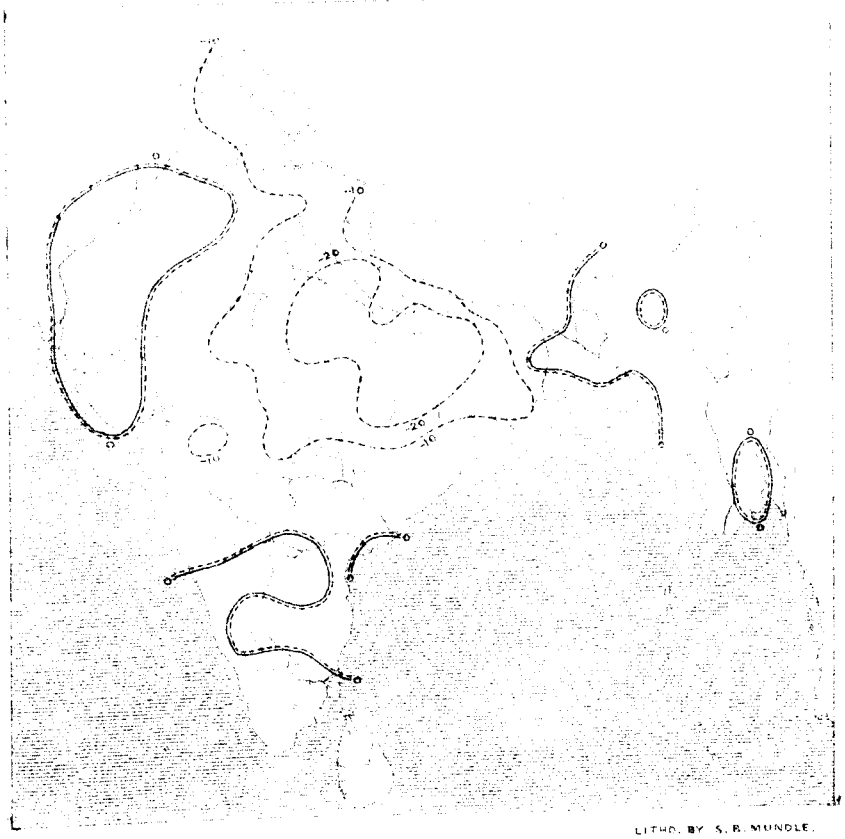


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 A. M.



LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF CLOUD
AMOUNT AT 8 A. M.

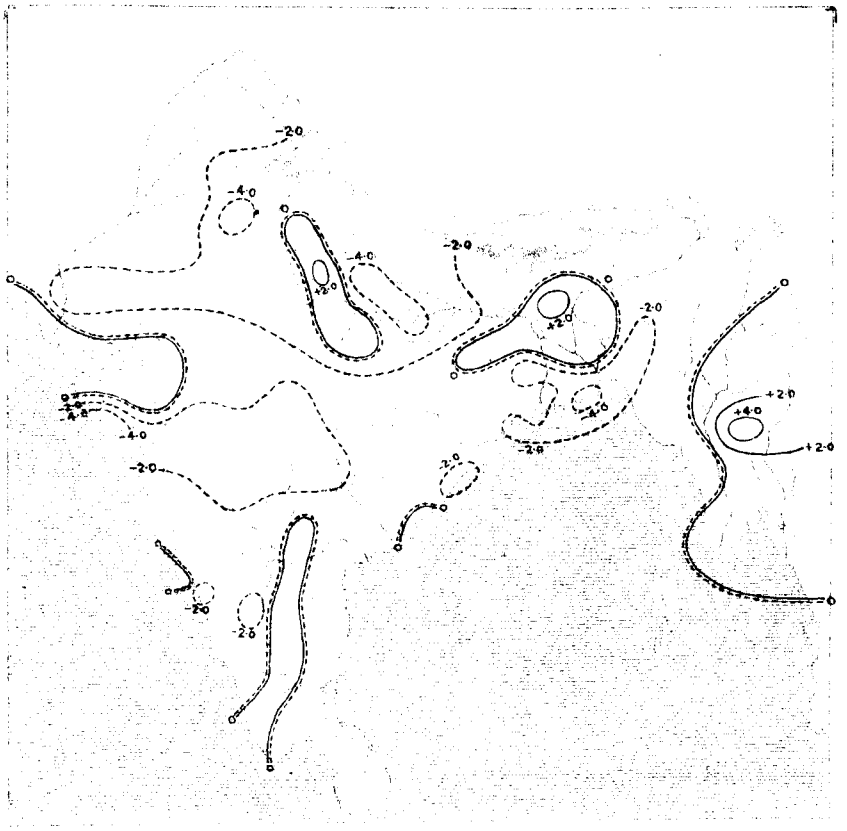
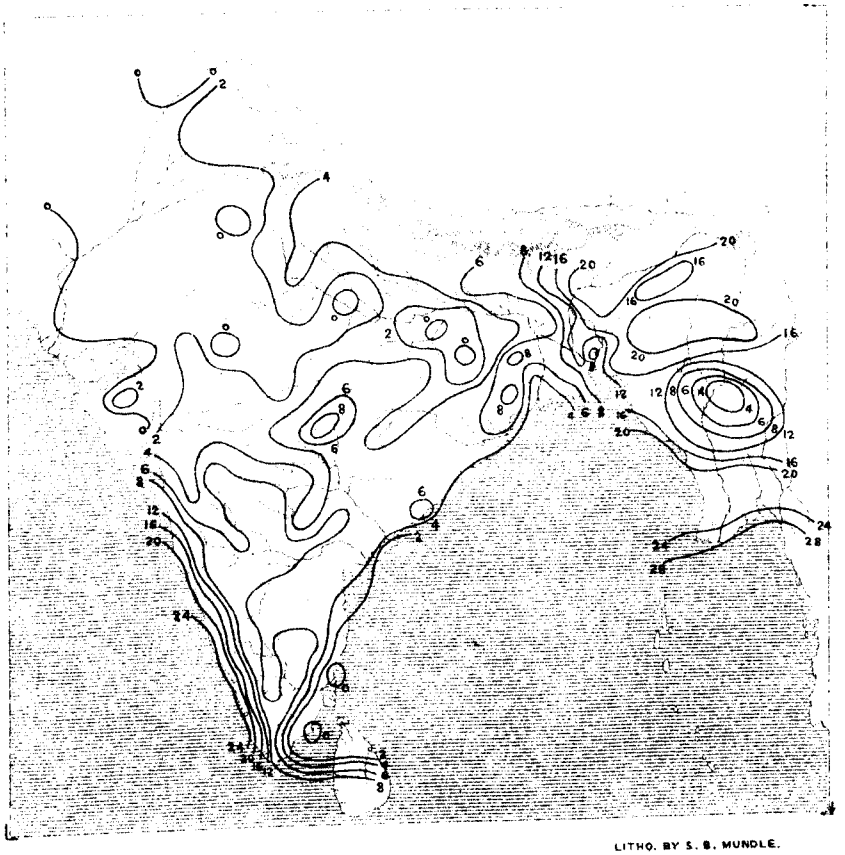


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE
MONTH ON WHICH RAINFALL EQUALLED OR
EXCEEDED 0·10 INCH.

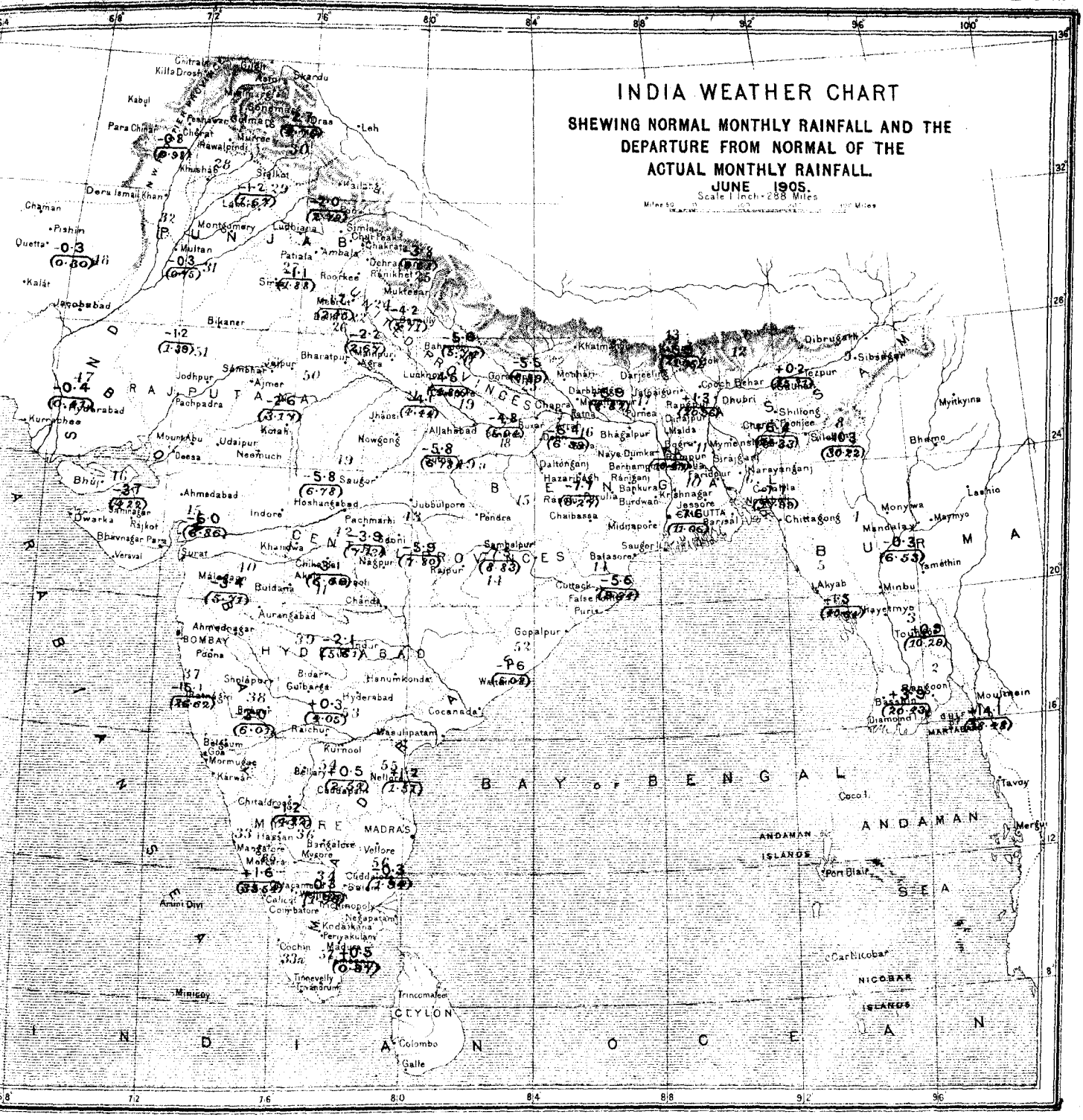


LITHO. BY S. B. MUNDLE.

B. W., I.—Jan. 05—1,050.

Litho. by S. B. Mundle
Zinco. S. I. O., Calcutta.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S. B. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above esc give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained referring in the following list to the number given in each district in red figures

Tenasserim
Lower Burma Deltaic
Central do.
Upper do.
Arakan
East Bengal
Assam, Surma
Do., Hills
Do., Brahmaputra
Deltaic Bengal
Central do.
North do.
Bengal Hills
Orissa
Chota Nagpur
South Bihar

17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province

33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind

48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JULY 1905.

INTRODUCTION.

THIS review of the weather in India during the month of July 1905, is based on observations taken daily at 8 A.M. at 233 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 65 stations. In the rainfall summary the rainfall data of the meteorological observatories and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the preparation of the review are utilized and brief notes on Solar and Magnetic disturbances are supplied by the observatories.

Summary of the chief features of the weather in India during the month of July, 1905.

The weather over India during the month of July was largely controlled by a series of six depressions or storms which passed in a more or less westerly direction from the Bay across India.

The shallow depression of the first three days gave rain over the central parts of the country and reduced the temperature over that region to below the normal. This depression had hardly disappeared when a fresh one was shown over Bengal. It lay over west Bengal on the 6th, over the east of Central India on the 7th, over the west of Central India on the 8th, and disappeared on the 9th. It occasioned a fair amount of rain, more particularly over the central parts of the country and perpetuated the previously existing distribution of temperature which remained lower than usual over the north-eastern and central districts and higher than usual elsewhere. The following gives temperature departure data for all divisions for the 7th illustrative of the conditions prevailing at this time :—

Province or division.	Departure from normal of		
	Mean maximum temperature, 7th July.	Mean minimum temperature, 7th July.	Mean temperature, 7th July.
	°	°	°
Burma	—0·8	+0·4	—0·2
Assam	+1·3	—0·5	+0·4
Bengal	—2·1	—2·7	—2·4
Orissa	—3·4	—0·6	—2·0
Bihar	—4·2	—1·3	—2·8
Chota Nagpur	—7·0	—1·2	—4·1
United Provinces of Agra and Oudh	—1·5	—0·2	—0·9
Punjab	—0·5	+4·2	+1·9

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 7th July.	Mean minimum temperature, 7th July.	Mean temperature, 7th July.
	°	°	°
North-West Frontier Province	+3·1	+7·2	+5·2
Baluchistan	+5·4	+0·6	+3·0
Sind	+2·4	+1·0	+1·7
Rajputana	+5·6	+1·4	+3·5
Gujarat (East)	0	+2·2	+1·1
Central India	+1·4	+0·3	+0·9
Central Provinces	−4·1	−1·7	−2·9
Berar	+2·8	+0·4	+1·6
West Coast	+0·8	+2·7	+1·8
Bombay Deccan	−4·2	+1·2	−1·5
Mysore	+1·2	+0·1	+0·7
Madras Coast	+3·2	+1·8	+2·5
Madras Deccan	−0·5	+2·9	+1·2
South India	+1·7	−0·3	+0·7

On the 11th another depression appeared over the head of the Bay and thence passed north-westward into the United Provinces where it broke up on the 16th. It was principally remarkable for the heavy rain which occurred over Northern India—the first heavy burst of rain in this area during the present monsoon season. The following shows the amounts exceeding 5″ in 24 hours which were received between the 12th and the 14th :—

DISTRICT.	Station.	Date.	Rain fall during 24 hours preceding 8 A.M. of date.
			Inches
DHOLPUR	Rajakhera	12th July	7·00
AGRA	Bah	" "	6·76
MAINPURI	Shikohabad	" "	6·72
BIJNOR	Bijnor	" "	5·26
JUMMOO	Sambha	13th "	7·77
KHASI & JAINTIA HILLS.	Cherra Poonjee Police Station.	" "	6·62
LAKHIMPUR	Moran	" "	6·61
KHASI & JAINTIA HILLS.	Cherra Poonjee Welsh Mission House.	" "	6·25
PARTABGARH	Kunda	" "	5·79
GARO HILLS	Tura	14th "	11·57
KHASI & JAINTIA HILLS.	Cherra Poonjee Police Station.	" "	10·80
	Cherra Poonjee Roman Catholic Mission House.	" "	10·42
	Cherra Poonjee Welsh Mission House.	" "	10·38
	Cherra Poonjee Mrs. Shadwell's house.	" "	8·90
DARJEELING	Darjeeling	" "	6·58
	Kurseong	" "	6·35
GAYA	Deo	" "	5·13
JALPAIGURI	Jalpaiguri	" "	5·10
BENARES	Chandauli	" "	5·07

When this rainfall ceased there occurred a period of generally high temperature, and these conditions lasted until the 20th. On the 19th the third depression of the month appeared over the head of the Bay. This storm travelled almost due westward and finally became merged in the permanent low pressure area over Sind on the 25th. Its principal characteristic was the heavy rain which it occasioned over Gujarat and surrounding regions when it reached the western portion of its track and drew into its circulation the moist winds of the Arabian Sea monsoon current. The following gives examples of falls of over 10″ in 24 hours recorded at this time :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
COLABA	Matheran	22nd July	11·80
GWALIOR	Jorhat	" "	11·30
KAIRA	Thasra	23rd "	13·23
PANCH MAHALS	Halol	" "	11·93
KAIRA	Kaira	" "	11·19
AHMEDABAD	Dholka	" "	11·04
KAIRA	Matar	" "	10·89
AHMEDABAD	Sanand	" "	10·81
REWA KANTHA	Chhota Udepur	" "	10·57
KAIRA	Nadiad	" "	10·44
GWALIOR	Ali Rajpur	" "	10·18
	Mahudha	" "	10·10
AHMEDABAD	Ahmedabad	24th "	18·68
	Viramgam	" "	15·35
	Sanand	" "	14·23
KATHIAWAR	Dhrangadhra	" "	13·27
PALANPUR	Radhanpur	" "	11·94
	Thared	" "	11·81
KATHIAWAR	Wadhwan	" "	11·65
	Rajkot	" "	11·00
	Chuda	" "	10·65
	Jasdan	" "	10·60
SATARA	Malcolmpeth	25th "	15·41
KOLABA	Mahad	" "	11·90
RATNAGIRI	Mandangad	" "	11·80

When this storm disappeared rain, to a great extent, ceased over the whole area dominated by the Arabian Sea

monsoon current and higher temperatures than usual were experienced over nearly the whole country. The following gives comparative temperature data for the 26th for all divisions in illustration :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 26th July.	Mean minimum temperature, 26th July.	Mean temperature, 26th July.
	°	°	°
Burma	−0·8	+0·7	−0·1
Assam	+4·8	+0·5	+2·7
Bengal	+3·9	+0·7	+2·3
Orissa	+1·9	−0·8	+0·6
Bihar	+2·7	+2·2	+2·5
Chota Nagpur	+2·5	+0·1	+1·3
United Provinces of Agra and Oudh.	+7·3	+3·3	+5·3
Punjab	+5·1	+4·5	+4·8
N.-W. Frontier Province	+2·4	+0·7	+1·6
Baluchistan	−1·0	−0·7	−0·9
Sind	+2·3	+0·3	+1·3
Rajputana	+1·2	−1·1	+0·1
Gujarat (East)	−7·9	−0·8	−3·9
Central India	+0·7	+0·3	+0·5
Central Provinces	+3·8	−0·3	+1·8
Berar	+4·4	−0·8	+1·8
West Coast	+1·8	+1·3	+1·6
Bombay Deccan	−0·6	+0·2	−0·2
Mysore	−0·5	+0·6	+0·1
Madras Coast	+4·7	+2·5	+3·6
Madras Deccan	+1·8	+1·1	+1·5
South India	+2·5	+1·2	+1·9

On the 27th the last storm of the month came into existence. It was a complicated disturbance and appeared over East Bengal and the head of the Bay on the 26th and 27th. Thence it advanced into Central Bengal and occasioned general, moderately heavy rain over the north-east of the Indian region. The following gives comparative temperature data for all divisions from the 27th to the end of the month :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	27th July.	28th July.	29th July.	30th July.	31st July.
	°	°	°	°	°
Burma	+0·8	+0·1	+0·1	−0·4	−1·6
Assam	+1·4	+1·8	−2·2	−1·6	−1·0
Bengal	+1·8	−0·2	−2·8	−1·9	−0·2
Orissa	−1·2	−2·1	+0·8	+2·5	+1·4
Bihar	+3·8	+·0	−1·8	−4·0	−3·8
Chota Nagpur	+0·3	+0·4	−2·7	−1·5	+1·2
United Provinces of Agra and Oudh.	+6·0	+5·6	+2·4	+0·6	+3·0
Punjab	+6·9	+8·3	+6·1	+4·4	+0·5
North-West Frontier Province	+4·3	+6·1	+6·1	+4·7	+3·5
Baluchistan	−0·9	−1·1	+0·4	+2·4	+0·4
Sind	+2·8	+1·8	+1·5	+1·4	+0·5
Rajputana	+2·6	+2·8	+4·2	+4·5	+3·8
Gujarat (East)	−1·8	−1·2	+0·1	+1·1	+1·1
Central India	+1·6	+2·6	+1·8	+3·1	+4·1
Central Provinces	+2·2	+2·1	+1·7	+2·0	+2·6
Berar	+3·1	+1·8	+4·2	+3·0	+2·3
West Coast	+1·2	+1·9	+2·0	+2·1	+2·7
Bombay Deccan	+1·5	+2·1	+1·0	+1·4	+1·6
Mysore	+1·0	+0·4	+1·2	+1·4	+2·3
Madras Coast	+4·0	+4·1	+4·2	+2·3	+0·1
Madras Deccan	+2·6	+1·9	+2·0	+1·8	+1·5
South India	+2·6	+2·7	+2·8	+3·0	+2·3

Solar, Magnetic and Seismic disturbances.

The following reports on solar, magnetic and seismic disturbances during the month of July have been received from the observatories :—

Kodaikanal :—Solar observations, July 1905. On the 11th bad weather prevented all observations and on five other days (10th, 18th, 19th, 21st and 22nd) it was not fine enough for work on prominences.

Sunspots.—The number of groups observed during the month was 32 which is the largest number seen in any month during the present spot cycle. The average daily number of groups visible was 5·0 against 3·6 in June, but this falls considerably below the February average of 6·1. The most remarkable feature in the month's observations was the extreme irregularity of the distribution of spots on the sun's surface. On the 14th no less than 9 groups were visible on the disc, while on the 28th and 29th not a single spot could be seen. The last occasion on which the visible disc was free from spots was September 23rd, 1903. The tendency for spots to be more numerous in certain longitudes than in others has been referred to before, but it is not often that one-half of the sun shows the characteristics of a sunspot maximum, while the other shows those of a minimum. On the days of no spots the spectroheliograms showed a

very uniform condition of the sun's surface. The distribution of spots in latitude was normal. Between latitudes 0° and 10° there were 11 groups, between 10° and 20° there were 19 groups, and between 20° and 30° there were 2 groups.

The most important spot groups of the month were 589 and 590* and 594. Group 589—590 when it appeared at the east limb on the 6th consisted of only two small spots, but it rapidly increased in size and formed a double group with two main clusters joined by a number of smaller spots. It began to break up after crossing the central meridian and by the time it reached the western limb it consisted of a scattered group of comparatively small spots. Group 594 was the largest that has been seen since the great spot of February. It was first seen on the 10th as a long streak parallel to the limb, but as it advanced it was seen to consist of a very large spot of regular and almost circular outline followed by a long train of smaller spots. The photograph of the 16th shows it as consisting of two very dark nuclei surrounded by a continuous penumbra and followed by a train of small spots extending over more than 60,000 miles. The extreme length of the group was more than 120,000 miles and its maximum breadth was about 44,000 miles. It was, of course, easily visible without a telescope. It was a comparatively quiet spot and no large prominences were seen near it when it was close to either the east or the west limb. On several days, however, the C line in parts of the group was reversed and slightly displaced.

Prominences.—There were no very conspicuous prominences seen during the month. Some 20 exceeded one minute in height and of these only two exceeded 100 seconds.

There were no great magnetic disturbances recorded, but there was a moderate disturbance on the 6th when no spot was near the central meridian.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Bombay:—

Note on the Colaba Magnetic Record.

During the month the traces showed 14 calm days, 15 days of small and two days of moderate disturbances.

Movements suspected to be due to seismic causes occurred on the 23rd at about 13½ hours, the strain apparently lasting for about 2 hours.

The selected quiet days of the month were the 4th, 11th, 15th, 21st and 26th.

The mean observed absolute values of the several elements, as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follow:—

Declination	0° 11′ 18″ east.
Horizontal Force	·37410 C. G. S. unit.
Dip	21° 59′·5
Horizontal Force range	·00048 C. G. S. unit.
Horizontal Force summed range	·00337 " "
Declination range	4′·60
Declination summed range	20′·20

Note.—(Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.)

Two very great seismic disturbances were recorded, the first on the 9th, commencing at 2 h. 38·3 m. P.M., and ending at 6 h. 59·0 m. P.M., and the second on the 23rd, commencing at 7 h. 44·8 m. A.M. and ending at 2 h. 37·2 m. P.M. Colaba civil time. As the disturbances were very large the traces overlap. Six other disturbances more or less of small magnitudes—less than 2½ M. M. were recorded on the 2nd, 6th, 11th, 14th, 15th and 16th.

Magnetic Disturbances:—July 1905.

July, 1905.		July, 1905.		July, 1905.	
1	S.	11	C.	21	C.
2	C.	12	S.	22	S.
3	C.	13	S.	23	S.
4	C.	14	S.	24	M.
5	C.	15	C.	25	C.
6	M.	16	S.	26	C.
7	S.	17	S.	27	C.
8	S.	18	S.	28	S.
9	S.	19	C.	29	C.
10	S.	20	S.	30	C.
				31	C.

The magnitudes of the disturbances are determined from Horizontal Force traces.

C=calm; S=small; M=moderate; G=great; V G=very great.

Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Govt. Observatory, Bombay.

List of displacements recorded by the Seismograph at the Alipore Osbervatory during July 1905:—

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum Amplitude in m. m.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M.	
6th	16-29·8	16-49·1	16-51·1	18-14·5	4·75	1-44·7	Sensibility 1 m. m. = 0″·38 of tilt.
11th	8-49·9	8-55·0	8-56·0	9-50·9	3·50	1-1·0	Ditto.
"	10-39·2	...	10-41·8	11- 6·2	1·00	0-27·0	Doubtful Sensibility 1 m. m. = 0″·38 of tilt.
14th	9-16·8	9-37·2	9-38·2	10- 8·7	1·50	0-51·9	Sensibility 1 m. m. = 0″·38 of tilt.
"	22-9·0	...	22-19·1	22-28·2	5·50	0-19·2	Ditto.
16th	18-57·0	19-3·1	19-8·2	19-17·3	1·50	0-20·3	Ditto.

The local times of the commencement:—

Date 1905.	H. M.
July 6th	22-23·1
" 11th	14-43·2
"	16-32·5
" 14th	15-10·1
" 15th	4- 2·3
" 17th	0-50·3

J. A. CUNNINGHAM,
Asstt Meteo. Reporter to the Govt. of India.

* These were originally classed as two, but later on became one large group.

Simla :—List of earthquakes recorded by the Omori-Ewing Seismograph at the Simla Observatory during July 1905:—

Date.	Commencement of P. T. G.M.T.	End of P. T. G.M.T.	Beginning of L. W. G.M.T.	Maxima G.M.T.	End approximately G.M.T.	Maximum amplitude in m. m.	Duration approximately.	REMARKS.
	H. M.	H. M.	H. M.	H. M.	H. M.	M. M.	H. M.	
2	3-43'8	3-44'8	...	3-45'3	4-30	0'75	0-45'0	
3	...	...	...	15-30	...	0'04	0- 0'1	Local.
6	...	...	...	10-50	...	0'20	0- 0'4	Do.
9	9-43'1	9-47'5	9-50'7	...	...	...	...	Tracing point went off the paper at 9 H. 22 M. Distance of source comparable with 1900 miles.
11	8-43	8-47'5	8-51'5	8-54'4	9-20	0'50	0-20'0	Distance of source comparable with 1700 miles.
14	...	...	...	10-25	...	0'03	0- 0'7	Local.
17	...	...	...	21-30	...	0'15	0- 0'8	Do.
18	7-50 (approx)	7-50'4	...	7-50'4	7-51	0'05	0- 1'0	Source at some distance.
23	2-56'3	3- 0'8	...	...	...	...	...	Tracing point went off the paper at 3 H. 1'1 M. Distance of source comparable with 2,000 miles.
25	...	...	22-15	22-15'2	22-22	1'75	0- 0'7	Local.
28	...	...	...	2-40	...	0'05	0- 0'2	Do.

J. PATTERSON,
Deputy Meteorologist.

Royal Alfred Observatory, Mauritius:—No observations were recorded, owing to unfavourable weather, on the 2nd, 3rd, 9th, 24th, and 29th July, and on the 28th and 30th there were no spots visible on the surface of the sun. On all the remaining days groups of spots were recorded and on most days faculæ were observed.

1 group was observed on the 25th, 26th, 27th and 31st.
2 groups were " " " 4th to 8th, 10th, 18th and 19th.
3 " " " " " 11th, 15th to 17th and 23rd.
4 " " " " " 1st, and 20th to 22nd.
5 " " " " " 12th and 14th.
6 " " " " " 13th.

Isolated spots were recorded on the 4th, 11th, 16th to 23rd, and on the 25th.

Magnetic disturbances:—

Days.	Hours.	Disturbances.
6	1½	A sudden increase of H. F. ('00014) followed till 23 hours by occasional small rapid fluctuations with waves 5 hours to 8 hours (+'00050) 12 hours to 14½ hours (+'00023) and two successive waves 8½ hours to 21½ hours (—'00018 and —'00016)
17	12¼	Sudden decrease of H. F. ('00014)
23	12¼—14¼	Shallow serrated wave in H. F. (+'00015) steep at commencement and end.
24	0—19	Small fluctuations in H. F. with double wave 4 hours to 5 hours (+'00020 to —'00011) and long irregular wave 24 d. 0½ hours to 25 d. 12 hours (+'00074)

T. F. CLAXTON,
Director.

Weather in Indian monsoon region.

The general meteorological conditions were fairly normal over a large part of the monsoon area. In the south-east Trades region the departures from normal were as shown below:—

July 1905.	Mauritius.	Seychelles.	Zanzibar.
	"	"	"
Pressure departure . . .	—'022	—'009	—'015
	°	°	°
Actual mean wind direction . .	S 58 E	S 33 E	S 19 E
Normal mean wind direction . .	S 64 E	S 33 E	S 6 E
Actual mean wind velocity (miles per diem).	230	256	214
Normal mean wind velocity (miles per diem).	287	287	197
Rainfall departure	—0'62	—1'97	—1'34

The mean pressure of the month was slightly below the normal at all the stations in the Trades region and there was slightly less easting than usual in the wind direction at Mauritius and more easting at Zanzibar. The velocity was lower than usual both at Mauritius and the Seychelles and slightly above at Zanzibar. The month's rainfall was less than the average both at Mauritius and the Seychelles and was in excess at Zanzibar. There were thus no departures from normal of much importance in the equatorial area.

The wind circulation over the south-east Trades and the western monsoon area were apparently fairly normal. This is shown in the following extracts of logs of vessels which traversed this region during the month.

The mail steamer *Oriental* left Aden on the 2nd July and experienced up to Longitude 62°E. a strong monsoon, cloudy weather and considerable sea and swell. Thence to arrival at Bombay on the morning of the 7th a moderate to fresh monsoon, cloudy weather and considerable to high sea and swell.

The mail steamer *Arcadia* left Aden on the 9th and experienced from Longitude 53°E. to Longitude 64°E. a fresh to strong monsoon, occasionally blowing a moderate gale, cloudy weather and high sea and swell. Thence to arrival on the 14th a moderate to fresh monsoon, cloudy

weather, with a few passing showers, and a high sea and swell.

The S. S. *Somali* left Lamu on the 3rd and experienced from there to Lat. 7°N. in Long. 51°E. on the 6th, a moderate to gentle monsoon, cloudy to overcast weather and a moderate sea and swell; thence to Latitude 17°N. in Longitude 68°E. on the 10th a strong monsoon blowing with the force of a moderate to strong gale, cloudy weather and a high sea and swell; thence to arrival at Bombay on the 11th, a fresh to strong monsoon and high sea and swell.

The mail steamer *Arabia* left Aden on the 16th and experienced from Long. 53°E. to Long. 68°E. a fresh to strong monsoon, occasionally blowing with the force of a moderate gale, cloudy weather and considerable to high sea; thence to arrival at Bombay on the morning of the 21st moderate to gentle south-westerly and light northerly winds, passing showers and a moderate sea and swell.

The mail steamer *Peninsula* left Aden on the 23rd and experienced from Long. 50°E. to Long. 68°E. a strong monsoon, blowing with the force of a moderate gale, a high sea and a few passing showers; thence to arrival at Bombay on the 28th a moderate to fresh monsoon with cloudy weather and a moderate sea.

The mail steamer *Persia* left Aden on the 30th and experienced from Long. 53°E. to Long. 62°E. a fresh to strong monsoon occasionally blowing with the force of a moderate gale, cloudy weather and a high sea and swell; thence to arrival at Bombay on the 4th August 1905 a moderate to gentle monsoon, cloudy weather and a moderate sea and swell.

The *S.S. Sultan* left Lamu on the 27th and experienced up to Lat. 4°N. in Long. 48°E. on the 29th, a moderate to gentle monsoon, passing showers and rough sea; thence to Lat. 11°N. in Long. 59°E. on the 1st August a fresh to strong monsoon occasionally rising to the force of a moderate gale, a clear sky and a rough sea; thence to arrival at Bombay on the 5th August a moderate to gentle monsoon, cloudy weather and passing showers.

The preceding extracts show that a strong monsoon prevailed throughout the month over the centre of the Arabian Sea and as far east as Long. 62° to 68°E. and that the vessels, during most of the month, carried a moderate monsoon with them to Bombay except about the 21st, when between Long. 68°E. and the coast, the *Arabia* experienced gentle south-westerly and light northerly winds.

The following table shows the departure from normal of the barometric gradient over the Equatorial Belt and over the Arabian Sea for each day of the month, the easterly deflection and the departures of velocity from normal of the south-east Trades and the daily departure of Indian rainfall from the average:—

Date of month July 1905.	Diurnal departure of pressure gradient from normal between Mauritius and Seychelles.	Diurnal departure of pressure gradient from normal between Seychelles and Bombay.	Easterly deflection of wind at Mauritius.	Easterly deflection of wind at Seychelles.	Departure of hourly wind velocity at Mauritius.	Departure of daily wind velocity at Seychelles.	Mean rainfall departure of India.
	"	"	°	°			"
1	—·031	—·010	+29	+12	+0·9	+ 34	+0·99
2	—·086	—·018	+42	— 9	—2·8	— 88	+0·11
3	—·081	—·052	+93	+34	—7·8	—156	—0·11
4	—·033	—·058	—18	+12	—5·0	—170	—0·99
5	+·006	—·012	— 9	+12	—2·4	0	+0·02
6	—·007	+·034	—24	— 9	—1·1	+128	—0·02
7	—·030	+·006	— 9	+12	—4·0	+ 67	+0 01
8	—·101	+·010	+35	— 9	—4·9	— 34	—0·02
9	—·158	—·035	+52	— 9	—7·1	— 17	—0·20
10	—·103	—·075	—37	—57	+1·7	+ 9	—03
11	+·003	—·052	—23	— 9	—0·6	—103	+0·03
12	+·021	—·029	— 5	— 9	—2·2	— 49	+0·07
13	+·029	—·003	—18	— 9	—2·2	— 5	+0·09
14	+·047	+·018	— 4	— 9	+0·1	+ 31	+0·05
15	+·053	—·027	— 9	+12	+0·8	+ 83	—0·07
16	+·037	—·014	— 2	+12	+0·2	— 34	—0·19
17	+ 053	+ 004	+ 2	+12	+1·2	— 1	—0·14
18	—·006	+·012	— 1	+12	—1·8	— 53	—0·05
19	—·052	+·019	—10	+22	—5·4	—139	—0·12
20	—·043	+·035	—44	—88	—5·3	— 33	—0·13
21	—·010	+·052	—19	+12	—2·6	— 5	—0·12
22	+·001	+·055	—10	+12	—3·8	— 43	—0·06
23	—·024	+·058	—16	+22	—0·2	— 99	0
24	—·045	+·088	+ 3	+22	—2·1	— 67	+0 01
25	—·027	+·041	0	+22	0	— 56	—0·11
26	—·007	+·002	— 2	+22	+0·8	— 35	—0·13
27	+·018	—·023	— 7	+12	+3·2	+ 1	—0·19
28	+·006	—·026	— 1	—33	+3·7	+ 28	0
29	—·071	—·028	0	—33	—5·6	— 30	0
30	—·115	—·035	—36	—57	—1·4	— 96	—0·01
31	—·033	—·050	—30	—33	+2·3	— 34	—0 09

The last column shows that the rainfall departures were generally small though on most days the mean rainfall of India was lighter than usual. On the occasions when the rainfall was in excess this was apparently due to local causes, as there is nothing in the extra-Indian conditions to account for an increase of rainfall on these days. To the west and north of India conditions were apparently quiet. In Egypt the mean pressure of the month was, on the whole, higher than the average, while in the Caspian region there were no storms or depressions of any consequence. For the whole monsoon area pressure was above the normal on the 1st and 2nd, below from the 3rd to the 7th, above from the 8th to the 22nd and below from the 23rd to the end of the month.

Depressions and cyclonic storms.

Five shallow depressions affected the weather over the Indian land area during the month under review.

Depression of the 1st to 3rd July.—On the 1st a shallow depression, which had advanced to that position from the Bay of Bengal, was shown over the Central Provinces. The centre lay between Raipur and Pendra and the barometer was 0·10″ below the normal at the former station. Rainfall measuring between 2″ and 4″ was reported from various stations across the head of the Peninsula. Between the 1st and 2nd the storm moved in a north-westerly direction into the eastern States of Central India and had filled up somewhat, pressure having been about

normal at 8 A.M. on the 2nd at Sutna and Nowgong. Moderately heavy rain had again been received over the region to the south of the storm. By the morning of the 3rd the depression, moving north-north-westward, had reached the submontane districts of the United Provinces, and during the day the storm entered the hills and broke up.

Depression of the 4th to 9th.—On the 3rd the barometer was falling rapidly over Bengal, Burma and the north of the Bay, and, on the following morning, the 4th, a shallow depression was shown over East and South-East Bengal. On this day pressure was giving way rapidly over the east of the Bay where an independent depression was developing. The reports of the next day, the 5th, showed that the two depressions had joined and that a largish shallow area of low pressure with steep surrounding gradients lay over Deltaic Bengal and the north of the Bay. Heavy rain was falling over north-East India and the barometer at 8 A.M. was 0·246″ below the normal off the Arakan Coast.

Between the 5th and 6th the combined storm crossed the Bengal coast, the wind at the Sandheads rising to force 8 from south-west and the centre was shown at 8 A.M. of the latter date over Chota Nagpur, the barometer at Ranchi marking ·317″ below the normal. Barometric gradients were steep around the storm and cyclonic winds, strong at the head of the Bay, surrounded the depression, but the rainfall was not very heavy. By the morning of the 7th, the storm, which had travelled nearly due westward, lay between Jubbulpore and Sutna where the barometer read between 0·20″ and 0·22″ below the average. The Arabian Sea monsoon winds were flowing freely into the storm area and heavy rain was reported from Jubbulpore, Pachmarhi and Hoshangabad. Continuing to move westward the storm had reached the Central India plateau by the morning of the 8th and the flow of moist air continuing, heavy rain was reported from Indore, Khandwa, Pachmarhi and Hoshangabad. By the 9th the storm had practically disappeared, but heavy rain continued to be received over the west of Central India and South Rajputana.

Quiet weather and generally increasing pressure prevailed over the greater part of the country during the 9th and 10th, but on the 11th a fresh depression appeared.

Depression of 11th to 15th.—Pressure was falling briskly over the head of the Bay on the morning of the 11th and a small and shallow depression was shown off the Sandheads. The storm crossed the coast during the day and was shown over South-West Bengal on the morning of the 12th when the wind was west-south-westerly, force 7 to 8 at the head of the Bay. It thence moved north-north-westward into Chota Nagpur where it was shown on the 13th, into Bihar on the 15th and broke up among the hills of the east of the United Provinces on the 16th. The storm was, throughout, of very slight intensity, but gave heavyish rain to North-East India.

Between the 15th and the 18th the monsoon trough of low pressure lay to the northward of its normal position, the winds were westerly over a large part of the country and the weather quiet and rainless.

Depression of the 19th to 25th :—On the 18th pressure was giving way slightly over Deltaic Bengal and the head of the Bay and on the morning of the 19th a shallow depression lay off the Sandheads. The depression moved westward during the day and was shown as a shallow and diffused depression lying over South-West Bengal, Orissa, Ganjam and the east of the Central Provinces on the morning of the 20th. The Arabian Sea monsoon winds were being drawn into the circulation, but little heavy rain was reported. The reports of the 21st showed that the depression, still moving westward, had reached the east of the Central Provinces and was central near Raipur. Rain had increased considerably in extent, but, except at Pachmarhi, remained light or moderate. By the morning of the 22nd the centre of the storm had reached the neighbourhood of Indore and Khandwa where the barometer read about ·15″ below the normal. A well-marked cyclonic circulation of the winds prevailed around the centre, and Khandwa and Indore both reported heavy falls of rain. The storm moved slowly west-north-westward during the day and at 8 A.M. on the 23rd was central near Ahmedabad. The flow of winds from the Arabian Sea into the storm area continued and heavy falls of rain were reported over Gujarat (see Rainfall Section, p. 215). The storm continued its slow west-north-westerly movement during the day and was central over west Gujarat and lower Sind on the 24th where pressure was about 0·20″ below the normal. Strong cyclonic winds prevailed on the south side of the depression and very heavy rain continued over Gujarat and Kathiawar (see Rainfall Section, p 215). The storm moved north-westward across the western desert during the 24th and 25th and eventually became merged in the permanent low pressure area over the Indus Valley.

Depression of the 26th to 30th.—In the meantime during the 24th and 25th pressure was giving way slightly to briskly over Arakan and Bengal and a fresh depression was shown over these areas. This depression apparently never developed, but on the 26th another depression was shown off the Arakan Coast and the wind was west-north-west force 8 at the Sandheads. This depression moved into East Bengal by the morning of the 27th and thence passed into Central Bengal. The centre was shown close to Bogra on the 28th and 29th where pressure was 0·20″ below the normal. The winds around the storm were not strong, but the rainfall to the south of the depression was heavy to very heavy (see Rainfall Section, p. 212). During the 29th the depression apparently broke up and the rainfall diminished. On the last day of the month the barometer was rising generally and rain was confined almost wholly to the north-east.

Pressure.

The general distribution of the actual mean pressure of the month of July at 8 A.M. is shown in Plate I. Pressure was lowest over the South-West Punjab and upper Sind and relatively low within an arm which extended from the South-East Punjab as far as North Bihar near the foot of the hills. Pressure was highest in Malabar and South Ceylon and the pressure gradient over India was steeper than usual. Pressure, on the mean of the month, was higher than usual over the Peninsula, Kathiawar, the Central Provinces, the west of Central India, the south-west of the United

Provinces, the east and centre of Rajputana and Tenasserim. It was lower than usual over Burma and over Northern India, with the exception of the districts mentioned above. The excess was greatest on the coasts of the Peninsula and the deficiency greatest over North-West and North-East India. The departures from normal exceeded 0·025″ at the following stations:—

Station.	Positive departure from normal of mean 8 A.M. pressure, July 1905.	Station.	Negative departure from normal of mean 8 A.M. pressure, July 1905.
	″		″
Nellore	+·035	Jacobabad	—·045
Trincomalee	+·033	Multan	—·036
Mormugao	+·032	D. I. Khan	—·032
Karwar	+·030	Lahore	—·032
Madura	+·029	Ludhiana	—·031
Trivandrum	+·028	Jessore	—·031
Ratnagiri	+·025	Berhampore	—·030
Cuddalore	+·026	Yamethin	—·031
		Silchar	—·028
		Peshawar	—·028
		Saugor Island	—·026
		Chittagong	—·026

The general departure for the whole country amounted to only —·001″.

July 1904 was the last month for which the mean pressure of the whole Indian area was below the normal, so that the mean pressure of the whole area more or less exceeded the normal continuously for eleven months, *viz.*, from August 1904 to June 1905.

The mean pressure of the month under review was below the normal at the hill stations with the exception of Leh, Murree and Wellington. The departures from normal were in nearly all cases small and unimportant and the vertical pressure gradients were, except in the north-west of the mountain area, approximately normal. This is shown below:—

Hill station.	Departure from normal pressure, July 1905.	Plain station.	Departure from normal pressure, July 1905.	Departure of pressure difference, July 1905.
	″		″	″
Quetta	—·001	Jacobabad	—·045	—·044
Leh	+·004	Lahore	—·032	—·036
Murree	+·002	Peshawar	—·028	—·030
Simla	—·004	Ludhiana	—·031	—·027
Chakrata	—·008	Roorkee	—·013	—·005
Ranikhet	—·019	Bareilly	—·011	+·008
Darjeeling	—·010	Dhubri	—·021	—·011
Lashio	—·037	Bhamo	0	+·037
Mount Abu	—·015	Deesa	—·009	+·006
Pachmarhi	...	Khandwa	—·002	...
Wellington	+·021	Coimbatore	+·020	—·001

The departures from normal of the mean pressure of the month at the extra-Indian stations were as follow:—

Station.	Departure from normal of mean 8 A.M. pressure of July 1905.
	″
Trincomalee	+·033
Colombo	+·013
Bushire	—·005
Jask	—·045
Muscat	—·029
Baghdad	+·001
Aden	+·037
Perim	+·031
Zanzibar	—·015
Seychelles	—·009
Mauritius	—·022

The above shows that the pressure deficiency prevailing over North-West India extended westward over Persia and North Arabia, but that the excess over the Peninsula and Ceylon did not extend southward into the South-East Trades region where the mean monthly pressure was in defect.

The following summarises the chief features of the pressure conditions of the month:—

(1) Pressure was higher than usual, on the mean of the month, over the Peninsula and generally lower than usual over Northern India.

(2) The pressure gradient was hence somewhat steeper than usual.

(3) The mean 8 A.M. pressure of the whole Indian land area was ·001″ lower than usual.

(4) The departures from normal at the hill stations were generally small.

(5) Pressure was lower than usual both over the Persian Gulf region and over the South-East Trades region.

The following table gives the mean pressure departures and anomalies of the month for the eleven meteorological provinces of India:—

Meteorological Province.	Departure from normal of mean 8 A.M. pressure of July 1905.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands	+·001	+·002
Burma Inland	—·018	—·017
Assam	—·024	—·023
Bengal and Orissa	—·017	—·016
Gangetic Plain and Chota Nagpur	—·011	—·010
Upper Sub-Himalayas	—·019	—·018
Indus Valley and North-West Rajputana	—·020	—·019
East Rajputana, Central India and Gujarat	+·003	+·004
Deccan	+·009	+·010
West Coast	+·024	+·025
South India	+·019	+·020

Temperature.

As was the case in July 1904, the rainfall of the month under review was lighter than usual and the temperature ruled above the normal over a considerable part of the country.

The mean maximum temperature of the month was lower than usual over (1) parts of Kathiawar, East Gujarat, Khandesh and the west of the Central Provinces and of Central India; (2) over Orissa, the east of the Central Provinces and a considerable part of Bengal and the Upper Assam Valley; (3) over Central Burma and (4) over Tenasserim. The departures from normal were generally small and only exceeded 1°·0 at the following stations:—

Area.	Station.	Mean maximum temperature. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
		°	°	°
First area	Surat	85·7	87·3	—1·6
	Malegaon	86·3	87·4	—1·1
Second area	Chaibassa	88·2	89·6	—1·4
	Sibsagar	88·7	90·0	—1·3
	Jessore	88·1	89·2	—1·1
Third area	Yamethin	88·0	90·0	—2·0
	Minbu	89·6	91·3	—1·7
Fourth Area	Tavoy	81·5	83·3	—1·8

In all other parts of the country, with some local exceptions, the mean maximum temperature exceeded the average. The excess was considerable to large at the foot of the Punjab Himalayas, over Sind, Rajputana and the Central India plateau and over the centre and east of the Peninsula. The excess was more than 3° at the following considerable number of stations:—

Station.	Mean maximum temperature. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°	°
asulipatam	98·0	92·7	+5·3
ipur	98·9	93·5	+5·4
adras	100·7	95·7	+5·0
ainpuri	97·4	92·7	+4·7
ddapah	99·7	95·3	+4·4
ddalore	100·0	95·9	+4·1
ansi	95·3	91·2	+4·1
Negapatam	99·8	95·9	+3·9
Sambhar	98·1	94·3	+3·8
Bikaner	104·2	100·4	+3·8
Jacobabad	111·7	107·8	+3·9
Pamban	92·8	89·1	+3·7
Cocanada	95·3	91·7	+3·6
Sialkot	101·2	97·6	+3·6
Ajmer	94·8	91·3	+3·5
Salem	96·7	93·1	+3·6
Rawalpindi	100·5	97·3	+3·2
Kurnool	94·5	91·4	+3·1
Bellary	94·0	90·9	+3·1
Nellore	100·4	97·3	+3·1

The following gives data of the highest recorded reading in each division of India during the month under review together with the highest temperature previously recorded in July at the different stations mentioned:—

Province or Division.	Station.	Highest maximum temperature recorded in July 1905.	Date on which recorded.	Highest maximum temperature recorded in July previous to 1905.	Year in which recorded.
		°		°	
Burma	Mandalay	101·6	22nd	106·1	1898
Assam	Silchar	98·1	1st	103·6	1896
Bengal	Bankura	96·6	10th	105·1	1897
Orissa	Puri	95·7	24th	96·7	1893
Bihar	Buxar	100·5	1st	108·0	1901
Chota Nagpur	Daltonganj	98·1	1st	110·1	1902
United Provinces.	Allahabad	107·1	4th	114·2	1901
Punjab	Sialkot	117·5	1st	119·5	1878
N.-W. F. Province.	Peshawar	116·0	6th	118·0	1900
Sind	Jacobabad	121·[illegible]	6th	126·0	1901
Rajputana	Bikaner	111·9	1st	116·9	1901
Gujarat East	Deesa	106·6	2nd	111·1	1902
Central India	Nowgong	102·5	1st	110·5	1900

PROVINCE OR DIVISION.	Station.	Highest maximum temperature recorded in July 1905.	Date on which recorded.	Highest maximum temperature recorded in July previous to 1905.	Year in which recorded.
		°		°	
CENTRAL PROVINCES.	Saugor .	99·4	1st .	103·9	1900
BERAR . .	Akola .	96·9	17th and 18th.	109·0	1875
WEST COAST .	Mormugao .	88·5	6th and 13th.	89·0	1897 and 1902
BOMBAY DECCAN	Sholapur .	97·2	17th. .	99·7	1877, 1891 and 1895
MYSORE . .	Bangalore .	89·3	10th and 11th.	91·9	1877
MADRAS COAST .	Madras .	105·0	4th .	105·7	1875
MADRAS DECCAN.	Cuddapah .	104·2	6th .	105·2	1897
SOUTH INDIA .	Trichinopoly	103·1	10th .	105·2	1896

The above shows that the highest temperature recorded was 121°·5 at Jacobabad on the 6th and that in all divisions higher temperatures than those recorded during July 1905 have been registered in July of previous years.

At the hill stations the departures from normal were generally irregular and, on the whole, smaller than on the neighbouring plains. At Leh the influence of the extensive snowfall continued to be felt and the mean maximum temperature was 4°·4 below the average.

The mean minimum temperature of the month exceeded the average except in the north-east where it was somewhat lower than usual. The departures from normal were generally small but exceeded 2° at the following stations:—

STATION.	MEAN MINIMUM TEMPERATURE.		
	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°	
Lahore	83·2	79·4	+3·8
Sialkot	83·2	79·5	+3·7
Multan	86·8	83·7	+3·1
Khushab	84·9	82·1	+2·8
Masulipatam	80·9	78·1	+2·8
Mainpuri	82·1	79·5	+2·6
Hyderabad (D)	74·2	71·7	+2·5
Goa	78·5	76·0	+2·5
Montgomery	86·3	83·9	+2·4
Rawalpindi	79·1	76·7	+2·4
D. I. Khan	84·9	82·5	+2·4
Peshawar	81·7	79·4	+2·3
Sirsa	84·3	82·0	+2·3
Agra	82·7	80·4	+2·3
Nowgong	80·2	78·1	+2·1
Jhansi	80·9	78·8	+2·1
Delhi	82·8	80·7	+2·1

At the hill stations in Baluchistan, Afghanistan and the north-west Himalayas the mean minimum temperature of the month was lower than usual, but at the remaining hill stations it was about normal. The largest departures were —2°·8 at Leh and—2°·6 at Murree.

The mean temperature was lower than usual over (1) East Gujarat, Khandesh and the extreme west of the Central Provinces and of Central India and (2) over Orissa, the extreme east of the Central Provinces and parts of Bengal and of Burma and was in excess elsewhere, more particularly over north-west India and the east of the Peninsula where departures from normal exceeding 2°·5 were recorded at the following places:—

STATION.	MEAN TEMPERATURE.		
	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°	°
Masulipatam	89·5	85·4	+4·1
Mainpuri	89·8	86·1	+3·7
Sialkot	92·2	88·5	+3·7
Jaipur	89·4	85·9	+3·5
Madras	90·6	87·2	+3·4
Jhansi	88·1	85·0	+3·1
Multan	96·8	93·8	+3·0
Negapatam	89·9	87·0	+2·9
Cuddalore	89·7	86·8	+2·9
Rawalpindi	89·8	87·0	+2·8
Bikaner	94·3	91·6	+2·7
Ajmer	87·0	84·3	+2·7
Hyderabad (D)	82·1	79·4	+2·7
Cuddapah	89·3	86·7	+2·6
Cocanada	88·1	85·5	+2·6
Pamban	86·9	84·3	+2·6
Salem	85·6	83·0	+2·6
Jacobabad	98·6	96·0	+2·6

The mean temperature of the month was generally normal or slightly lower than usual at most of the hill stations with the exception of Leh where the departure from normal was as much as—3°·6.

The following table gives the mean temperature data of the month for the 57 meteorological divisions of the empire :—

Province.	Division.	Actual temperature.					Departure from normal of month or		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	83·7	76·2	80·0	7·5	16·7	−0·4	+1·6	−2·0
	Lower Burma (Deltaic)	84·8	76·4	80·6	8·3	14·7	0	+0·7	−0·7
	Central do.	88·0	75·4	81·7	12·7	21·7	−0·4	+0·5	−0·9
	Upper do.	91·1	77·4	84·2	13·7	23·7	−0·5	+0·8	−1·3
	Arakan	84·6	77·0	80·8	7·6	15·7	−0·1	−0·5	+0·4
Bengal and Assam	Eastern Bengal	87·2	77·3	82·3	10·0	19·0	+0·4	−0·3	+0·7
	Assam (Surma)	91·1	77·3	84·2	13·8	22·8	+0·9	+0·1	+0·8
	Do. (Hills)	74·4	64·7	69·5	9·7	17·9	...	...	...
	Do. (Brahmaputra)	88·7	77·1	82·9	11·6	20·1	0	−0·7	+0·7
	Deltaic Bengal	88·4	78·7	83·6	9·8	17·8	−0·3	−0·5	+0·2
	Central do.	89·1	78·1	83·6	11·0	19·5	−0·4	−0·3	−0·1
	North do.	88·8	77·9	83·4	10·9	19·2	+0·2	+0·1	+0·1
	Bengal Hills	64·7	54·0	59·4	10·7	18·8	+0·3	+0·2	+0·1
	Orissa	88·2	78·9	83·6	9·3	20·0	−0·1	−0·1	0
	Chota Nagpur	87·2	75·6	81·4	11·6	21·2	−0·5	+0·1	−0·6
	Bihar (South)	91·5	79·3	85·4	12·1	24·2	+1·0	−0·1	+1·1
	Do. (North)	90·5	78·9	84·7	11·7	22·2	0	−0·5	+0·5
United Provinces of Agra and Oudh.	United Provinces (East)	92·4	79·9	86·2	12·5	30·0	+1·0	+0·4	+0·6
	Oudh (South)	93·8	79·7	86·8	14·1	29·5	+1·6	+0·4	+1·2
	Do. (North)	93·6	79·4	86·5	14·2	27·8	+2·3	+0·6	+1·7
	United Provinces (Central)	95·6	80·6	88·1	15·0	29·3	+4·4	+2·4	+2·0
	Do. (West)	95·9	81·5	88·8	14·4	29·0	+2·9	+1·6	+1·3
	Do. (East Submontane).	90·2	79·7	85·0	10·5	21·6	−0·9	+0·3	−1·2
	Do. (West Submontane).	90·8	77·1	84·0	13·7	25·9	+1·1	+0·1	+1·0
	Do. (Hills)	70·9	60·9	65·9	10·0	17·7	−0·4	*+0·5	−0·9
Punjab	Punjab (South-East)	96·7	82·8	89·8	13·9	30·9	+2·7	+2·1	+0·6
	Do. (South)	98·7	82·7	90·7	16·0	32·9	+1·9	+2·3	−0·4
	Do. (Central)	101·0	83·2	92·1	17·8	36·7	+0·4	+3·8	−3·4
	Do. (Submontane)	98·8	81·1	90·0	17·8	39·8	+2·5	+2·3	+0·2
	Do. (Hills)	81·6	57·9	69·8	23·7	41·1	−0·3	−1·8	+1·5
	Do. (West)	105·2	86·0	95·6	19·2	42·6	+1·5	+2·8	−1·3
N.-W. F. Province	North-west Frontier Province	105·0	83·3	94·2	21·7	44·4	+1·8	+2·4	−0·6
Bombay and Malabar Coast Districts (Madras).	Malabar	84·1	75·4	79·8	8·8	14·0	+1·4	+1·0	+0·4
	Madras (South Central)	92·7	73·2	83·0	19·5	26·0	+2·1	+1·4	+0·7
	Coorg	69·8	62·4	66·1	7·4	11·9	+0·9	+0·2	+0·7
	Mysore	82·5	66·9	74·8	15·6	23·5	+1·7	+0·4	+1·3
	Konkan	85·1	77·9	81·5	7·2	13·3	+1·6	+1·8	−0·2
	Bombay Deccan	84·7	71·0	77·9	13·7	23·0	+1·3	+1·0	+0·3
	Hyderabad (North)	88·3	71·6	80·0	16·6	26·7	...	...	...
	Khandesh	85·9	72·3	79·1	13·6	22·9	−0·5	+0·4	−0·9
Central Provinces and Berar.	Berar	89·2	75·0	82·1	14·3	24·9	+1·1	+1·1	0
	Central Provinces (West)	87·7	75·5	81·6	12·2	21·4	+0·4	+0·3	+0·1
	Do. (Central)	87·8	74·8	81·3	12·9	25·4	+1·9	+0·6	+1·3
	Do. (East)	85·9	74·9	80·4	11·0	20·5	−0·3	−0·6	+0·3
Bombay (North)	Gujarat (East)	89·9	78·5	84·2	11·4	26·5	−0·3	+0·8	−1·1
	Kathiawar and Cutch	89·4	79·1	84·3	10·2	20·0	+0·1	+0·7	−0·6
	Sind	101·5	83·2	92·4	18·4	32·2	+2·4	+1·3	+1·1
	Baluchistan Hills	97·4	63·8	80·7	33·6	47·2	+1·3	−0·8	+2·1
Rajputana and Central India.	Central India	88·7	76·5	82·6	12·2	23·7	+1·4	+1·0	+0·4
	Rajputana (East)	95·6	79·4	87·5	16·2	29·9	+4·2	+1·4	+2·8
	Do. (West)	100·6	81·9	91·2	18·7	33·0	+2·8	+1·5	+1·3
Madras	East Coast (North)	90·9	79·7	85·4	11·2	23·1	+1·8	+0·8	+1·0
	Hyderabad (South)	91·1	74·4	82·8	16·6	25·2	+2·0	+1·1	+0·9
	Madras (Central)	96·1	76·8	86·5	19·3	27·3	+3·5	+1·0	+2·5
	East Coast (Central)	99·2	81·2	90·3	18·0	27·2	+4·2	+2·4	+1·8
	Do. (South)	98·3	79·3	88·8	19·1	27·3	+3·7	+1·5	+2·2
	Madras (South)	96·4	79·6	88·0	16·8	22·8	+2·4	+1·2	+1·2

The hottest area outlined by the isotherm of 90° included the South, Central, Submontane and West Punjab, the North-west Frontier Province, Sind and West Rajputana and within this area the heat was greatest in the West Punjab where the mean temperature was 95°6. Over the central division of the East Coast the mean temperature also exceeded 90°. The mean maximum temperature exceeded 100° over the following divisions:—the Central Punjab, the West Punjab (105°2), the North-west Frontier Province, Sind, and West Rajputana.

The following gives the mean temperature departure data for the extra-Indian stations for the month:—

STATION.	MEAN TEMPERATURE.		
	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°	°
Trincomalee	85·5	84·6	+0·9
Colombo	82·6	81·5	+1·1
Kashgar	78·3	80·1	—1·8
Kabul	78·2	76·9	+1·3
Ispahan	83 3	82·3	+1·0
Bushire	89·3	89·8	—0·5
Jask	91·2	90·3	+0·9
Muscat	94·8	89·4	+5·4
Baghdad	96·6	93·3	+3·3
Aden	89·1	87·6	+1·5
Perim	92·0	89·8	+2·2
Zanzibar	77·1	76·4	+0·7
Seychelles	77·8	76·4	+1·4
Mauritius	68·6	67·5	+1·1

The above shows that the mean temperature of the month was generally in excess except at Kashgar.

The chief abnormal features of the temperature conditions of the month were:—

(1) Both the day and night and consequently also the mean temperatures were below the normal over Orissa, the east of the Central Provinces and a considerable part of Bengal.

(2) The day temperatures were slightly lower and the night temperatures slightly higher than usual over the north-west of the Peninsula and over parts of inland Burma and of Tenasserim.

(3) Elsewhere both the day and night and consequently also the mean temperatures exceeded the average.

(4) The excess was greatest over north-west India and over the east of the Peninsula.

(5) The departures of mean temperature from the normal were generally small at the hill stations except at Leh.

(6) The mean temperature was also generally above the normal at the extra-Indian stations.

The following table gives mean comparative data of temperature for the eleven meteorological provinces or divisions into which India is divided.

METEOROLOGICAL PROVINCE.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, July 1905.	Mean minimum temperature, July 1905.	Mean temperature, July 1905.
	°	°	°
Burma Coast and Bay Islands	—0·2	+0 8	+0·3
Burma Inland	—0·5	+0·7	+0·1
Assam	+0·3	—0·4	—0·1
Bengal and Orissa	—0·2	—0·2	—0·2
Gangetic Plain and Chota Nagpur.	+0·9	+0·3	+0·6
Upper Sub-Himalayas	+2·1	+1·7	+1·9
Indus Valley and North-West Rajputana.	+2·1	+2·0	+2·1
East Rajputana, Central India and Gujarat.	+1·4	+1·1	+1·3
Deccan	+1·1	+0·7	+0·9
West Coast	+1·5	+1·4	+1·5
South India	+2·8	+1·2	+2·0

The following gives a brief summary of the more important changes of temperature during the month:—

The month opened with a good deal of rain over the Peninsula, the central parts of the country and north-east India, but very little elsewhere. There was, in consequence, a considerable excess of temperature over northern India, a slight excess over the Peninsula, and a considerable deficiency over the central parts of the country across the head of the Peninsula. This distribution of temperature continued till the 5th, as is shown by the following comparative data for all divisions for alternate days from the 1st to the 5th:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	1st July.	3rd July.	5th July.
	°	°	°
Burma	+0·7	+1·3	—1·2
Assam	+0·6	—1·2	—0·5
Bengal	—0·1	—1·2	—1·9
Orissa	—3·6	+0·9	—0·4
Bihar	+2·2	+2·9	—3·4
Chota Nagpur	—1·7	—0·3	—2·7
United Provinces of Agra and Oudh	+4·4	+5·9	—0·7
Punjab	+5·	+5·1	+4·8
North-west Frontier Province	+7·9	+5·7	+5·7
Baluchistan	—1·3	—2·0	—2·4
Sind	+2·6	+2·9	+2·5

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	1st July.	3rd July.	5th July.
	°	°	°
Rajputana	+8·2	+3·2	+2·0
Gujarat (East)	+2·6	−1·7	−2·4
Central India	+3·9	+1·7	+2·3
Central Provinces	−0·5	−2·5	−0·9
Berar	−6·4	−3·1	−0·8
West Coast	+0·1	+2·0	+2·2
Bombay Deccan	−0·1	−0·8	−0·1
Mysore	−0·2	+0·6	+1·9
Madras Coast	−1·6	+2·3	+3·3
Madras Deccan	−0·5	+1·6	+2·9
South India	+0·2	+1·6	+2·2

The excess was most marked in the maximum temperature which was 12° or more above the normal at the following places on the following dates:—

DATE.	STATION.	MAXIMUM TEMPERATURE.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
1st July	Sialkot	117·5	100·6	+16·9
3rd ,,	Mainpuri	106·8	94·8	+12·0
4th ,,	Allahabad	107·1	93·0	+14·1
5th ,,	Rawalpindi	111·5	98·9	+12·6

Between the 6th and the 10th the temperature conditions were largely controlled by the rainfall of a depression which passed westward from Bengal through the central parts of the country and disappeared on the 10th. During this period the mean temperature was steadily high over north-west India and over the Peninsula, and low elsewhere—more particularly at the central stations. The following gives comparative data for all divisions for the 6th, 8th, and 10th, and shows the prevailing conditions:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	6th July	8th July.	10th July.
	°	°	°
Burma	−0·7	−0·5	−2·1
Assam	+1·1	+0·3	−0·5
Bengal	−1·0	+0·2	+0·8
Orissa	−3·7	+1·5	+1·7

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	6th July.	8th July.	10th July.
	°	°	°
Bihar	−1·9	−1·8	+4·4
Chota Nagpur	−4·5	−1·0	+3·5
United Provinces of Agra and Oudh	−4·2	−0·3	+3·2
Punjab	+3·3	+6·4	+4·3
North-west Frontier Province	+7·8	+7·8	+3·8
Baluchistan	+0·4	+·6	+2·0
Sind	+2·5	+2·9	−1·2
Rajputana	+4·2	+4·1	−0·7
Gujarat (East)	+0·2	+1·6	−1·4
Central India	+1·9	−3·3	+0·6
Central Provinces	+0·1	−6·1	+2·0
Berar	−0·6	−5·9	+1·6
West Coast	+1·7	+1·5	+2·3
Bombay Deccan	−1·9	−1·4	+2·2
Mysore	+0·2	+0·5	+3·7
Madras Coast	+2·7	+2·4	+2·2
Madras Deccan	+2·2	+1·6	+4·7
South India	+1·6	+1·7	+2·8

A great change then occurred in the temperature conditions. A shallow storm appeared at the head of the Bay on the 11th. Thence it passed into west Bengal and disappeared over the United Provinces on the 15th, while during the same time a well-marked depression existed over Sind. A strong flow of monsoon winds into northern India occurred during this period occasioning fairly heavy general rain and bringing about a great reduction of temperature. This is shown by the following table which gives comparative data for each day from the 11th to the 15th:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	11th July.	12th July.	13th July.	14th July.	15th July.
	°	°	°	°	°
Burma	−1·3	−1·3	−1·3	+0·7	+0·5
Assam	−0·8	+0·7	−0·3	−2·6	−2·8
Bengal	−1·2	−0·5	−1·2	−2·4	−1·5
Orissa	−2·4	−2·6	−2·9	−2·3	+0·7
Bihar	+1·5	+0·7	−0·2	−2·7	−4·3
Chota Nagpur	+0·5	−0·5	−2·3	−2·2	−1·9
United Provinces of Agra and Oudh.	+2·3	−5·1	−4·2	−2·7	−3·0
Punjab	+3·5	−6·0	−7·8	−8·9	−7·6

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	11th July.	12th July.	13th July.	14th July.	15th July.
	°	°	°	°	°
North-west Frontier Province.	+4·3	−0·7	−10·9	−9·8	−9·5
Baluchistan	+2·1	−0·8	−6·3	−6·8	−3·5
Sind	+0·6	−0·1	+0·8	−0·1	−0·8
Rajputana	+1·9	+0·7	−0·3	−1·2	−0·4
Gujarat (East)	−1·3	−1·2	+0·8	+1·2	+1·7
Central India	+2·0	+0·1	−1·4	−1·3	+1·2

The greatest deficiency was shown in the day temperature which was more than 15° below the normal at the following places on the following dates:—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
13th July	Cherat	71·3	88·6	−17·3
	Dera Ismail Khan	86·3	103·5	−17·2
	Montgomery	87·8	104·8	−17·0
	Multan	87·8	104·0	−16·2
14th „	Gilgit	74·3	97·1	−22·8
	Leh	55·6	77·9	−22·3
	Srinagar	64·1	84·8	−20·7
	Montgomery	88·8	104·7	−15·9
15th „	Gilgit	69·8	96·9	−27·1
	Leh	53·6	77·8	−24·2
	Montgomery	88·8	104·6	−15·8
16th „	Leh	54·6	77·8	−23·2

During this time there was no rain of importance over the Peninsula and the mean temperature ranged above the normal. As the rainfall grew lighter and contracted in the north this area of excessive temperature spread northward and on the 16th, 17th and 18th the mean temperature exceeded the average in nearly all divisions except Burma and North-east India. This is shown below:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	16th July.	17th July.	18th July.
	°	°	°
Burma	+1·0	−1·8	−2·0
Assam	−1·2	+0·5	−0·1
Bengal	−0·6	+0·1	−1·6
Orissa	+2·2	+3·1	−0·3

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	16th July.	17th July.	18th July.
	°	°	
Bihar	−0·9	−1·9	−2·4
Chota Nagpur	+2·5	+3·8	+0·8
United Provinces of Agra and Oudh	−0·7	+1·9	+2·3
Punjab	−2·4	+2·0	+3·2
North-west Frontier Province	−4·1	−0·1	+1·4
Baluchistan	−3·7	−0·8	+0·9
Sind	+1·1	+1·3	+0·5
Rajputana	+0·4	+4·9	+5·6
Gujarat East	+2·7	+3·1	+3·4
Central India	+1·7	+3·2	+3·1
Central Provinces	+3·5	+4·0	+4·1
Berar	+5·0	+5·8	+7·2
West Coast	+1·2	+1·8	+0·1
Bombay Deccan	+3·4	+3·3	+4·0
Mysore	+1·0	+2·9	+0·3
Madras Coast	+4·2	+3·9	+2·2
Madras Deccan	+4·6	+5·2	+3·3
South India	+1·2	+2·0	+1·4

Between the 19th and the 25th another depression passed from the head of the Bay westward, as far as Lower Sind, occasioning rain over the central parts of the country and the Peninsula. The rainfall was heaviest over Gujarat and the greatest depression of temperature was reported from that area. The following gives comparative data for that province for each day from the 20th to the 28th:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of								
	20th July.	21st July.	22nd July.	23rd July.	24th July.	25th July.	26th July.	27th July.	28th July.
	°	°	°	°	°	°	°	°	°
Gujarat	+3·8	+4·7	+4·5	−0·7	−2·4	−4·3	−3·9	−1·8	−1·2

Showers fell over the north-west Himalayas and neighbouring districts on the 23rd and the mean temperature was lower than usual over the North-west Frontier Province

for some days. The following gives data for this division from the 22nd to the 26th :—

PROVINCE.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	22nd July	23rd July.	24th July.	25th July.	26th July.
	°	°	°	°	°
North-west Frontier Province .	+4·3	—0·6	—2·3	—3·3	+1·6

In other parts of the Indian land area the mean temperature was generally higher than usual between the 20th and 28th. On the 27th a fresh depression appeared over Bengal marching northward through that province. Rain fell over Burma and in the north-east and the mean temperature was lower than usual over these areas. The following gives data :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	27th July.	28th July.	29th July.	30th July.	31st July.
	°	°	°	°	°
Burma	+0·8	+0·1	+0·1	—0·4	—1·6
Assam	+1·4	+1·8	—2·2	—1·6	—1·0
Bengal	+1·8	—0·2	—2·8	—1·9	—0·2
Orissa	—1·2	—2·1	+0·8	+2·5	+1·4
Bihar	+3·8	+3·0	—1·8	—4·0	—3·8
Chota Nagpur	+0·3	+0·4	—2·7	—1·5	+1·2

Winds.

The wind directions, on the mean of the month, were practically normal at the stations in the Bay Islands and on the Burma and Arakan coasts, but the steadiness and velocity both exceeded the normal. The following gives data :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Port Blair . .	S 47 W	S 48 W	95	86	+ 9	336	278	+58
Diamond Island .	S 44 W	S 42 W	82	80	+ 2	291	252	+39
Akyab . .	S 5 E	S 6 E	90	71	+19	138	94	+44

Around the head of the Bay the winds were more westerly than usual and except at Calcutta were steadier and stronger than the normal. This is shown below :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Calcutta . .	S 31 W	S 1 W	59	63	— 4	156	120	+ 36
Saugor Island .	S 33 W	S 19 W	64	58	+ 6	504	367	+137
False Point . .	S 61 W	S 54 W	79	63	+16	295	269	+ 26

In the Gangetic Plain the wind was west-north-westerly instead of east-north-easterly and was steadier than the average. The following gives data for Allahabad :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Allahabad . .	N 66 W	N 75 E	43	6	+37	147	175	—28

In parts of upper India this increased westing was also disclosed in the mean wind directions. The following gives examples :—

STATION.	MEAN WIND DIRECTION.	
	Actual, July 1905.	Normal, July.
	°	°
Roorkee	S 36 W	S 36 E
Meerut	S 20 W	S 69 E
Ludhiana	N 78 W	S 36 E

In the Indus Valley the mean winds were practically normal except that at Peshawar the velocity was less than usual. This is shown below:—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Peshawar . .	N 50 E	N 48 E	43	47	—4	47	98	—51
Jacobabad . .	S 43 E	S 43 E	55	56	—1	158	134	+24
Kurrachee . .	S 71 W	S 69 W	90	84	+6	428	413	+15

In East Gujarat the wind blew from the normal direction, but in Eastern Rajputana the mean direction was south-westerly instead of west-north-westerly. The velocity and steadiness exceeded the average. The following gives data for Jaipur and Deesa:—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Jaipur . . .	S 39 W	N 78 W	48	30	+18	162	130	+32
Deesa . . .	S 49 W	S 45 W	87	66	+21	437	367	+70

The following gives comparative data of the mean air movement of the month over northern India, Burma and the Bay Islands:—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
Bay Islands . .	95	86	+ 9	336	278	+58
Burma . . .	86	76	+10	215	173	+42
Bengal . . .	63	63	0	286	221	+65
Chota Nagpur .	35	13	+22	214	209	+ 5
Orissa . . .	79	63	+16	295	269	+26
United Provinces of Agra and Oudh.	28	18	+10	72	82	—10
Punjab . . .	24	27	— 3	57	70	—13
North-west Frontier Province . . .	43	47	— 4	47	98	—51
Rajputana . . .	68	48	+20	300	249	+51
Sind . . .	73	70	+ 3	293	274	+19

The above shows increased velocity and steadiness in the north-east and in Sind and Rajputana, and generally diminished steadiness and velocity over the Gangetic Plain, and westward over the Punjab and the North-west Frontier Province.

The wind blew from about the normal directions over the greater part of the Deccan, but both the steadiness and the velocity of the winds generally exceeded the average. This is shown below:—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Belgaum . .	S 68 W	S 69 W	92	92	0	...	634	...
Sholapur . .	S 73 W	S 78 W	84	86	— 2	461	346	+115
Akola . . .	N 72 W	N 75 W	85	72	+13	243	218	+ 25
Buldana . .	S 88 W	N 78 W	85	75	+10	280	223	+ 57
Khandwa . .	N 68 W	N 85 W	82	82	0	426?	226	+200?
Nagpur . .	N 82 W	S 89 W	81	69	+12	221	209	+ 12
Hyderabad (D) .	W	N 85 W	100	86	+14	245	238	+ 7

The wind was slightly more southerly than usual along the West Coast. The wind was steadier than usual, but while the velocity exceeded the average at Karwar, it was lower than usual at Bombay.

In South India also the winds blew from practically the normal directions, except at Madras, where the mean direction of the wind was south-easterly instead of south-westerly. The steadiness and velocity varied irregularly from the normal. The following gives data for the stations in this area:—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Salem . . .	S 67 W	S 54 W	81	71	+10	136	113	+23
Chitaldroog .	S 83 W	S 75 W	84	93	— 9	264	278	—14
Bangalore . .	S 68 W	S 72 W	90	88	+ 2	298	230	+68
Hassan . .	S 85 W	S 89 W	87	91	— 4	111	120	— 9
Mysore . .	S 71 W	S 78 W	92	91	+ 1	330	346	—16
Madras . .	S 53 E	S 51 W	82	66	+16	207	190	+17
Bellary . .	N 86 W	S 87 W	87	90	— 3	278	286	— 8
Waltair . .	S 46 W	S 52 W	89	77	+12	138	...	...

The following gives data of the mean air movement for the different divisions of the Peninsula :—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
Central Provinces . .	82	76	+ 6	221	209	+12
Berar	85	74	+11	262	221	+41
Bombay Deccan . .	88	89	— 1	461	346	+115
Madras Deccan . .	94	88	+ 6	262	262	0
West Coast . . .	89	79	+10	282	303	—21
Mysore . .	88	91	— 3	251	244	+ 7
Madras Coast . .	82	66	+16	207	190	+17
South India . . .	81	71	+10	136	113	+23

The above shows increased velocity in most divisions, while the steadiness was about normal.

At the northern hill stations the wind directions were generally very irregular, but at several stations, as on the neighbouring plains, there was an increased amount of westing in the mean directions. The following gives examples :—

HILL STATION.	MEAN WIND DIRECTION.		
	Actual, July 1905.	Normal, July	Westerly deflection.
	°	°	
Srinagar	N 63 W	N 48 W	+15
Simla	N 38 W	N 15 E	...
Ranikhet	S 67 W	S 60 W	+ 7
Katmandu	S 82 W	S 63 W	+19
Darjeeling	S 64 W	S 75 E	...

At the central hill stations the principal feature was the increased velocity of the wind. The following gives examples :—

HILL STATION.	MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal July.	Departure from normal, July 1905.
Mount Abu	395	276	+119
Pachmarhi	416	259	+157

At Aden the wind, on the mean of the month, was lighter and less steady than usual, and blew from S 41° E instead of from S 1° W, while at Perim, on the contrary, both the velocity and steadiness exceeded the average, and the wind was more northerly than the average. This is shown below :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Aden . . .	S 41 E	S 1 W	32	73	—41	198	254	—56
Perim . . .	N 33 W	N 88 W	77	46	+31	427	367	+60

The following gives data for the stations in the South-east Trades region :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, July 1905.	Normal, July.	Actual percentage, July 1905.	Normal percentage, July.	Departure from normal, July 1905.	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	°	°						
Zanzibar . .	S 19 E	S 6 E	94	83	+11	214	197	+17
Seychelles . .	S 33 E	S 33 E	84	81	+ 3	256	287	—31
Mauritius . .	S 58 E	S 64 E	—	—	—	230	287	—57

At Zanzibar the mean wind was slightly more easterly and stronger and steadier than usual, while at the Seychelles and Mauritius the wind was normal as regards direction, but was lighter than the average.

The following summarises the principal abnormal features of the wind circulation :—

(1) The monsoon was steadier and stronger than usual over the east of the Bay.

(2) In northern India there was, in many places, an increased amount of westing in the mean wind directions both on the hills and plains.

(3) Over the Peninsula the winds generally blew from about the normal directions, while the steadiness and velocity varied irregularly, but to no important extent, from the average.

(4) In the South-east Trades region the winds were about normal or slightly more easterly than usual.

Humidity and Cloud.

The mean absolute humidity of the month generally exceeded the normal over the Peninsula (except on the Madras coast), part of the western desert, along the foot of the hills in Northern India, and over the greater part of east Bengal and of Burma. It was, on the contrary, in defect over part of Central and Deltaic Bengal and within a broad band stretching from the Orissa and Circars coasts westward to Lower Sind, and west-north-westward to the South-East Punjab. It was also in defect on the Madras coast. The departures from normal were not large, but exceeded ·050″ at the following stations :—

Station.	Absolute humidity. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	″	″	″
Kurnool	·817	·720	+·097
Surat	·992	·913	+·079
Chanda	·873	·796	+·077
Thayetmyo	·945	·873	+·072
Diamond Island	·964	·897	+·067
Dera Ismail Khan	·965	·912	+·053
Bhavnagar Para	·837	·922	−·085
Agra	·841	·922	−·081
Montgomery	·764	·838	−·074
Ludhiana	·820	·893	−·073
Cawnpore	·869	·941	−·072
Jaipur	·770	·838	−·068
Waltair	·806	·867	−·061
Balasore	·915	·970	−·055
Rawalpindi	·756	·808	−·052

The mean temperature of the month was generally excessive, so that even where the absolute humidity exceeded the normal, the mean relative humidity was only very slightly in excess. These areas of excess were shown over Central Burma, parts of Bengal, the centre of the south of the Peninsula, Ceylon, and Gujarat, and the excess was 5 or more only at the following places :—

Province or Division.	Station.	Absolute humidity. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.	Relative humidity. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
		″	″	″	%	%	
Burma	Thayetmyo	·945	·873	+·072	90	85	+5
Peninsula	Kurnool	·817	·720	+·097	78	72	+6
Ceylon	Colombo	·886	·852	+·034	84	79	+5
Gujarat	Surat	·992	·913	+·079	92	86	+6

Elsewhere the mean relative humidity was generally in defect, and at the following places the departures from normal exceeded 5 :—

Station.	Relative humidity. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	%	%	
Agra	68	79	−11
Jaipur	67	76	− 9
Rawalpindi	63	72	− 9
Mainpuri	74	82	− 8
Nowgong	75	83	− 8
Saugor	79	87	− 8
Ludhiana	68	76	− 8
Coimbatore	76	84	− 8
Tinnevelly	52	59	− 7
Nellore	61	68	− 7
Karwar	79	86	− 7
Ahmednagar	75	82	− 7
Cawnpore	75	82	− 7
Delhi	68	75	− 7
Meerut	72	79	− 7
Ambala	79	86	− 7
Peshawar	56	63	− 7
Khushab	59	65	−
Montgomery	54	60	− 6
Pachpadra	74	80	− 6
Lucknow	78	84	− 6
Allahabad	78	84	− 6
Benares	80	86	− 6
Bhavnagar Para	74	80	− 6
Goa	82	88	− 6
Madras	63	69	− 6

At the majority of the hill stations both the absolute and relative humidities were in defect. The following gives comparative data :—

Hill Station.	Absolute humidity. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.	Relative humidity. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	″	″	″	%	%	
Gilgit	·373	·451	−·078	36	46	−10
Srinagar	·593	·642	−·049	77	85	− 8
Quetta	·494	·537	−·043	52	57	− 5

HILL STATION.	ABSOLUTE HUMIDITY. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.	RELATIVE HUMIDITY. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	"	"	"	%	%	
Cherat	·650	·633	+·017	67	72	— 5
Murree	·526	·517	+·009	74	77	— 3
Simla	·501	·512	—·011	87	88	— 1
Chakrata	·532	·537	—·005	90	91	— 1
Ranikhet	·589	·577	+·012	87	88	— 1
Darjeeling	·524	·524	0	96	97	— 1
Mount Abu	·640	·645	—·005	94	96	— 2
Pachmarhi	·653	·665	—·012	90	90	0
Leh	·278	·255	+·023	62	52	+10
Wellington	·424	·423	+·001	71	71	0

At Aden and Perim the absolute humidity was in considerable excess, but the mean temperature exceeded the normal and the excess of the mean relative humidity was comparatively small. This is shown below :—

STATION.	ABSOLUTE HUMIDITY. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.	RELATIVE HUMIDITY. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	"	"	"	%	%	
Aden	·964	·822	+·142	67	63	+ 4
Perim	·932	·873	+·059	62	60	+ 2

In the South-east Trades region both the absolute and relative humidities exceeded the normal at Zanzibar and Mauritius, while at the Seychelles, both were in defect. The following gives data :—

STATION.	ABSOLUTE HUMIDITY. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.	RELATIVE HUMIDITY. Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
	"	"	"	%	%	
Zanzibar	·752	·716	+·036	87	85	+ 2
Seychelles	·748	·751	—·003	75	78	— 3
Mauritius	·536	·507	+·02	77	76	+ 1

At the following stations the mean relative humidity exceeded 90% or was less than 65% and this table hence defines the areas of greatest and of least relative humidity at 8 A.M. on the mean of the month :—

STATION.	Relative humidity exceeding 90 %	STATION.	Relative humidity less than 65 %
	%		%
Akyab	95	Jacobabad	64
Mergui	94	Cuddapah	64
Bassein	94	Rawalpindi	63
Sibsagar	94	Hanumkonda	63
Moulmein	93	Madras	63
Rangoon	93	Multan	62
Dibrugarh	93	Madura	61
Sirajganj	93	Periyakulam	61
Cooch Behar	93	Vellore	61
Tavoy	92	Nellore	61
Dhubri	92	Trichinopoly	60
Tezpur	92	Khushab	59
Narayanganj	92	Peshawar	56
Belgaum	92	Montgomery	54
Surat	92	Tinnevelly	52
Bhamo	91		
Faridpur	91		
Krishnagarh	91		
Berhampore	91		

The following summarises the chief abnormal feature of the humidity conditions on the mean of the month :—

(1) The absolute humidity was in slight excess of the average over the greater part of the Peninsula and along the foot of the hills in Northern India, but was in defect over the intervening region.

(2) The mean temperature was generally higher than usual, so that even where the absolute humidity exceeded the normal, the excess of relative humidity was unimportant.

(3) Mean relative humidity was in slight excess over Central Burma, Central Bengal, the centre of the south of the Peninsula, Ceylon and Gujarat and was generally in defect elsewhere.

(4) At most of the hill stations mean relative humidity was in defect of the normal.

(5) At Aden and Perim both the absolute and relative humidities were in excess, while in the South-east Trades region both were normal or in excess.

The following table gives departure data of the mean aqueous vapour pressure and of mean humidity of the

nine meteorological provinces for the month of July 1905:—

Meteorological Province.	Mean absolute humidity.		Mean relative Humidity.	
	Average actual, July 1905.	Departure from normal, July 1905.	Average actual, July 1905.	Departure from normal, July 1905.
	"		%	
Burma Coast and Bay Islands	·919	+·008	85	—3
Bengal and Orissa	·941	—·021	86	—1
Gangetic Plain and Chota Nagpur.	·848	—·032	79	—4
Upper Sub-Himalayas	·868	—·014	71	—4
Indus Valley and north-west Rajputana.	·851	+·005	62	—1
East Rajputana, Central India and Gujarat.	·796	—·033	67	—7
Deccan	·733	—·010	76	—3
West Coast	·897	+·013	85	—2
South India	·701	+·010	72	—2

The sky was generally less cloudy than usual on the mean of the month. In Central Burma, on the south Burman coast, over part of north-east India, and over an area including east Rajputana, Gujarat and Central India, the mean cloud amount exceeded the normal, but in other places the sky was clearer than the average. The departures from the average were considerable at many stations—more particularly in the north-west—and amounted to —2·5 or more at the following places:—

Station.	Mean cloud amount.		
	Actual, July 1905.	Normal, July.	Departure from normal, July, 1905.
Pachpadra	2·3	7·6	—5·3
Sirsa	1·6	5·9	—4·3
Hyderabad (S)	1·9	6·0	—4·1
Ahmednagar	4·6	7·8	—3·2
Silchar	6·0	9·2	—3·2
Cawnpore	4·4	7·4	—3·0
Trichinopoly	4·4	7·1	—2·7
Barisal	6·2	8·9	—2·7
Ludhiana	3·9	6·4	—2·5

The sky was clearer than usual at nearly all the hill stations. This is shown below:—

Hill Station.	Mean cloud amount.		
	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
Srinagar	3·0	4·6	—1·6
Gilgit	2·6	4·1	—1·5
Cherat	2·7	4·2	—1·5
Murree	3·8	4·7	—0·9
Ranikhet	7·4	8·2	—0·8
Quetta	0·5	1·1	—0·6
Simla	8·2	8·4	—0·2
Wellington	6·8	7·8	—1·0
Darjeeling	9·0	9·6	—0·6
Lashio	8·6	8·9	—0·3
Chakrata	7·8	5·9	+1·9
Mount Abu	9·7	9·0	+0·7
Pachmarhi	8·8	8·8	0

The mean cloud amount was less than usual both in southern Arabia and in the South-east Trades region, except at Mauritius. The following gives data for the stations in these areas:—

Station.	Mean cloud amount.		
	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.
Aden	0·	2·5	—1·8
Perim	0·1	2·5	—2·4
Zanzibar	5·3	6·0	—0·7
Seychelles	5·5	5·6	—0·1
Mauritius	6·1	5·2	+0·9

The following summarises the principal abnormal features of the cloud distribution of the month:—

(1) There was a slight excess of cloud, on the mean of the month, on the south Burman coast, over Central Burma, over north-east India, and over eastern Rajputana, Gujarat and Central India. The excess was generally small and unimportant.

(2) In practically all other parts of the Indian land area the sky was clearer than usual, and in the north-west the deficiency was particularly marked.

(3) At the hill stations the sky was generally clearer than the average.

The following table gives mean comparative data of the cloud amount for July 1905 :—

METEOROLOGICAL PROVINCE.	MEAN CLOUD AMOUNT. Average actual, July 1905.	Departure from normal, July 1905.
Burma Coast and Bay Islands	8·4	0
Bengal and Orissa	8·6	+0·2
Gangetic Plain and Chota Nagpur	9·0	+0·2
Upper Sub-Himalayas	4·4	—1·7
Indus Valley and north-west Rajputana	3·4	—0·5
East Rajputana, Central India and Gujarat	7·8	+0·1
Deccan	7·8	—0·6
West Coast	7·6	—0·7
South India	7·8	—0·4

Rainfall.

The monsoon was, on the whole, weak during the month, except over the east of the Bay and Burma. There were consequently few days of general rain over the country, and the greater part of the fall was more or less connected with the various depressions or storms, which, originating over the Bay, passed westward or west-north-westward into north-west India. The principal periods of rainfall were hence:—

(1) The 5th to the 9th, during which a storm passed from the head of the Bay to Gujarat.

(2) The 11th to the 15th, when a second depression travelled from the Bay into the United Provinces.

(3) The 19th to the 15th, when the third storm of the month moved from the head of the Bay into lower Sind.

(4) And the 27th to the 30th, when a storm moving from the Bay into Central Bengal, gave rain to the north-east of India.

The Chart (Plate VII) giving the actual rainfall of the month, as measured at the meteorological observatories, shows that the total rainfall of the month was less than half an inch in amount over part of the North-West Frontier Province, over a large part of the western desert, over part of the Deccan and over the extreme south of the Peninsula and north Ceylon. From these areas of light rainfall the amount increased and was as much as 37·50″ at Ahmedabad; 30·85″ at Mercara; 59·71″ at Tavoy and 71·94″ at Akyab.

The following table gives comparative rainfall data for the 57 meteorological divisions of the empire :—

PROVINCE.	DIVISION.	NUMBER OF RAINY DAYS. Average actual, July, 1905.	Average normal, July,	RAINFALL. Average actual, July, 1905.	Average normal, July.	Departure from normal, July 1905.
				Inches.	Inches.	Inches.
BURMA	Tenasserim	27·0	27·2	51·57	43·40	+8·17
	Lower Burma (Deltaic)	26·4	25·9	27·93	24·25	+3·68
	Central do.	22·0	19·5	14·95	12·44	+2·51
	Upper do.	9·2	9·4	6·68	6·66	+0·02
	Arakan	27·5	27·3	60·37	47·62	+12·75
BENGAL AND ASSAM	Eastern Bengal	20·7	18·9	22·49	17·98	+4·51
	Assam (Surma)	24·1	22·5	23·31	20·90	+2·41
	Do. (Hills)	22·6	22·1	24·01	27·54	—3·53
	Do. (Brahmaputra)	18·0	18·0	15·37	17·22	—1·85
	Deltaic Bengal	19·9	16·2	22·07	11·97	+10·10
	Central do.	18·0	15·6	16·95	12·22	+4·73
	North do.	17·1	17·3	17·15	21·56	—4·41
	Bengal Hills	24·3	24·6	30·05	28·85	+1·20
	Orissa	14·8	14·5	10·57	11·96	—1·39
	Chota Nagpur	20·4	16·7	17·84	14·33	+3·51
	Bihar (South)	14·4	14·2	14·72	12·74	+1·98
	Do. (North)	14·0	14·5	16·59	13·55	+3·04
UNITED PROVINCES OF AGRA AND OUDH.	United Provinces (East)	12·0	13·5	13·22	11·84	+1·38
	Oudh (South)	10·7	12·2	11·04	10·98	+0·06
	Do. (North)	10·9	12·5	12·11	12·36	—0·25
	United Provinces (Central)	7·2	12·0	4·75	11·01	—6·26
	Do. do. (West)	5·7	9·5	4·63	8·50	—3·87
	Do. do. (East Submontane)	13·3	13·4	15·39	12·93	+2·46
	Do. do. (West do.)	10·2	13·1	8·13	14·91	—6·78
	Do. do. (Hills)	14·8	17·7	13·59	17·72	—4·13

Province.	Division.	Number of rainy days. Average actual, July 1905.	Number of rainy days. Average normal, July.	Rainfall. Average actual, July 1905.	Rainfall. Average normal, July.	Rainfall. Departure from normal, July 1905.
				Inches.	Inches.	Inches.
Punjab	Punjab (South-East)	3·6	7·4	3·58	6·43	−2·85
	Do. (South)	4·0	5·4	3·89	4·75	−0·86
	Do. (Central)	4·4	5·2	4·39	5·33	−0·94
	Do. (Submontane)	7·6	8·2	5·83	8·18	−2·35
	Do. (Hills)	13·8	14·1	13·08	15·64	−2·56
	Do. (West)	2·7	3·0	2·36	2·47	−0·11
North-West Frontier Province.	North-West Frontier Province	3·7	4·6	2·46	3·47	−1·01
Bombay and Malabar Coast Districts (Madras).	Malabar	26·7	26·8	31·50	35·45	−3·95
	Travancore	14·9	...	9·12	...	...
	Madras (South Central)	2·6	3·8	1·52	1·87	−0·35
	Coorg	24·9	...	24·42	...	...
	Mysore	8·0	9·1	5·11	6·47	−1·36
	Konkan	25·6	26·6	31·20	40·60	−9·40
	Bombay Deccan	9·8	11·7	7·58	8·80	−1·22
	Hyderabad (North)	5·7	12·3	2·89	8·39	−5·50
	Khandesh	11·2	11·9	11·48	8·70	+2·78
Central Provinces and Berar.	Berar	9·5	12·2	8·79	9·32	−0·53
	Central Provinces (West)	11·7	14·6	15·95	13·34	+2·61
	Do. (Central)	12·4	16·7	11·83	16·61	−4·78
	Do. (East)	15·7	16·3	15·13	16·26	−1·13
Bombay (North)	Gujarat East	15·2	15·1	24·39	16·46	+7·93
	Kathiawar and Cutch	9·9	10·8	17·62	10·71	+6·91
	Sind	1·6	2·7	1·38	2·40	−1·02
	Baluchistan Hills	1·0	1·5	0·43	0·87	−0·44
Rajputana and Central India.	Central India (East)	10·5	13·1	10·81	11·22	−0·41
	Rajputana (East), Central India (West)	5·7	9·7	3·98	8·35	−4·37
	Do. (West)	2·2	4·7	1·45	3·88	−2·43
Madras	East Coast (North)	8·8	10·4	5·14	7·09	−1·95
	Hyderabad (South)	5·3	10·2	2·19	5·73	−3·54
	Madras (Central)	3·8	5·7	1·61	2·88	−1·27
	East Coast (Central)	2·6	4·6	0·89	2·22	−1·33
	East Coast (South)	3·3	4·5	1·86	2·64	−0·78
	Madras (South)	0·7	1·8	0·31	0·84	−0·53

The preceding data show that the rainfall of the month was normal, or in slight excess over Burma, Assam, Bengal, the east of the United Provinces, Khandesh, the west of the Central Provinces, Gujarat and Kathiawar and was normal or in slight to considerable defect elsewhere. The excess was more than 25 per cent. in the divisions for which comparative data are given below :—

Division.	Rainfall. Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Arakan	60·37	47·62	+12·75	+ 27
Deltaic Bengal	22·07	11·97	+10·10	+ 84
Central Bengal	16·95	12·22	+ 4·73	+ 39
Khandesh	11·48	8·70	+ 2·78	+ 32
Gujarat (East)	24·39	16·46	+ 7·93	+ 48
Kathiawar and Cutch	17·62	10·71	+ 6·91	+ 65

The excess was, relatively to the average, thus greatest in Deltaic Bengal and Kathiawar. The deficiency was more than 40 per cent. in the following divisions : —

Division.	Rainfall. Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
United Provinces (Central)	4·75	11·01	−6·26	− 57
United Provinces (West)	4·63	8·50	−3·87	− 46
United Provinces (West Submontane.)	8·13	14·91	−6·78	− 45
South-east Punjab	3·58	6·43	−2·85	− 44
Hyderabad (North)	2·89	8·39	−5·50	− 66
Sind	1·38	2·40	−1·02	− 43
Baluchistan hills	0·43	0·87	−0·44	− 51
Rajputana East, Central India West.	3·98	8·35	−4·37	− 52
West Rajputana	1·45	3·88	−2·43	− 63
Hyderabad (South)	2·19	5·73	−3·54	− 62
Madras (Central)	1·61	2·88	−1·27	− 44
East-Coast (Central)	0·89	2·22	−1·33	− 60
Madras (South)	0·31	0·84	−0·53	− 63

The deficiency was thus, relatively to the normal, greatest in Rajputana and some of the Peninsular divisions.

The above table of 57 divisions shows that the actual rainfall of the month more or less exceeded the normal in 19 divisions, was exactly normal in one division and was more or less in defect in 36 divisions and that the mean departure of the rainfall of the whole country (excluding the hill districts) derived from the fifth figure column amounts to +0·04 inch.

The following gives comparative rainfall data of the month for the extra-Indian stations :—

STATION.	RAINFALL.			
	Actual, July 1905.	Normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee	0·20	1·97	—1·77	— 90
Colombo	1·40	4·83	—3·43	— 71
Minicoy	2·70	6·66	—3·96	— 59
Amini Divi	5·55	9·91	—4·36	— 44
Kashgar	0·40	0·29	+0·11	+ 38
Kabul	0	0·20	—0·20	—100
Meshed	0	0·01	—0·01	—100
Ispahan	0	0·06	—0·06	—100
Bushire	0	0	0	0
Jask	0	0·02	—0·02	—100
Muscat	0	0·04	—0·04	—100
Baghdad	0	0	0	0
Aden	0	0·03	—0·03	—100
Perim	0	0·03	—0·03	—100
Zanzibar	4·08	2·74	+1·34	+ 49
Seychelles	0·64	2·61	—1·97	— 75
Mauritius	1·66	2·28	—0·62	— 27

The departures from normal show that except at Kashgar and Zanzibar the month's rainfall was in defect, and that over Afghanistan, Persia, Asiatic Turkey and Arabia even the small normal fall of the month was not received.

The following summarises the principal abnormal features of the rainfall distribution of the month :—

(1) The monsoon was strong and steady over the east of the Bay and the rainfall exceeded the normal over Burma and north-east India.

(2) A succession of storms passed from the Bay across the central parts of the country giving heavy rain in their tracks, and the rainfall of the month was in excess over the west of the Central Provinces, Khandesh, Gujarat and Kathiawar.

(3) Elsewhere the month's rainfall was lighter than usual, the deficiency being most marked, relatively to the average, over parts of north-west India and the centre and east of the Peninsula.

The following table gives comparative rainfall data for the eleven meteorological provinces for July 1905 :—

METEOROLOGICAL PROVINCE.	RAINFALL.			
	Mean actual for July 1905.	Mean normal for July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands.	32·10	31·41	+3·63*	+ 12
Burma Inland	7·20	6·67	—1·68*	—25
Assam	14·53	16·03	—1·50	— 9
Bengal and Orissa	18·96	14·56	+4·40	+ 30
Gangetic Plain and Chota Nagpur.	13·96	12·30	+1·66	+ 13
Upper Sub-Himalayas	5·71	10·73	— 5·01*	—46
Indus Valley and North-West Rajputana.	1·07	3·02	—1·95	—64
East Rajputana, Central India and Gujarat.	8·69	10·08	—0·72*	— 7
Deccan	8·44	11·05	—2·46*	—22
West Coast	16·05	28·58	—12·53	—44
South India	1·72	3·14	—1·42	—45

* A reference to table 1 will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

In Tenasserim, Lower and Central Burma and Arakan rain fell practically continuously during the month. The fall was, however, heavier during the first ten days than in other parts of the month, and the following amounts exceeding 6″ in 24 hours were generally recorded during that period of heavy rainfall :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
AMHERST	Amherst	3rd July	7·40
THATON	Thaton	" "	7·35
	Pa-an	" "	7·00
AKYAB	Pabru	" "	6·27
THATON	Thaton	4th "	13·00
AKYAB	Akyab	" "	12·34
	Rathedaung	" "	10·40
THATON	Kyaikto	" "	7·25
	Pa-an	" "	6·95
SANDOWAY	Sandoway	5th "	9·22
TAVOY	Tavoy	" "	6·01
SANDOWAY	Sandoway	6th "	8·53
KYAUKPYU	Kyaukpyu	7th "	6·34
THARRAWADDY	Tharrawaddy	8th "	7·56

The total rainfall of the month was normal or in slight excess in these divisions.

In Upper Burma the rainfall was much less continuous (except on the hills), but fairly general rain was received, except between the 13th and 16th and the 27th and the end of the month when the weather was generally fine. The total rainfall of the month, was, however, exactly normal, and the following amounts exceeding 3″ in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Upper Chindwin	Homalin	4th July	9·35
	Ditto	,, ,,	5·00
	Maingkaing	,, ,,	4·25
Katha	Banmauk	,, ,,	3·45
Chin Hills	Port White	5th ,,	8·23
	Haka	,, ,,	3·12
	Port White	6th ,,	7·62
	Haka	,, ,,	4·29
Meiktila	Meiktila	9th ,,	3·23
Shwebo	Kyunhla	10th ,,	6·93
Myitkyina	Mogaung	,, ,,	5·29
Lower Chindwin	Budalin	,, ,,	3·29
Shwebo	Kanbalu	,, ,,	3·03
Ruby Mines	Tagaung	11th ,,	4·30
Shwebo	Kanbalu	,, ,,	4·20
Ruby Mines	Mogok	,, ,,	3·80
Upper Chindwin	Homalin	12th ,,	7·25
	Do.	13th ,,	3·35
Myitkyina	Sadon	14th ,,	5·21
	Myitkyina	,, ,,	4·93
Upper Chindwin	Homalin	22nd ,,	3·14
Pakokku	Gangaw	31st ,,	3·30

In the Surma Valley of Assam, between the 1st and the 20th, and again between the 25th and the end of the month, rain fell generally and daily, but between the 21st and the 24th the weather was fair with passing showers. The month's rainfall was about normal, and the following falls exceeding 5″ in 24 hours were registered during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Cachar	Barkhola	9th July	6·18
Sylhet	Lalakhal	,, ,,	5·90
	Sylhet	,, ,,	5·71
	Sunamganj	,, ,,	5·50
Cachar	Hailakandi	,, ,,	5·09
Sylhet	Sunamganj	10th ,,	5·82
	Ditto	16th ,,	8·65
	Lalakhal	,, ,,	6·50

In the Brahmaputra Valley similar conditions prevailed; the weather was fair to showery between the 21st and the 25th but general, daily rain fell at other times. Falls exceeding 4″ in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Lakhimpur	Pathalipam	3rd July	4·30
Sibsagar	Nazira	7th ,,	4·95
Goalpara	Dhubri	10th ,,	4·13
	Goalpara	14th ,,	4·61
Darrang	Kerkeriya	15th ,,	6·72
Goalpara	Marnai	,, ,,	5·45
	Bijni	16th ,,	4·61
	Kachugaon	,, ,,	4·11
Lakhimpur	North Lakhimpur	20th ,,	4·23
	Dhakuakhana	,, ,,	4·20
Goalpara	Kachugaon	30th ,,	6·32
	Marnai	,, ,,	4·57
Nowgong	Sukimbari	31st ,,	4·50

In this division also the total rainfall of the month was about normal.

At the hill stations in Assam rain fell daily from the 1st to the 20th and again from the 28th to the end of the month, the intervening week having been generally fair. At Cherra Poonjee the total rainfall of the month amounted to 100·49,″ the normal fall of the month being 109·49″. The heaviest falls in 24 hours recorded at this station were 10·80″ on the 14th, 11·60″ on the 16th and 10·03″

on the 22nd. The total rainfall of the hills division was approximately normal.

In Bengal the month's rainfall exceeded the normal in almost all divisions. The greatest excess was reported from Deltaic Bengal, and the following gives comparative data of the districts contained in this division:—

Division.	District.	Rainfall. Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Precentage departure from normal.
		Inches.	Inches.	Inches.	
Deltaic Bengal	Midnapore	19·04	12·43	+ 6·61	+ 53
	Hooghly	23·72	12·02	+11·70	+ 97
	Howrah	27·70	11·53	+16·17	+140
	24-Parganas	23·76	12·98	+10·78	+ 83
	Nadia	18·98	10·36	+ 8·62	+ 83
	Jessore	22·13	10·64	+11·49	+108
	Khulna	26·67	13·10	+13·57	+104
	Faridpur	22·46	11·71	+10·75	+ 92

In south-west Bengal general rain was reported between the 1st and the 8th, the 11th and the 15th, the 17th and the 22nd, and the 25th and the 29th. The rain was heaviest during the last period when the following falls exceeding 7″ in 24 hours were registered:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Howrah	Mohesreka	27th July	8·37
Burdwan	Burdwan	28th ,,	11·78
Bankura	Kotalpur	,, ,,	11·43
Hooghly	Arambagh (Jahanabad.)	,, ,,	10·43
Howrah	Mohesreka	,, ,,	10·40
Nadia	Krishnagar	,, ,,	9·62
24-Parganas	Budge Budge	,, ,,	9·03
Hooghly	Serampore	,, ,,	8·60
24-Parganas	Diumond Harbour	,, ,,	8·38
Midnapore	Tamluk	,, ,,	8·29
Howrah	Ulubaria	,, ,,	7·85
Khulna	Nakipur	,, ,,	7·76
24-Parganas	Alipore (Obsy.)	,, ,,	7·23
Howrah	Amta	,, ,,	7·20
24-Parganas	Barrackpore	,, ,,	7·20

North Bengal experienced fairly fine weather between the 20th and the 27th, and the total rainfall for the month for this division was slightly less than usual. As in the previous division heavy rain occurred at the close of the month, when the following falls exceeding 5″ in 24 hours were recorded:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Darjeeling	Mongpoo	30th July	6·16
	Kurseong	,, ,,	5·40
	Darjeeling	,, ,,	5·39
Cooch Behar	Cooch Behar	,, ,,	5·03
Jalpaiguri	Bhagatpur	31st ,,	7·42
	Buxa	,, ,,	6·10

In East Bengal the weather was very rainy, except between the 20th and the 24th, and the total fall of the month slightly exceeded the average. Amounts exceeding 6″ in 24 hours were registered at the following places on the following dates during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Noakhali	Harishpur	3rd July	6·01
Tippera	Nasirnagar	8th ,,	6·35
Mymensingh	Durgapur	10th ,,	8·65
Backergunge	Daulatkhan	17th ,,	6·29
Chittagong	Cox's Bazar	,, ,,	6·16
	Chittagong	30th ,,	8·40

Bihar experienced less continuous rain than other parts of the Province, but fairly general rain fell between the 4th and the 7th, the 13th and the 17th, and the 29th and the 31st. The total rainfall of the month, however, exceeded the normal, and the following amounts exceeding 5″ in 24 hours were registered during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Gaya	Deo	14th July	5·13
Darbhanga	Laukahi	17th ,,	5·40
Sonthal Parganas	Pakaur	27th ,,	10·80
	Mohespur	,, ,,	10·30
	Hiranpur	,, ,,	6·10
	Sahibganj	,, ,,	5·15
Darbhanga	Madhubani	28th ,,	6·43
Sonthal Parganas	Madhupur	29th ,,	9·30
Bhagalpur	Bansil	,, ,,	7·45

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Sonthal Parganas	Jamtara	29th July	6·39
	Katikund	" "	6·13
Champaran	Burhurwa	" "	5·60
Sonthal Parganas	Sarath	" "	5·50
	Deoghur	" "	5·25
Bhagalpur	Banka	" "	5·19
	Madhipura	" "	5·17
Sonthal Parganas	Bhagya	30th "	5·82
Muzaffarpur	Sitamarhi	31st "	11·63
Monghyr	Chupreon	" "	7·35
Bhagalpur	Supaul	" "	6·90
	Pratapganj	" "	6·59
Shahabad	Monaharpur	" "	6·53
Monghyr	Begusarai	" "	5·70
Champaran	Motihari	" "	5·48

Orissa received general rain on the 1st, the 5th and 6th, between the 10th and the 13th, between the 18th and 21st and between the 25th and the 28th. The total fall was, however, slightly less than usual, and the only heavy falls exceeding 4·50″ in 24 hours were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Orissa Tributary Mahals.	Ranpur	1st July	4·70
	Baripada	6th "	4·70
Angul	Balandapara	12th "	4·97
Cuttack	Dharmsala	25th "	4·62

The total rainfall of Chota Nagpur was heavier than that of Orissa or of Bihar and exceeded the normal by 3½″. Fairly continuous rain fell during the first three weeks, after which showery weather prevailed till the end of the month. There were not many heavy falls, but amounts of 4·50″ or more in 24 hours were recorded at the following places on the following dates during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Ranchi	Chainpur	1st July	6·39
Manbhum	Purulia	13th "	4·53
Singhbhum	Kalikapur	26th "	4·56
Manbhum	Pandra	29th "	6·40

In the east of the United Provinces the month's rainfall was normal or in slight excess of the average, but in the centre and west it was in defect. The deficiency was greatest in the central division, and the following gives comparative data of the districts in this division:—

District.	Rainfall.			
	Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Banda	6·50	12·67	−6·17	−49
Fatehpur	7·65	10·57	−2·92	−28
Hamirpur	4·10	11·63	−7·53	−65
Cawnpore	4·58	10·43	−5·85	−56
Jalaun	3·66	11·31	−7·65	−68
Etawah	3·42	10·06	−6·64	−66
Farrukhabad	3·98	10·38	−6·40	−61
Mainpuri	4·02	9·98	−5·96	−60
Etah	4·74	9·13	−4·39	−48
Jhansi	4·87	11·89	−7·02	−59

The rainfall over the United Provinces occurred mainly during the passage of the various depressions of the month and fell generally between the 4th and the 8th, the 11th and the 15th, and the 18th and the 22nd. During the last week of the month the weather was generally fine, except in the submontane and hill districts. The following amounts exceeding 6″ in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Allahabad	Allahabad	5th July	7·10
Sultanpur	Amethi	" "	6·45
Allahabad	Soraon	" "	6·26
Agra	Bhikapur	11th "	6·73
	Bah	12th "	6·76
Basti	Haraia	15th "	8·90
Fyzabad	Fyzabad	" "	6·45
Dehra Dun	Rajpur	30th "	6·45

The only general fall of rain in the Punjab occurred between the 9th and the 15th, when a strong flow of monsoon winds into the Province occurred in the rear of the fourth storm of the month. At other times only showers were experienced principally in the hill and submontane districts. The month's fall was everywhere below the nor-

mal, but particularly so in the south-east. The following gives comparative data for the districts in this division:—

District.	Rainfall. Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Gurgaon	3·80	6·58	−2·78	−42
Rohtak	2·44	5·94	−3·50	−59
Delhi	4·79	6·14	−1·35	−22
Karnal	3·11	6·64	−3·53	−53

At Jatusana, in Gurgaon, at Jhajjar and Salhawas in Rotak, at Mianwali, at Dera Ghazi Khan, at Jampur, and Rajanpur in Dera Ghazi Khan and at Shujabad in Multan, the total rainfall of the month was *nil*, or less than one-quarter of an inch. On the other hand, the month's rainfall was almost normal in some parts of the Province, and the following amounts exceeding 4″ in 24 hours were recorded at the following places on the following dates:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Gurgaon	Gurgaon	7th July	4·73
Kangra	Palampur	11th ,,	5·50
Karnal	Panipat	,, ,,	4·05
Kangra	Dera	13th ,,	4·75
Shahpur	Sakesar	,, ,,	4·41
Gurdaspur	Dalhousie	14th ,,	4·50
Jind State	Jind	,, ,,	4·37
Kangra	Dharmsala	21st ,,	6·42
	Palampur	,, ,,	4·48
	Kangra	,, ,,	4·07
Sialkot	Pasrur	24th ,,	4·20

In the North-West Frontier Province fairly general rain fell between the 10th and the 14th and between the 22nd and 24th, but there was very little rain at other times. The total fall was short of the average, and the only heavy falls exceeding 2″ in 24 hours were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Bannu	Marwat	12th July	2·50
Hazara	Abbottabad	13th ,,	4·12
	Dungagali	,, ,,	2·65

In Baluchistan light rain occurred between the 10th and the 14th and the 23rd and 25th. The total fall was only about half the normal, but the following amounts exceeding 1·00″ in 24 hours were registered during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Zhob	Hindubagh	9th July	2·00
Bolan Pass	Kolepur	,, ,,	1·40
Quetta-Peshin	Beleli	,, ,,	1·10
Thal Chotiali	Duki	24th ,,	1·20
	Do.	25th ,,	1·05

Kashmir received general rain between the 8th and the 14th and showery weather prevailed at other times. So far as can be judged, the total fall of the month was lighter than usual, but the rainfall was heavy in places, and the following falls exceeding 4″ in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Jummoo	Sambha	13th July	7·77
	Ramnagar	,, ,,	4·80
	Bisolee	20th ,,	4·72

In Rajputana showery weather prevailed between the 1st and the 3rd, the 6th and the 8th, the 11th and the 15th, and the 19th and the 23rd. At other times the weather was fine. Only about half the normal amount of rain was received (except in Udaipur, where the total for the month slightly exceeded the average), as is shown by the following comparative data of the larger States:—

State.	Rainfall. Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Jodhpur	1·63	4·09	−2·46	−60
Bikaner	0·40	3·29	−2·89	−88
Jaipur	2·03	7·20	−5·17	−72
Alwar	2·45	6·39	−3·94	−62
Bharatpur	2·79	7·63	−4·84	−63
Dholpur	5·62	8·03	−2·41	−30

STATE.	RAINFALL.			
	Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Karauli	3·15	8·27	—5·12	—62
Kotah	3·86	10·40	—6·54	—63
Jhalawar	5·44	14·06	—8·62	—61
Ajmer-Merwara	2·42	7·10	—4·68	—66
Udaipur	11·80	9·31	+2·49	+27

The fall was heavy on some days in some places, and the following amounts exceeding 4″ in 24 hours were registered :—

DISTRICT.	Station.	Date	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
KOTAH	Iklera	6th July	4·06
JHALAWAR	Gangdhar	7th ,,	4·53
KUSALGARH	Kusalgarh	,, ,,	4·47
PARTABGARH	Partabgarh	8th ,,	4·25
SIROHI	Mount Abu	9th ,,	4·10
DHOLPUR	Rajakhera	12th ,,	7·00
	Gajpura	,, ,,	5·00
SIROHI	Mount Abu	26th ,,	8·45
	Do.	27th ,,	4·05

In Central India there were three periods of rainfall and in parts the month's fall exceeded the normal. The following gives comparative data of the different States :—

STATE.	RAINFALL.			
	Average actual, July 1905.	Average normal, July.	Departure from normal, July 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Indore	17·64	9·76	+7·88	+81
Rutlam	15·42	10·83	+4·59	+42
Bhopal Agency	11·63	11·04	+0·59	+ 5
Gwalior	12·50	9·18	+3·32	+36
Rewah	12·92	14·50	—1·58	—11
Bundelkhand	4·79	12·71	—7·92	—62

Heavy falls of rain occurred on the 7th and 8th and the 22nd and 23rd, as is shown below :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
BHOPAL AGENCY	Narsinghgarh	7th July	8·45
	Ashta	,, ,,	8·14
GWALIOR	Sonkach	8th ,,	9·40
	Manpur	,, ,,	7·55
	Shujaulpur	,, ,,	6·95
	Jobat	22nd ,,	11·30
	Ali Rajpur	23rd ,,	10·18

In the Central Provinces the rainfall was irregularly distributed during the month, but the most general falls occurred between the 1st and the 8th, the 11th and the 14th, and the 18th and the 22nd. The weather during the latter part of the month was generally fair. The total rainfall was generally about normal, though in the central division there was some slight deficiency. Amounts exceeding 6″ in 24 hours were recorded at the following places during the month :—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
SAMBALPUR	Padampur	1st July	6·75
AMRAOTI	Karanja	2nd ,,	7·47
	Murtizapur	,, ,,	7·24
HOSHANGABAD	Pachmarhi	7th ,,	8·00
JUBBULPORE	Jubbulpore	,, ,,	7·50
MANDLA	Tikaria	,, ,,	7·46
HOSHANGABAD	Seoni	8th ,,	13·15
	Harda	,, ,,	9·84
NIMAR	Harsud	,, ,,	8·99
HOSHANGABAD	Hoshangabad	,, ,,	7·19
BETUL	Shahpur	,, ,,	6·19
FEUDATORY STATES	Sarangarh	12th ,,	6·50
CHINDWARA	Tamia	21st ,,	9·00
NIMAR	Burhanpur	22nd ,,	7·04
AKOLA	Jalgaon	,, ,,	6·78
ELLICHPUR	Dharni	,, ,,	6·16

The Konkan division of Bombay had daily rain throughout the month, but the total fall was slightly less than usual. Falls exceeding 9″ in 24 hours were recorded at

the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Thana	Murbad	5th July	11·17
	Mokhada	" "	9·30
	Shahapur	6th "	17·37
	Vada	" "	12·90
Kolaba	Matheran	" "	12·24
North Kanara	Honavar	16th "	9·06
	Do.	18th "	9·05
Kolaba	Matheran	22nd "	11·80
	Panvel	" "	9·55
Ratnagiri	Khed	24th "	9·10
Kolaba	Mahad	25th "	11·90
Ratnagiri	Mandangad	" "	11·80

In the Bijapur district of the Deccan there was very little rain, but in the remaining districts local rain occurred fairly frequently, and the total for the month for the division was only slightly below the normal. In Khandesh there was general rain between the 1st and the 9th and again between the 22nd and the 29th, and the total fall somewhat exceeded the average. The rainfall was heavy in parts of both the Deccan and Khandesh, more particularly on and near the hills, and the following falls exceeding 6″ in 24 hours were registered during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Khandesh	Nanapur	5th July	6·25
Nasik	Igatpuri	6th "	8·90
Satara	Malcolmpeth	" "	7·82
Nasik	Trimback	" "	7·10
Poona	Lanoli	" "	6·69
Satara	Malcompeth	22nd "	7·34
Poona	Lanoli	" "	6·85
Khandesh	Chopda	" "	6·08
Nasik	Igatpuri	23rd "	7·53
Satara	Malcolmpeth	" "	6·71
	Nedha	24th "	8·03
	Malcolmpeth	" "	7·74
Poona	Lanoli	" "	7·57
Satara	Malcolmpeth	25th "	15·41

In Gujarat there were three rainfall periods, *viz.*, between the 1st and 5th, the 8th and 12th, and the 22nd and the 28th. Very heavy rain occurred between the 22nd and 24th from the fifth storm of the month, and the following amounts exceeding 10″ in 24 hours were recorded :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kaira	Thasra	23rd July	13·23
Panch Mahals	Halol	" "	11·93
Kaira	Kaira	" "	11·19
Ahmedabad	Dholka	" "	11·04
Kaira	Matar	" "	10·89
Ahmedabad	Sanand	" "	10·81
Kaira	Nadiad	" "	10·44
	Mahudha	" "	10·10
Ahmedabad	Ahmedabad	24th "	18·68
	Viramgam	" "	15·35
	Sanand	" "	14·23

The total fall was nearly 50 per cent. above the normal.

In Kathiawar rain fell between the 1st and 5th, the 9th and 12th and the 23rd and 25th. In this division also the average monthly fall was exceeded, and falls exceeding 10″ in 24 hours were recorded at the following places during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Rewa Kantha	Chhota Udepur	23rd July	10·57
Kathiawar	Dhrangadhra	24th "	13·27
Palanpur	Radhanpur	" "	11·94
	Thared	" "	11·81
Kathiawar	Wadhwan	" "	11·65
	Rajkot	" "	11·00
	Chuda	" "	10·65
	Jasdan	" "	10·60

In Sind there were showers between the 9th and the 11th and the 23rd and the 27th. Amounts exceeding 1″ in 24 hours were recorded as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Thar and Parkar	Nagar Parkar	7th July	1·35
Kurrachee	Shahbandar	9th "	1·32
Thar and Parkar	Nagar Parkar	25th "	3·05
Kurrachee	Jerruck	" "	2·20
Thar and Parkar	Nagar Parkar	26th "	3·00
		27th "	1·73

Light scattered rain occurred during the month within H. H. the Nizam's dominions, and the total fall of the month was less than half the normal.

In Mysore the rainfall was very irregularly distributed. In the districts of Hassan, Shimoga and Kadur fairly continuous rain fell during the month, but in the remaining districts only scattered rain was received, and the total rainfall of the division for the month was less than usual.

The east coast of the Peninsula received rain on the 1st, between the 10th and the 13th, between the 16th and the 21st and on the 30th and 31st. The rainfall diminished both in amount and extent from north to south, and the only heavy falls were in the north division, where the following amounts exceeding 3″ in 24 hours were registered :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Vizagapatam	Nowrangapur	1st July	4·00
	Jeypore	„ „	3·02
Ganjam	Balliguda	12th „	3·19
Vizagapatam	Jeypore	20th „	9·58
	Malkanagiri	„ „	6·05
	Koraput	„ „	5·60
	Nowrangapur	„ „	4·70
	Padwa	„ „	3·45
Ganjam	Balliguda	„ „	3·24
Vizagapatam	Pottanghi	„ „	3·10

The total rainfall along the East Coast was lighter than usual.

In south Madras there was hardly any rain, and in south-central and central Madras only local rain. In all three divisions the fall was less than usual.

In the Malabar Coast districts rain fell daily throughout the month, and the total fall was about normal. There were no very heavy rainfalls, but the following amounts exceeding 6″ in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
South Canara	Karkal	15th July	8·40
	Bantwal	„ „	8·26
Malabar	Payyanur	„ „	6·90
South Canara	Hosdrug	„ „	6·33
Malabar	Vayittiri	21st „	6·76
Travancore State	Peermade	22nd „	6·50
Malabar	Vayittiri	„ „	6·10

Snowfall.

I.—Afghan Mountain Districts.

(1) *Parachinar* :—The Political Officer, Parachinar, reports that no fresh snowfall occurred on the surrounding mountains during July.

II.—Kashmir and Punjab Himalayas.

(1) *Kashmir* :—July, like June, was an exceptionally dry month, and the snowfall much below the average.

On the higher ranges to the south-west near Gulmarg slight snow fell on July 13th at a height of 14,000 ft.

From Sonemarg snow was noticed on the higher mountains on July 12th and 14th, and Dras observed five feet of snow on the higher ranges in the first fortnight of July.

In Kargil rain was light to moderate during the first fortnight of July, but towards Leh no snow fell during the month. To the north in Gurais, light snow fell on the higher ranges on July 11th and 13th.

(2) *Kulu* :—There was a heavy snowfall on the hills to the north of Kulu on the 13th—14th July; it measured 2 ft. on the Rohtang Pass and 1½ foot on the Hampta Pass and around Naggar it descended to about 13,000 ft. It appears to have been fairly general in South Lahoul.

In Saraj Tehsil there were slight snowfalls in Kothi Shergarh on July 5th.

(3) *Bashahr, Simla* :—On the 12th July there was a fall of snow which deposited from 1″ to 2″ down to 12,500 ft., and on the 14th there was a slight fall of snow which, however, did not extend beyond 16,000 ft.

The accumulated snow on the passes at the close of the month was as follows :—

	Ft.	Ft.
Rupan Pass	16,000	2
Bruin „	16,000	2
Harang „	12,000	*nil.*
Shatul „	15,000	1
Buldar „	16,000	1
Runang „	14,000	½

All the passes were open.

(4) *Chamba*:—The snowfall on the Sach Pass, 14,000 ft., was as follows :—

	Ft.	In.
July 11th	0	8
„ 12th	0	4
„ 13th	1	6

On the 13th July the snowline descended to 11,000 ft.

III.—UNITED PROVINCES, HIMALAYAS.

(1) *Almora.*—The snowfall reports were as follows:—

Malla Johar:—Very slight falls on the higher peaks on the 10th and 11th.

Darma:—Light snow fell on eighteen days, the total amounting to six inches.

Danpur Malla:—No snow.

The snow accumulation on the passes was as follows:—

	Ft.	In.
Unt Dhura	6	0
Ralam Dhura	3	6
Millam Dhura	2	0
Nirwe Pass	16	0

The snowfall was heavier than in past years.

(2) *Garhwal:*—Only the normal light snowfall occurred.

Crop Report.

Madras:—At the close of the month crops were generally fair, but some in parts of Godaveri, South Arcot and Tanjore were withering and some in parts of Kistna, Bellary, the central districts and Tinnevelly required more rain. Pasture was insufficient except in Ganjam, Vizagapatam, Kurnool, Salem, the west coast districts and the Nilgiris. The condition of cattle was generally good.

Bombay:—The sowing of autumn crops was nearly completed at the end of the month in Sukkur, Broach, Khandesh and Satara, and continued elsewhere, except in parts of Bijapur and Dharwar, where it was retarded on account of insufficient rain. Autumn seedlings had been slightly damaged by heavy rain in parts of the Panch Mahals, Baroda, Mahi Kantha, and Rewa Kantha and were suffering from want of rain in parts of Sholapur and the Karnatak.

Bengal:—The prospects of sugarcane, jute and other standing crops were fair at the end of July, at which time there was no want of fodder or water.

United Provinces:—At the close of the month rain was required in almost every district. Sowings had been suspended in places and the standing crops were reported to be withering for want of rain in Mainpuri, Etawah, Cawnpore and Hamirpur. Germination had failed in Shahjahanpur, but prospects were otherwise good.

Punjab:—The condition of the standing crops was generally good. Crops on unirrigable lands were suffering from want of rain in the Hissar and Amritsar districts. Cattle were in good condition and fodder was sufficient, except in parts of Mianwali and Multan.

North-West Frontier Province:—More rain was required everywhere. The condition of crops on irrigated land was generally good and on unirrigated land average. The condition of cattle was good and fodder was sufficient.

Burma:—Agricultural operations were proceeding satisfactorily. In Upper Burma more rain was still required in Thayetmyo, parts of the Yeu and Tabayin townships of Shwebo, and in Yamethin and Myingyan: in the two latter districts the sesamum plants were withering. Recent rain had improved the prospects of early sesamum in Sagaing. The condition of the standing crops was generally satisfactory at the end of the month.

Central Provinces:—The standing crops of all sorts were everywhere in good condition at the end of July, but rain was urgently required in Saugor and the Chanda rice tracts. Scarcity of fodder existed in several parts of the provinces, and in the Thana Tehsil of Saugor cattle were dying for want of grass.

Assam:—More rain was wanted at the close of the month for late rice in some districts of the Assam Valley. Prospects of rice were good in Sylhet, Goalpara and the Garo Hills, poor in Kamrup and fair in other places. The prospects of jute and cotton were good.

Mysore:—The crops were in good condition, except in the Mysore, Kolar and Chitaldroog districts. More rain was much needed generally in the province.

Hyderabad:—Autumn sowings had been suspended in four taluks for want of rain; young crops were withering in eighteen taluks and more rain was urgently required in fourteen.

Rajputana:—Rain had been generally insufficient and more was urgently wanted at the close of the month. Autumn sowings were retarded in Haraoti and Tonk, Kishangarh, Alwar, Bharatpur and parts of Kotah and Jaipur and in Ajmer-Merwara. Crops were withering in parts of Jaipur, Kishangarh, and in Bharatpur and Ajmer-Merwara.

Central India:—Sowings had been completed in parts of Indore, Malwa and Bhopal, and were in progress elsewhere.

Kashmir Jummoo:—The condition of the standing crops at the end of July was good.

W. L. DALLAS.

TABLE I.—Abstract of Observations taken at 8 A.M. at 233 Stations in India, Burma, etc., in July, 1905.

Table

Abstract of Observations taken at 8 A.M. at 233

Number of District	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma Coast and Bay Islands.			+·001								84·9	—0·2	76·2	+0·8	80·5	+0·3	8·7					16·7
1	Car Necobar . .	25	29·818		29·770	29·903	12th	29·732	23rd	·171	81·1	87·5		78·8		83·2		8·7	89·7	14th	74·4	24th	15·1
	Port Blair . .	61	29·781	+·017	29·773	29·872	12th	29·680	24th	·192	81·1	86·1	+0·7	79·0	+1·6	82·5	+1·2	7·1	89·6	13th	74·4	20th	15·2
	Slipper Island . .		29·795																				
	Mergui . . .	96	29·780	+·013	29·805	29·890	12th	29·668	23rd	·222	78·2	84·0	—0·5	74·5	+2·0	79·3	+0·8	9·5	88·9	8th, 12th & 14th.	67·4	5th	21·5
	Tavoy . . .	19	29·849	+·010	29·800	29·958	12th	29·723	23rd	·235	76·9	81·5	—1·8	74·7	+0·6	78·1	—0·6	6·8	87·5	14th	72·1	6th & 31st.	15·4
	Moulmein . .	94	29·725	+·007	29·757	29·865	12th	29·566	23rd	·299	77·7	83·0	0	74·5	+0·3	78·8	+0·2	8·5	88·5	1st	71·8	30th	16·7
2	Rangoon . .	57	29·735	—·004	29·730	29·849	1st	29·584	23rd	·265	78·7	84·3	—1·0	75·3	0	80·1	—0·5	8·5	89·1	23rd	73·9	10th & 17th.	15·2
	Bassein . . .	27P	29·751	+·004	29·716	29·862	1st	29·618	23rd & 24th.	·244	79·3	85·2	+0·5	76·3	+0·5	80·8	+0·5	8·9	90·2	16th	73·9	11th & 31st.	16·1
	Diamond Island .	41	29·724	—·012	29·710	29·859	1st	29·583	24th	·276	81·7	84·8	+0·5	77·2	+1·6	81·0	+1·1	7·6	86·9	3rd & 5th.	74·2	4th & 25th	12·7
5	Akyab . . .	20	29·668	—·021	29·631	29·827	1st	29·453	5th	·374	79·6	84·6	—0·1	77·0	—0·5	80·8	—0·3	7·6	89·9	24th	74·2	12th	15·7
3	Toungoo* . .	183	29·583	—·006	29·708	29·712	1st	29·448	23rd	·264	79·0	87·5	+0·8	73·9	P	80·7	P	13·6	94·9	22nd	72·1	12th	22·8
	II.—Burma Inland.			—·018								90·3	—0·5	77·2	+0·7	83·7	+0·1	13·1					23·7
3	Thayetmyo . .	121	29·599	—·020	29·661	29·744	1st	29·453	25th	·291	80·6	88·5	—0·4	76·8	+0·5	82·7	+0·1	11·7	95·5	23rd	75·0	12th & 13th.	20·5
4	Minbu . . .	*165*	29·529	—·025	29·636	29·679	1st	29·391	5th	·288	79·9	89·6	—1·7	77·4	+0·2	83·5	—0·3	12·2	97·7	23rd	75·1	13th	22·6
	Yamethin . .	657	29·055	—·031	29·663	29·197	1st	28·927	5th	·270	78·5	88·0	—2·0	75·2	+0·6	81·6	—0·7	12·8	94·3	21st, 22nd & 23rd	73·2	9th & 17th.	21·1
	Monywa . .	*280*	29·434		29·653	29·591	1st	29·323	27th	·268	81·9	94·2		78·4		86·3		15·8	100·3	22nd	74·4	27th	25·9
	Mandalay . .	250	29·444	—·015	29·641	29·603	1st	29·323	5th	·280	83·3	94·9	+0·7	80·1	+1·7	87·5	+1·2	14·8	101·6	22nd	76·3	11th & 17th.	25·3
	Myitkyina . .	458	29·312		29·618	29·374	1st	29·095	23rd	·279	79·1	88·0		76·5		82·2		11·5	99·7	21st	73·1	9th & 14th.	26·6
	Bhamo . . .	*381*	29·308	0	29·643	29·457	1st	29·214	5th	·243	79·2	88·8	+1·0	75·7	+0·6	82·3	+0·8	13·1	95·9	6th	72·1	5th	23·8
4(a)	Maymyo . . .	3,545	26·289		26·224	26·429	1st	26·171	4th	·258	71·1	76·9		67·8		72·3		9·1	81·4	5th	64·6	20th	16·8
	Lashio . . .	*2,751*	26·942		26·888	27·076	1st	26·853	23rd	·223	73·5	84·1	+0·5	69·4	+0·1	76·8	+0·3	14·7	92·0	23rd	67·0	12th	25·0
	III.—Assam.			—·024								89·1	+0·3	77·2	—0·4	83·2	—0·1	12·0					20·5
7	Silchar . . .	104	29·540	—·028	29·596	29·716	1st	29·354	27th	·362	81·4	91·1	+0·9	77·3	+0·1	84·2	+0·5	13·8	98·1	1st	75·3	1st	22·8
9	Sibsagar . .	333	29·310	—·022	29·597	29·473	1st	29·166	27th	·307	80·1	88·7	—1·3	77·1	—0·8	82·9	—1·1	11·6	93·7	21st	74·0	1st & 3rd.	19·7
	Dhubri . . .	115	29·488	—·021	29·557	29·660	1st	29·338	26th	·322	81·0	87·2	+1·3	77·8	—0·5	82·5	+0·4	9·4	92·7	25th	75·8	31st	16·9
	Gauhati . . .	195	29·434		29·584	29·604	1st	29·289	26th	·315	81·3	90·7		77·9		84·3		12·8	95·0	26th & 27th.	75·6	2nd	19·4
	Tezpur . . .	252	29·375		29·584	29·531	1st	29·240	27th	·291	79·7	89·3		77·4		83·4		11·9	95·1	26th	74·9	3rd	20·2
	Dibrugarh . .	353	29·291		29·602	29·453	1st	29·163	27th	·290	78·7	87·8		75·4		81·6		12·4	95·7	6th	71·5	3rd & 4th.	23·4
	IV.—Bengal and Orissa.			—·017								88·3	—0·2	78·1	—0·2	83·2	—0·2	10·3					19·1
6	Chittagong . .	87	29·552	—·026	29·587	29·720	1st	29·357	27th	·363	80·2	85·9	+0·2	76·3	—0·3	81·2	—0·1	9·6	92·5	24th	74·1	10th	18·4
	Noakhali . .	43	29·572		29·562	29·729	1st	29·377	5th	·352	81·1	85·7		77·4		81·6		8·3	91·7	24th	74·9	7th	16·8
	Comilla . . .	36	29·583		29·566	29·746	1st	29·360	27th	·386	80·6	87·5		76·1		81·8		11·4	93·3	24th & 27th.	70·3	27th	23·0
	Sirajganj . .	49	29·547		29·546	29·713	1st	29·307	28th	·406	81·1	87·5		77·9		82·7		9·6	92·3	25th	71·2	15th	21·1
	Narayanganj . .	26	29·582	—·016	29·556	29·745	1st	29·387	4th	·358	81·6	88·5	+0·2	78·6	—0·6	83·6	—0·2	9·9	93·6	24th	75·3	7th	18·3
	Barisal . . .	12	29·592	—·013	29·550	29·737	1st	29·398	5th	·339	82·1	87·3	0	75·5	P	81·4	P	11·8	92·8	24th & 26th.	72·6	2nd	20·2
	Mymensingh . .	63	29·547	—·022	29·559	29·723	1st	29·360	28th	·363	81·4	87·9	+0·8	78·3	0	83·1	+0·4	9·6	93·2	24th, 25th & 26th	76·1	2nd & 11th,	17·1
	Faridpur . .	46	29·550		29·545	29·696	1st	29·345	28th	·351	81·4	87·6		78·0		82·8		9·6	92·3	25th & 26th,	74·9	2nd	17·4
10	Jessore . . .	33	29·541	—·031	29·521	29·662	1st	29·363	5th	·299	82·1	88·1	—1·1	78·6	—0·4	83·4	—0·8	9·5	94·0	25th	76·2	7th	17·8
	Calcutta . . .	21	29·553	—·016	29·520	29·682	9th	29·366	5th	·316	81·5	88·4	+0·4	78·1	—0·4	83·3	0	10·3	93·9	17th	74·9	7th	19·0
	Saugor Island . .	25	29·527	—·026	29·505	29·679	9th	29·346	5th	·333	82·7	87·6	—0·2	79·8	—0·8	83·7	—0·5	7·8	91·9	24th	77·1	7th, 11th & 20th.	14·8

N.B.— Elevations in italics indicate barometrical determinations.

* 30 days' observations.

Note 1.—When a query is inserted against any reading or in the returns of any station, the data for that

Note 2.—The data from which divisional means of the figure columns Nos. 40, 42, and 44 are derived

Note 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau

I.

Stations in India, Burma, etc., in July, 1905.

Wind Direction. Number of winds from Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May, to 31st July 1905.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														91	0	·915	+·010	8·3	−0·3				32·10	31·41	+3·63					I.—Burma Coast and Bay Islands.
3					1	13			S 42° W	5·3			5·3	87		·923		9·3		7			5·62			20·83			2·81	Car Necobar.
					2	15	14		S 63° W	12·5	11·0	+14		88	+1	·930	+·003	7·9	−0·6	13			14·51	15·68	−1·17	49·32	51·42	−2·10	2·53	Port Blair.
					17	10	3		S 23° W	29·9																			Slipper Island.
19	2	1		2	2	2	1	2	S 68° W	2·7	1·8	+50	2·4	94	+2	·890	+·015	5·5	−2·0	25	25·60	−0·60	27·62	31·50	−3·88	70·89	81·05	−10·16	3·95	Mergui.
22						4			S 45° W	1·9				92	0	·852	−·017	7·3	−0·9	29	28·00	+1·00	59·71	46·83	+12·88	152·97	112·76	+40·21	6·18	Tavoy.
6	1	1	1	3	8	7	3	1	S 22° W	4·7	3·8	+24	5·2	93	0	·877	+·005	8·8	+0·3	28	28·20	−0·20	46·95	45·96	+ 0·99	109·27	101·74	+7·53	10·55	Moulmein.
9			1	3	15			2	1 S 1° E	4·4	5·5	−20	3·7	93	−1	·904	−·009	9·1	+0·1	30	25·70	+4·30	29·73	20·98	+ 8·75	59·76	49·72	+10·04	2·58	Rangoon.
				5	12	10	3	1	S 19° W	7·1†	4·0	+78		94	0	·945	+·026	8·7	−0·1	26	26·80	−0·80	27·68	25·46	+ 2·22	68·07	59·18	+8·89	4·16	Bassein.
2				2	2	19	5	1	S 48° W	12·0	8·9	+35	12·0	87	+1	·964	+·067	8·8	0	22	24·00	−2·00	22·09	25·80	− 3·71	66·09	59·40	+6·69	3·40	Diamond Island.
		3		13	11	4			S 22° E	5·9	3·8	+55	5·7	95	+1	·963	+·003	8·7	+0·4	27	27·80	−0·80	71·94	52·62	+19·32	130·24	109·29	+20·96	12·34	Akyab.
14				13	3				S 37° E	8·2	9·8	+71	8·1	89	−3	·897	−·007	9·1	−0·2	23	25·00	−2·00	15·18	17·89	− 2·71	39·20	38·32	+0·88	1·57	Toungoo.
														86	+3	·893	+·035	8·4	+1·0				7·20	6·67	−1·68					II.—Burma Inland.
	1		2	8	20				S 17° E	8·1	6·7	+21		90	+5	·945	+·072	8·5	+0·4	20	15·20	+4·80	9·02	6·87	+ 2·15	19·23	17·34	+ 1·89	1·30	Thayetmyo.
				29	2				S 42° E	8·2			9·8	87	+4	·891	+·018	8·0	+1·8	7	8·80	−1·80	6·06	4·34	+ 1·72	16·28	14·89	+ 1·39	2·60	Minbu.
2				20	9				S 31° E	3·2			3·4	88	+4	·857	+·023	9·1	+4·1	9	9·60	−0·60	2·83	4·12	− 1·29	10·90	15·14	− 4·24	0·59	Yamethin.
1				5	23	2			S 4° E	7·9			8·2	79		·869		8·4		6	3·60	+2·40	2·26	2·61	− 0·35	13·55	11·41	+ 2·14	0·91	Monywa.
1	1			1	16	12			S 17° W	1·1			1·1	79	+4	·887	+·044	9·0	+0·8	5	6·20	−1·20	1·63	3·05	− 1·42	12·61	14·39	− 1·78	0·56	Mandalay.
10		1	10	8	1	1			S 69° E	2·5			2·5	89		·889		8·9		18			20·42			48·38			4·93	Myitkyina.
16	2	5	4			1	1	2	N 35° E	1·4			1·6	91	−1	·913	+·017	6·9	−1·8	17	21·50	−4·50	8·15	19·01	−10·86	27·93	39·19	−11·26	1·18	Bhamo.
	1		3	3	7	14	2	1	S 23° W	4·2				88		·670		7·9		15	12·10	+2·90	7·44	7·97	− 0·53	20·65	25·60	− 4·95	1·57	Maymyo.
24					3	4			S 26° W	3·3				87	−3	·727	+·003	8·6	−0·3	19			10·34	14·71	− 4·37	22·58	31·54	− 8·96	2·20	Lashio.
														91	0	·949	+·009	8·3	+0·5				14·53	16·03	−1·50					III.—Assam.
31									Calm	0	3·1	−100	0	88	−2	·950	+·003	6·0	−3·2	22	22·50	−0·50	18·38	18·43	− 0·05	51·65	57·66	− 6·01	3·41	Silchar.
10	3	8		3		5		3	N 26° E	2·9	2·8	+ 4	2·6	94	+1	·953	−·012	9·6	+0·7	18	19·20	−1·20	17·29	17·12	+ 0·17	34·81	43·33	− 8·52	2·45	Sibsagar.
14		4	11	1	1				N 82° E	3·6	3·9	− 8	4·2	92	+1	·979	+·035	9·5	+1·1	14	15·80	−1·80	13·99	15·49	− 1·50	6·79	54·09	+15·70	4·19	Dhubri.
15	2	6	2	1	2		2	1	N 45° E	1·7			1·9	89		·955		7·8		12	14·80	−2·80	5·60	10·83	− 5·23	23·19	31·81	− 8·62	1·78	Gauhati.
21		5	4			1			N 86° E	3·3			3·4	92		·940		8·9		16	17·20	−1·20	11·04	13·33	− 2·29	29·55	35·32	− 5·77	2·11	Tezpur.
19	3	3	3				1	2	N 53° E	1·4			1·3	93		·909		7·7		22	20·40	+1·60	20·90	21·00	− 0·10	36·35	54·63	−18·28	3·14	Dibrugarh.
																														IV.—Bengal and Orissa.
2		2		19	5	2			S 38° E	9·1	7·2	+26	8·4	89	−1	·954	−·012	7·6	−0·4				18·96	14·56	+4·40					
2			3	18	12	1			S 29° E	7·0			7·5	88	−1	·911	−·009	7·2	−1·1	22	19·45	+2·55	40·36	16·94	+20·96	61·00	52·01	+ 8·99	9·93	Chittagong.
	1	2	15	11	2				S 29° E	7·5			6·3	89		·942		6·6		24	22·81	+1·19	26·38	22·1	+ 4·28	48·75	55·45	− 6·70	3·67	Noakhali.
21	1	3	3	2	1				S 51° E	2·2			2·3	93		1·000		8·8		21	19·07	+1·93	19·32	17·05	+ 2·27	39·39	45·97	− 6·58	2·53	Comilla.
2		6	12	5	4	1			S 33° E	7·9	7·3	+ 8	6·8	92	+2	·994	+·013	8·7	0	20	14·26	+5·74	13·05	11·30	+ 1·75	34·42	30·82	+ 3·60	2·08	Sirajganj.
5	1		16	11	4				S 14° E	4·5			3·9	89	+1	·975	−·004	6·2	−2·7	23	20·58	+2·42	23·97	15·02	+ 8·95	34·64	30·23	+ 4·59	3·60	Barisal.
3		7	12	8	1				S 41° E	4·3			3·8	90	−1	·962	+·002	8·5	+0·6	20	19·65	+0·35	16·66	15·33	+ 1·33	56·34	45·63	+10·71	2·92	Mymensingh.
8		3	18	12	1		1		S 24° E	5·0			4·3	91		·988		7·9		13	17·13	+0·87	20·95	12·47	+ 8·48	35·51	33·52	+ 1·99	2·80	Faridpur.
22			4	4	1				S 14° E	1·9	4·6	−59	1·9	90	0	·983	−·010	8·5	+0·1	20	17·52	+2·48	27·28	12·02	+15·26	39·42	32·52	+ 6·90	4·80	Jessore.
14	1	2	3	6	16	3	2		S 33° W	6·6	5·3	+25		90	+1	·969	+·002	9·0	+0·6	19	18·96	+0·04	24·84	12·27	+12·57	36·45	29·30	+ 7·15	7·23	Calcutta.
34		1	1	8	11	3	4		S 48° W	21·0	14·2	+48		88	0	·981	−·015	8·5	−0·8	18	16·74	+1·26	17·63	15·95	+ 1·68	24·49	31·06	− 6·57	4·07	Saugor Island.

tation are not utilised in calculating the provincial departures from normal.
rs incomplete.
stations, the elevations of which exceed 3,250 feet.

† Mean of 27 days.

‡ Wind variable 14.

Table

Abstract of Observations taken at 8 A.M. at 233

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10	Krishnagar	47	29·523		29·518	29·654	8th	29·314	6th	·340	81·4	89·4		78·8		84·1		10·6	94·6	24th	77·0	7th, 17th & 29th,	17·6
	Midnapore	149	29·420		29·515	29·546	9th	29·227	6th	·319	81·4	88·8		78·0		83·4		10·8	94·3	17th	74·3	18th	20·8
11	Bankura	298	29·240		29·502	29·362	9th	29·029	6th	·333	81·6	89·4		78·5		84·0		10·9	96·6	10th	75·7	5th & 29th,	20·9
	Raniganj	334	29·241		29·526	29·361	9th	29·022	6th	·339	80·3	89·5		78·0		83·8		11·5	95·5	10th	75·9	21st&29th	19·6
	Burdwan	99	29·467	−·022	29·514	29·585	8th & 9th.	29·246	6th	·339	81·8	89·5	−0·7	78·9	−0·5	84·2	−0·6	10·6	95·4	10th	76·3	29th	19·1
	Naya Dumka	499	29·075†		29·520†	29·184	8th	28·864	6th	·320	80·6*	88·6		77·6		83·1		11·0	95·5	10th	74·9	18th	20·6
	Berhampore	67	29·499	−·030	29·515	29·613	8th	29·306	6th	·307	81·6	88·8	−0·6	78·4	−0·4	83·6	−0·5	10·4	93·3	10th	75·8	7th	17·5
	Rampur Boalia	70	29·505		29·524	29·650	1st	29·334	6th	·316	82·3	88·4		78·6		83·5		9·8	93·1	10th	75·6	7th & 8th	17·5
	Malda	72	29·486		29·509	29·619	1st	29·280	29th	·339	81·6	89·4		76·5		83·0		12·9	95·1	10th & 24th.	72·6	7th	22·5
	Bogra	61	29·513	−·021	29·526	29·677	1st	29·324	29th	·353	81·3	89·2	+0·1	78·6	+0·1	83·9	+0·1	10·6	94·2	25th & 28th.	76·2	2nd	18·0
12	Dinajpur	123	29·458	−·018	29·536	29·618	1st	29·285	29th	·333	81·3	89·0	−0·1	78·2	−0·7	83·6	−0·4	10·8	95·3	10th	75·5	7th & 29th,	19·8
	Rangpur	123	29·486		29·563	29·652	1st	29·328	29th	·324	81·8	88·8		77·9		83·4		10·9	94·7	25th	74·8	31st	19·9
	Jalpaiguri	284	29·323	−·007	29·564	29·494	1st	29·179	29th	·315	80·9	88·6	+0·4	77·4	+0·6	83·0	+0·5	11·2	93·4	26th & 27th.	75·1	10th, 14th & 15th.	18·3
	Cooch Behar	156	29·448		29·558	29·626	1st	29·297	28th	·329	80·7	88·9		78·2		83·6		10·7	94·4	26th	75·6	31st	18·8
17	Purnea	125	29·452	−·017	29·532	29·584	1st	29·314	29th	·270	81·9	89·4	−0·6	78·7	0	84·1	−0·3	10·7	95·2	10th	76·7	7th & 18th,	18·5
14	Balasore	50	29·529	−·011	29·521	29·668	9th	29·339	5th	·329	81·7	88·4	−0·1	77·9	−0·5	83·2	−0·3	10·5	94·4	24th	75·7	6 days.	18·7
	False Point	21	29·583	−·004	29·546	29·714	9th	29·415	5th	·299	82·2	87·4	−0·2	78·7	+0·1	83·1	−0·1	8·7	95·5	24th	75·1	6th, 11th, & 13th.	20·4
	Cuttack	80	29·529	+·002	29·552	29·664	9th	29·390	5th	·274	81·9	89·7	−0·1	78·7	+0·1	84·2	0	11·0	95·4	5 days.	74·2	5th	21·2
	Puri	24	29·597		29·560	29·730	9th	29·446	5th	·284	82·5	87·2		80·2		83·8		7·0	95·7	24th	76·1	11th, 16th & 19th.	19·6
	V.—Gangetic Plain and Chota Nagpur.			−·011								91·0	+0·9	78·6	+0·3	84·8	+0·6	12·4					24·5
15	Hazaribagh	2,007	27·569	−·025	29·513	27·689	9th	27·389	6th	·300	76·9	85·2	+0·6	74·1	+0·4	79·7	+0·5	11·1	91·2	1st & 10th.	71·3	5th	19·9
	Ranchi	2,128	27·465	−·007	29·529	27·591	9th	27·283	6th	·308	75·9	83·3	−0·7	73·3	+0·4	78·3	−0·2	10·0	89·2	17th	71·4	5th & 8th,	17·8
	Daltonganj	*730*	28·828		29·511	28·953	9th	28·675	6th	·278	80·5	90·9		77·9		84·4		13·0	98·1	1st	73·5	5th	24·6
	Purulia	*816*	28·748		29·507	28·875	9th	28·548	6th	·327	80·4	88·5		75·6		82·1		12·9	95·6	9th	73·4	26th	22·2
	Chaibassa	*760*	28·804	−·007	29·513	28·935	9th	28·614	6th	·321	79·6	88·2	−1·4	77·0	−0·5	82·7	−1·0	11·2	95·4	24th	74·0	1st & 27th	21·4
16	Gaya	375	29·179	−·015	29·505	29·285	9th	29·024	6th	·261	83·1	91·6	+0·2	78·9	+0·1	85·3	+0·2	12·7	99·0	1st	74·8	31st	24·2
	Dehri	351	29·193		29·495	29·342	10th	29·052	6th	·290	83·0	91·5		79·9		85·7		11·6	98·9	3rd	76·0	4th, 5th & 31st.	22·9
	Patna	183	29·366	−·024	29·501	29·465	8th	29·243	5th & 6th.	·222	83·1	91·8	+1·7	79·5	−0·3	85·7	+0·7	12·3	99·0	4th	74·7	16th, & 17th.	24·3
	Arrah	190	29·364		29·505	29·464	8th & 9th.	29·245	6th	·219	83·3	91·8		79·5		85·7		12·3	99·4	1st	75·7	16th	23·7
	Buxar	239	29·305		29·499	29·410	9th	29·191	6th	·219	82·4	90·6		78·8		84·7		11·8	100·5	1st	74·6	4th	25·9
17	Bhagalpur	160	29·402		29·514	29·515	1st	29·241	6th	·274	82·6	89·7		78·8		84·3		10·9	97·2	10th	76·6	5th & 8th	20·6
	Darbhanga	166	29·393	−·023	29·511	29·511	1st	29·266	30th	·245	82·2	90·1	+0·6	78·8	−1·0	84·5	−0·2	11·3	97·1	10th	74·3	17th	22·8
	Muzaffarpur	178	29·382		29·514	29·492	1st	29·243	30th	·249	82·4	91·1		79·2		85·2		11·9	98·7	10th	75·0	17th	23·7
	Motihari	224	29·334		29·517	29·466	1st	29·210	27th	·256	81·6	90·8		78·4		84·6		12·4	99·9	27th	71·8	30th	25·1
	Chapra	181	29·356		29·492	29·474	8 th	29·205	4th	·269	82·8	92·0		79·3		85·7		12·7	98·4	10th	76·1	16th & 31st.	22·3
18	Benares	267	29·280	−·007	29·500	29·387	9th	29·164	7th	·223	83·6	92·0	+0·8	79·5	−0·1	85·8	+0·4	12·5	101·6	4th	74·7	5th	26·9
	Allahabad	309	29·241	−·004	29·502	29·351	9th	29·111	7th	·240	83·8	92·7	+1·1	80·2	+0·8	86·5	+1·0	12·5	107·1	4th	74·1	5th	33·0
23	Gorakhpur	257	29·291	−·013	29·502	29·397	1st	29·173	27th	·224	83·5	90·2	−0·9	79·7	+0·3	85·0	−0·3	10·5	97·6	1st	76·0	13th	21·6
19	Lucknow	368	29·168	−·015	29·492	29·281	9th	29·066	29th	·215	83·7	93·8	+1·6	79·7	+0·4	86·8	+1·0	14·1	104·3	4th	75·8	5th	29·5
20	Bahraich	401	29·133	−·023	29·491	29·240	9th	28·996	28th	·244	83·7	93·6	+2·3	79·4	+0·6	86·5	+1·5	14·2	102·1	1st	74·3	14th	27·8
21	Cawnpore	416	29·129	+·008	29·500	29·236	9th	29·034	29th	·202	83·9	94·1	+1·6	78·8	?	86·5	?	15·3	103·4	1st	74·7	19th	28·7
	Mainpuri	516	29·033	+·006	29·500	29·137	9th	28·913	4th	224	85·8	97·4	+4·7	82·1	+2·6	89·8	+3·7	15·3	106·8	3rd	77·3	4th, 11th & 12th.	29·5

N. B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading

Note 2.—The data from which divisional means of the

* Mean of 29 days.

† Mean of 30 days.

—continued.

tations in India, Burma, etc., in July, 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1905.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July 1905.	Heaviest rainfall during month.	Station.
25 26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
3	1	4	9	7	3	3	1	S 20° E	3·0			3·3	91		·977		7·7		23	15·87	+7·13	27·40	10·36	+ 7·14	43·66	26·79	+16·87	9·62	Krishnagar.
3 3	1		9	9	5		1	S 11° E	3·8			3·4	86		·910		6·9		18	15·95	+2·05	19·07	12·56	+ 6·51	28·53	28·76	— 0·23	3·88	Midnapore.
9 1	1	6	2	2	5	5		S 5° W	4·3			3·8	85		·905		7·2		19	16·46	+2·54	15·67	12·87	+ 2·80	20·83	27·08	— 6·25	3·88	Bankura.
2 2	2	1	2	2	2	2	3	N 45° E	2·9			2·2	90		·947		7·4		17	16·39	+ 0·61	16·05	14·15	+ 1·90	25·24	27·85	— 2·31	4·72	Raniganj.
5 1	2	3	3	3	4			S 8° W	2·8	4·3	−35	2·8	89	+ 3	·962	+·020	8·1	−0·1	24	16·10	+7·90	34·14	12·48	+ 21·66	45·23	28·75	+16·48	11·78	Burdwan.
7 2	1	5	4	1			1	S 87° E	2·3			2·5	89†		·937†		6·5		18	18·72	−0·72	16·37	14·14	+ 2·23	22·86	27·70	— 4·90	3·36	Naya Dumka.
10		8	1	8	4			S 27° E	3·5	5·0	−30	3·0	91	− 1	·989	−·004	9·0	+0·2	24	15·71	+8·29	18·39	10·51	+ 7·88	26·08	25·46	+ 4·62	2·96	Berhampore.
19		2	4	6				S 17° W	4·6			4·7	88		·976		6·8		22	15·15	+6·85	18·72	11·46	+ 7·26	31·84	27·70	+ 4·14	5·00	Rampur Boalia.
1 3	3	7	7	5	3	1	1	S 59° E	8·3			7·6	90		·975		7·6		18	15·45	+2·55	11·91	11·07	+ 0·84	25·77	24·21	+ 0·56	2·10	Malda.
16		14		1				S 86° E	2·4			2·0	89	0	·950	−·029	8·1	−0·1	22	15·94	+6·26	9·99	12·64	− 2·65	29·71	33·58	− 3·87	1·62	Bogra.
2	7	9	8	3	1		1	S 77° E	4·8			4·5	89	− 1	·951	−·019	8·7	+0·3	20	16·38	+3·62	13·03	14·38	− 1·35	29·37	36·00	− 6·63	1·80	Dinajpur.
1 2	3	12	4	4	4	1		S 65° E	3·8			3·5	89		·966		6·0		14	15·42	−1·42	12·33	16·01	− 3·68	39·06	46·33	− 7·27	4·15	Rangpur.
7 1	5	10	6	2				S 83° E	2·0			2·5	88	− 4	·931	−·018	6·9	−1·6	19	20·16	−1·16	26·02	33·38	− 7·36	64·12	68·28	− 4·16	5·02	Jalpaiguri.
15	5	4	6				1	E	2·4			2·5	93		·966		8·6		18	18·79	−0·79	23·96	25·58	−1·62	88·38	72·99	+15·39	5·03	Cooch Behar.
5	13	3	3		3		4	N 48° E	4·3	2·9	+48	3·8	89	0	·968	−·013	6·9	−0·3	18	17·13	+0·87	13·39	14·56	− 1·17	21·92	29·35	− 7·43	3·65	Purnea.
2 1	1	1		2	19	4	1	S 51° W	7·1			5·3	84	− 4	·915	−·055	7·1	−1·1	18	14·94	+3·06	15·38	11·68	+ 3·70	21·77	28·97	− 7·20	3·93	Balasore.
				3	14	12	2	S 59° W	11·9	10·5	+13	12·4	86	− 1	·936	−·030	8·4	0	15	14·90	+0·10	9·63	11·89	− 2·26	13·73	25·42	−11·69	2·35	False Point.
8				2	14	4	3	S 58° W	3·4	3·2	+ 6		79	− 2	·873	−·018	7·7	+0·2	12	16·13	−4·13	8·62	11·46	− 2·84	16·35	26·52	−10·17	3·16	Cuttack.
11					19	1		S 47° W	13·3*			12·1*	86		·957		6·8		10	11·74	−1·74	6·23	9·96	− 3·73	10·81	20·84	−10·03	1·80	Puri.
													83	−3	·912	−·018	6·8	−0·7				13·96	12·30	+ 1·66					V.—Gangetic Plain and Chota Nagpur.
	2	5		4	4	8	8	N 89° W	10·1	8·4	+20	9·0	82	− 5	·757	−·043	9·6	+0·2	23	18·74	+4·26	18·86	14·41	+ 4·45	19·74	25·85	− 6·11	2·33	Hazaribagh
1	2	2	2	2	5	11	6	S 89° W	7·6			9·0	89	+ 1	793	−·003	8·8	+0·8	21	19·10	+1·90	16·10	15·81	+ 0·29	20·60	28·25	− 7·65	2·58	Ranchi.
19	2	2	1		6	1		S 14° W	5·0			4·0	83		·871		6·5		21	16·10	+4·84	13·38	12·51	+ 0·87	14·08	19·65	− 5·57	2·73	Daltonganj.
1 1	2	2	2	2	6	11	4	S 81° W	4·3			5·3	87		9·6		7·6		20	17·42	+2·58	25·33	12·23	+13·10	29·16	25·22	+ 3·94	4·53	Purulia.
15		1	1	1	6	6	1	S 61° W	4·5			3·9	87	+ 2	·880	−·018	7·5	−0·2	24	16·66	+7·32	20·18	12·34	+ 7·84	26·37	25·19	+ 1·18	2·97	Chaibassa.
5	5	1	2	1	10	7		S 53° W	4·0	2·9	+38	3·1	82	− 2	·934	+·005	7·0	−2·0	15	15·68	−0·68	12·15	13·67	− 1·52	13·04	22·08	− 9·04	2·58	Gaya.
1 2		6		4	7	10	1	S 59° W	7·5			6·6	79		·877		8·0		12	14·7.	−2·72	10·03	11·64	− 1·61	10·62	18·99	− 8·37	2·16	Dehri.
	3	13	2	1	1	8	3	N 81° E	7·6	3·6	+111	8·6	84	− 2	·959	−·011	7·9	−0·7	13	14·16	−1·16	13·47	12·66	+ 0·81	16·51	23·13	− 6·62	2·34	Patna.
19	3		1	1	5	2		S 45° W	2·9			2·9	81		·924		3·3		15	15·13	−0·13	9·74	13·35	− 3·61	11·49	21·77	−10·28	1·73	Arrah.
1 2	1	11	1	1	6	8		N 72° W	7·6			7·1	84		·921		7·4		13	14·39	−1·39	13·57	11·78	+ 1·79	14·04	18·04	− 4·00	2·15	Buxar.
10	4	8	3	3	1	2		S 73° E	2·0‡			1·8‡	87		·974		7·6		21	15·39	+5·61	21·70	12·22	+ 9·48	27·45	23·29	+ 4·16	3·13	Bhagalpur.
6 1	1	14	4	1	1	2	1	S 82° E	4·8	5·0	− 4	4·2	90	+ 2	994	+·025	7·7	+0·6	14	14·37	−0·37	20·62	11·81	+ 8·81	25·61	23·02	+ 2·59	4·65	Darbhanga.
9	1	9	7	2	1	1	1	S 63° E	4·5				89		·975		5·4		11	14·38	−3·39	12·23	11·90	+ 0·33	17·29	21·55	− 4·26	3·62	Muzaffarpur.
6 1	3	17	2		2			N 89° E	5·2			5·0	82		·935		5·3		17	12·48	+4·52	21·27	12·49	+ 8·78	29·64	24·04	+ 5·60	5·48	Motihari.
5 1	1	12	1	2	4	4	1	S 63° E	2·9			2·6	84		946		6·6		15	14·23	+0·77	10·10	11·29	−1·19	13·87	19·04	− 5·17	1·86	Chapra.
7 1	4	1	2		6	8	2	S 62° W	3·8	4·8	−21	4·3	80	− 6	·927	−·035	7·4	−0·6	11	14·60	−3·60	12·59	11·45	+1·14	14·25	18·32	− 4·07	2·29	Benares.
1	3	5		1	7	11	3	S 81° W	7·5	6·3	+19	6·2	78	− 6	·901	−·040	7·4	−0·8	13	13·30	−0·30	11·87	12·15	−0·33	12·41	18·86	− 6·45	4·79	Allahabad.
10	10	4	1		2	2	2	N 48° E	2·3	2·8	−18		84	− 2	·956	+·005	5·9	0	14	14·70	−0·70	13·22	13·75	−0·53	15·52	24·18	− 8·66	3·13	Gorakhpur.
7 1	3	4	2	3	6	3	2	S 15° W	3·5	3·9	−10	3·8	78	− 6	·908	−·033	6·1	−1·8	10	14·10	−4·10	10·58	11·53	−0·95	10·92	18·25	− 7·33	2·99	Lucknow.
5 1	1	6	6	3	3	3		S 35° E	3·3			3·1	83	− 2	·954	−·003	7·6	+0·9	12	12·80	−0·80	9·86	11·86	−2·00	12·54	20·34	− 7·80	2·36	Bahraich.
5	4	5	1	1	10	5		S 31° W	5·6				75	− 7	·869	−·072	4·4	−3·0	12	12·10	−0·10	8·15	10·96	−2·81	8·44	15·36	− 6·92	2·64	Cawnpore.
3	2	5	6	2	6	6	1	S 3° E	4·7			4·7	74	− 8	·911	−·017	5·0	−2·0	6	10·20	−4·20	2·10	8·75	−6·65	2·53	13·91	−11·38	0·75	Mainpuri.

or in the returns of any station, the data for that station are not utilized in calculating the provincial departures from normal.
figure columns Nos. 49, 42 and 44 are derived are incomplete.

* Mean of 30 days. † Mean of 29 days. ‡ Mean of 20 days.

Table

Abstract of Observations taken at 8 A.M. at 23

Number of District	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Upper Sub-Himalayas.			—·019								96·7	+2·1	80·6	+1·7	88·7	+1·9	16·1					33·2
24	Bareilly	568	28·968	—·011	29·495	29·085	21st	28·824	28th	·261	83·6	93·2	+1·6	79·3	+0·6	86·3	+1·1	13·9	101·9	2nd & 3rd.	79·6	12th	22·3
	Dehra Dun	2,233	27·366	—·010	29·529	27·506	1st	27·207	29th	·299	77·0	85·9	+0·4	73·6	−0·5	79·8	−0·1	12·3	90·5	27th	68·5	30th	22·0
	Roorkee	899	28·640	—·012	29·496	28·773	1st	28·483	4th	·290	83·0	93·5	+1·4	78·5	+0·3	86·0	+0·9	15·0	103·0	26th	74·6	12th, 13th & 31st.	28·4
22	Meerut	738	28·785	—·018	29·477	28·907	21st	28·633	4th	·274	84·3	95·8	+3·0	80·3	+0·9	88·1	+2·0	15·5	102·7	2nd, 3rd & 26th.	74·3	13th	28·4
28	Delhi	718	28·805	—·017	29·475	28·925	21st	28·673	29th	·252	86·5	96·7	+2·7	82·8	+2·1	89·8	+2·4	13·9	104·7	3rd	73·8	14th	30·9
28	Lahore	702	28·776	—·032	29·433	28·913	9th & 21st	28·593	5th	·320	83·1	101·0	+0·4	83·2	+3·8	92·1	+2·1	17·8	109·9	1st	73·2	12th & 14th.	36·7
27	Sirsa	662	28·838	—·019	29·452	28·938	12th	28·689	29th	·249	88·5	102·4	+1·9	84·3	+2·3	93·3	+2·1	18·1	109·3	4th & 8th.	72·1	12th.	37·2
	Patiala	*818*	28·689		29·472	28·845	21st	28·526	4th	·319	85·0	95·0		81·1		88·0		13·9	103·5	11th	75·0	14th & 15th.	28·5
29	Ludhiana	812	28·688	—·031	29·466	28·815	1st	28·518	23rd	·297	85·4	98·8	+1·8	82·3	+2·0	90·6	+1·9	16·5	107·0	11th	74·1	14th	32·9
	Sialkot	830	28·665	—·024	29·451	28·850	21st	28·482	29th	·368	87·5	101·2	+3·6	83·2	+3·7	92·2	+3·7	18·0	117·5	1st	71·6	14th	45·9
	Ambala	892	28·632	—·012	29·480	28·771	21st	28·458	4th	·313	84·0	96·0	+2·7	79·7	+0·9	87·9	+1·8	16·3	105·5	28th	70·2	29th	35·3
	Rawalpindi	1,674	27·847	—·024	29·463	27·989	1st	27·668	29th	·323	85·4	100·5	+3·2	79·1	+2·4	89·8	+2·8	21·4	114·5	6th	69·6	23rd	44·9
	VII.—Indus Valley and North-West Rajputana.			—·020								102·9	+2·1	83·6	+2·0	93·3	+2·1	19·3					37·1
32	Peshawar	1,110	28·386	—·028	29·454	28·514	1st	28·203	5th	·311	89·3	105·4	+2·5	81·7	+2·3	93·6	+2·4	23·7	116·0	6th	72·4	14th	43·6
	D. I. Khan	590	28·880	—·032	29·407	29·070	12th	28·680	5th	·340	89·7	104·5	+1·1	84·9	+2·4	94·7	+1·8	19·6	115·2	1st	70·1	14th	45·1
31	Khushab	612	28·873	—·004	29·443	29·011	12th	28·684	5th	·327	89·8	104·0	+1·4	84·9	+2·8	94·4	+2·1	19·1	115·3	1st	72·9	12th & 14th.	42·4
	Montgomery	558	28·912	—·011	29·425	29·016	9th	28·732	29th	·284	90·7	105·0	+0·3	86·3	+2·4	95·7	+1·4	18·7	116·8	1st	73·0	12th	43·8
	Multan	420	29·024	—·036	29·399	29·166	12th	28·855	5th	·311	90·2	106·7	+2·9	86·8	+3·1	96·8	+3·0	19·9	116·5	2nd	75·0	12th & 13th.	41·5
47	Jacobabad	186	29·243	—·045	29·386	29·357	10th	29·074	29th	·288	90·0	111·7	+3·9	85·5	+1·2	98·6	+2·6	26·2	121·5	6th	78·7	24th	42·8
	Hyderabad	96	29·401	—·014	29·449	29·501	10th	29·303	24th	·198	86·8	101·0	+2·1	82·4	+1·6	91·7	+1·9	18·6	111·2	24th	78·5	26th	32·7
	Kurrachee	30	29·518	—·013	29·498	29·602	10th	29·408	24th	·194	84·4	92·1	+1·5	81·5	+0·9	86·8	+1·2	10·6	95·9	2nd	78·7	28th & 30th.	17·2
51	Bikaner	*771*	28·742	—·014	29·467	28·833	18th	28·619	5th	·214	87·7	104·2	+3·8	84·4	+1·6	94·3	+2·7	19·8	111·9	1st	75·5	14th	36·4
	Pachpadra	*380*	29·158	—·002	29·488	29·268	10th	29·027	23rd	·241	86·7	99·3	+1·7	81·1	+1·4	90·2	+1·6	18·2	107·7	23rd	76·0	26th	31·7
	Jodhpur	782	28·772		29·525	28·874	10th	28·658	25th	·216	83·5	98·2		80·1		89·2		18·1	106·2	1st	75·3	26th	30·9
	VIII—East Rajputana, Central India and Gujarat.			+·003								91·8	+1·4	78·9	+1·1	85·4	+1·3	12·9					25·4
50	Jaipur	1,431	28·155	+·005	29·529	28·257	10th	28·054	5th & 29th.	·193	83·8	98·9	+5·4	79·8	+1·6	89·4	+3·5	19·1	107·6	1st	75·1	9th 25th & 26th.	32·5
	Bharatpur	585	28·949		29·487	29·029	12th	28·804	5th	·225	85·8	97·6		81·1		89·4		16·5	104·8	3rd	76·1	12th & 13th.	28·7
	Kotah	819?	28·727		29·536	28·841	10th	28·587	8th	·254	84·9	96·8		81·0		88·9		15·8	105·0	2nd & 3rd.	75·6	23rd	29·4
	Sambhar	1,254	28·316	+·008	29·518	28·415	10th	28·227	5th	·188	84·3	98·1	+3·8	79·8	+0·6	89·0	+2·2	18·3	108·5	1st	74·4	25th	34·1
	Ajmer	1,611	27·983	+·001	29·536	28·075	10th	27·879	5th	·196	82·0	94·8	+3·5	79·2	+1·9	87·0	+2·7	15·6	104·4	1st	74·1	28th	30·3
	Udaipur	1,925	27·693		29·555	27·806	10th	27·547	23rd	·259	78·6	87·7		75·3		81·5		12·4	96·0	2nd	71·8	24th	24·2
46	Bhuj	395	29·200	+·003	29·543	29·290	10th	29·006	24th	·284	81·9	90·0	0	78·7	+0·6	84·4	+0·3	11·3	100·3	1st	75·0	10th	25·3
	Jamnagar	61	29·554		29·560	29·654	10th	29·441	23rd	·213	83·8	91·4		79·4		85·4		12·0	97·1	18th	76·2	10th	20·9
	Rajkot	429	29·204	+·006	29·582	29·302	10th	29·045	23rd	·257	81·8	91·5	+0·9	76·7	+0·9	84·1	+0·9	14·8	98·4	18th & 21st.	70·8	5th	27·6
	Veraval	*18*	29·661	+·023	29·621	29·753	10th	29·512	24th	·241	81·3	83·2	−0·5	80·0	+0·8	81·6	+0·2	3·2	86·6	21st	76·8	23rd & 24th.	9·8
	Dwarka	37?	29·587		29·570	29·674	10th	29·459	24th	·215	83·2	86·6		81·0		83·8		5·6	90·9	1st & 2nd	78·8	4th	12·1
	Bhavnagar Para	55	29·597	?	29·596	29·697	10th	29·457	24th	·240	83·4	93·6	+0·1	79·2	+0·4	86·4	+0·3	14·4	99·6	17th	75·5	24th & 25th.	24·1
49	Nowgong	757	28·810	—·001	29·518	28·923	10th	28·676	7th	·247	82·9	92·5	+2·8	80·2	+2·1	86·4	+2·4	12·3	102·5	1st	76·0	19th	26·5
	Indore	1,823	27·833	+·014	29·608	27·954	10th	27·657	8th	·297	75·8	83·9	−0·6	72·6	0	78·3	−0·3	11·3	89·6	19th	69·1	23rd	20·5
	Neemuch	1,630	27·996	+·009	29·580	28·101	10th	27·874	23rd	·227	77·5	88·1	+0·7	74·4	+0·3	81·3	+0·5	13·7	94·0	6th & 7th.	70·7	4th & 23rd.	23·3
45	Surat	39	29·634	+·001	29·618	29·742	10th	29·521	8th	·221	81·6	85·7	−1·6	78·3	+1·0	82·0	−0·3	7·4	91·1	21st & 22nd.	71·5	1st	19·6

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or

Note 2.—The data from which divisional means of the figure

—continued.

tations in India, Burma, etc., in July, 1905—continued.

Wind Direction.										Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.								Heaviest rainfall during month.	Station.
Number of winds from									Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July 1905.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July 1905.		
N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.																						
5	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														73	— 5	·867	—·011	4·4	—1·4				5·71	10·73	—5·01					VI.—Upper Sub-Himalayas.
2			4	1		1	3		S 38° E	1·2	4·1	—71	1·1	80	— 5	·912	—·020	5·9	—0·7	11	13·45	—2·45	8·14	15·47	—7·33	9·33	22·19	—12·86	2·10	Bareilly.
9	2	4	7	5	1	1	2		S 88° E	1·6	1·2	+33		87	— 1	·812	+·005	7·7	—0·3	16	21·20	—5·20	11·77	28·58	—16·81	19·30	40·53	—21·23	2·91	Dehra Dun.
8	1			14	3	1	1	3	S 30° E	3·8	2·9	+31		77	— 5	·861	—·015	5·1	—1·3	11	11·90	—0·90	3·60	12·61	—9·01	5·99	18·74	—12·75	1·56	Roorkee.
10			6	5		2	7	1	S 24° W	1·0	2·3	—57	1·0	72	— 7	·862	—·024	4·9	—1·7	6	9·40	—3·40	6·50	9·35	—2·85	9·07	13·44	— 4·37	2·43	Meerut.
1			5	7	1	1	12	4	S 54° W	7·6	4·5	+69	6·7	68	— 7	·849	—·021	6·0	—0·3	4	9·20	—5·20	5·33	8·48	—3·15	6·32	12·61	— 6·29	2·90	Delhi.
7	1		3	12	4	1	3		S 83° E	3·6	3·3	+ 9		70	— 1	·927	+·050	2·4	— 1·9	3	3·30	—0·30	8·34	5·56	—2·62	3·93	8·87	— 4·94	2·54	Lahore.
2	2	2	1	9	1	9	3	2	S 18° W	4·9	4·8	—17	3·4	66	— 1	·878	+·021	1·6	—4·3	4	5·00	—1·00	2·76	4·14	—1·44	2·93	6·64	— 3·71	2·25	Sirsa.
1	1	1	4	13	4	1	5	1	S 34° E	6·9			7·0	74		·896		4·1		7			5·58			6·72			1·60	Patiala.
18		1		7		2		3	S 31° E	1·5	2·0	—25	1·3	68	— 8	·820	—·073	3·9	—2·5	8	7·60	+0·40	4·59	9·27	—4·68	5·07	12·90	— 7·83	1·80	Ludhiana.
6	1	2	10	10	1			1	S 75° E	3·7	2·5	+48	3·3	69	— 5	·908	+·028	2·6	—1·3	8	9·00	—1·00	7·11	8·01	—0·90	8·41	12·12	— 3·71	2·14	Sialkot.
5			2	20		2		2	S 43° E	3·6			3·2	79	— 7	·917	—·020	4·8	—0·9	8	9·80	—1·80	4·24	7·65	—3·41	5·18	14·67	— 9·49	1·87	Ambala.
15	1	2	5	4	2		1	1	S 77° E	3·6	2·1	+71	3·3	63	— 9	·756	—·052	4·0	—0·2	8	9·10	—1·10	5·60	8·53	—2·93	6·67	12·01	— 5·34	2·35	Rawalpindi.
														65	— 3	·859	—·003	2·7	—1·9				1·07	3·02	—1·95					VII.—Indus Valley and North-West Rajputana.
13	8	2	2					6	N 3° W	1·8	4·4	—59	2·0	56	— 7	·765	—·033	1·2	— 2·0	1	2·10	—1·10	0·12	1·66	—1·54	1·96	2·71	— 0·75	0·12	Peshawar.
14	1	8		7		1			N 84° E	2·1	2·4	—13	2·2	69	0	·965	+·053	1·1	—1·3	3	3·10	—0·10	2·27	2·38	—0·11	2·68	3·37	— 0·69	0·82	D. I. Khan.
3	2	14	7	2	2		1		N 64° E	10·3			9·9	59	— 6	·824	—·023	1·6	—1·1	4	3·50	+0·50	2·61	4·52	—1·91	3·91	7·02	— 3·11	1·65	Khushab.
2		2	2	5	9	10	1		S 3° W	10·9			10·1	54	— 6	·764	—·074	1·1	—1·8	4	3·20	+0·80	2·68	2·48	+0·20	3·32	3·89	— 0·57	1·67	Montgomery.
4	1	1	1	4	5	15			S 20° W	2·9	3·4	—15	2·6	62	0	·871	+·021	1·3	—0·8	1	2·50	—1·50	1·25	2·41	—1·16	1·55	3·33	— 1·78	1·14	Multan.
3		2	8	10	6	1		1	S 52° E	6·2	5·3	+17	6·4	64	— 1	·897	—·006	0·8	—1·8	1	1·60	—0·60	0·46	1·22	—0·76	0·46	1·47	— 1·01	0·42	Jacobabad.
					6	21	4		S 42° W	16·4	13·9	+18	14·6	67	0	·863	+·018	1·9	—4·1	2	3·30	—1·30	0·34	2·70	—2·36	0·34	3·26	— 2·92	0·23	Hyderabad.
						7	21	3	S 81° W	17·8	17·8	0	17·6	80	— 2	·941	—·016	8·5	+1·2	1	3·00	—2·00	0·13	3·66	—3·53	0·13	4·37	— 4·24	0·13	Kurrachee.
			2	5	5	13	5	1	S 29° W	13·1	6·7	+96		65	— 1	·848	+·004	2·5	—1·9	2	4·90	—2·90	0·40	3·39	—2·99	0·64	5·97	— 5·33	0·26	Bikaner.
	1	2	1		9	15	2	1	S 33° W	12·1	9·8	+23	10·5	74	— 6	·913	—·011?	2·3	—5·3	2	5·40	—3·40	0·49	4·63	—4·14	0·69	16·75	— 6·06	0·27	Pachpadra.
			1	3	3	16	7	1	S 45° W	10·6			9·5	69		·801		7·9		3	5·30	—2·30	1·07	4·19	—3·12	1·67	5·95	— 4·28	0·47	Jodhpur.
														79	— 4	·859	—·018	7·0	— 0·1				8·69	10·08	—0·72					VIII.—East Rajputana, Central India and Gujarat.
	1	3	4	1	2	16	4		S 38° W	6·8	6·2	+10		67	— 9	·770	—·068	7·0	+0·2	2	10·90	—8·90	0·40	8·66	—8·26	0·79	11·81	—11·02	0·23	Jaipur.
8			3	2	1	6	11		S 58° W	6·5			5·9	78		·959		3·5		5			5·30			5·79			3·95	Bharatpur.
2	2	1			1	10	12	3	S 81° W	7·5			6·0	65		·776		5·5		6	10·90	—4·90	2·30	9·85	—7·55	2·40	14·53	—12·13	1·20	Kotah.
1	1	1	3	2	2	1	17	3	S 89° W	10·3	9·1	+19		68	— 5	·807	—·014	6·7	+0·5	2	8·80	—6·80	1·40	7·23	—5·83	1·55	9·57	— 7·62	1·05	Sambhar.
		2	1	2	2	12	9	2	S 55° W	13·5	6·9	+96	11·8	75	— 5	·816	—·022	6·8	+1·2	3	9·50	—6·50	1·62	7·42	—5·80	2·03	10·51	— 8·48	1·05	Ajmer.
4	1	1		2	2	13	7	1	S 55° W	8·2			7·2	81		·794		7·5		10	9·50	+0·50	10·59			12·29			3·96	Udaipur.
						9	7	15	N 80° W	23·8	16·6	+43	20·9	84	— 4	·906	+·030	5·9	—1·8	8	6·20	+1·80	4·76	7·47	—2·71	4·76	9·59	— 4·83	1·43	Bhuj.
					8	21	7		S 51° W	24·1			23·6	76		·979		5·9		5			6·03			6·11			1·83	Jamnagar.
						16	15		S 67° W	18·8	14·5	+30	18·6	79	— 4	·844	—·029	7·8	—0·2	9	11·20	—2·20	14·06	13·31	+0·75	14·80	18·65	— 3·85	10·39	Rajkot.
						20	11		S 61° W	15·1	14·8	+ 2	15·1	89	+ 1	·939	+·007	6·4	—2·2	7	10·90	—3·90	6·22	7·24	—1·02	6·26	12·49	— 6·23	3·05	Veraval.
					3	26	2		S 44° W	22·0				85		·978		8·5		6			2·14			2·15			0·63	Dwarka.
						26	3	2	S 54° W	17·1			15·6	74	— 6	·837	—·085	8·1	+0·5	7	10·20	—3·20	10·39	4·78	+5·66	10·89	9·95	+ 0·54	7·42	Bhavnagar Para.
	2	2	2	2	2	2	19		S 81° W	8·9	4·2	— 7	8·9	75	— 8	·846	—·039	7·6	+0·6	9	14·80	—5·80	5·70	14·20	—8·50	6·22	22·68	—16·46	1·24	Nowgong.
			1	2	7	19	1		S 75° W	11·2	6·8	+65	9·1	86	— 1	·777	—·005	9·6	+0·9	12	12·50	—0·50	17·64	9·00	+8·64	20·54	15·94	+ 4·60	5·79	Indore.
	1	1			2	13	13	1	S 69° W	17·3	12·2	+42	14·5	82	0	·782	—·018	8·1	+1·3	7	10·10	—3·10	4·19	8·96	—4·77	4·38	14·36	— 9·98	2·15	Neemuch.
		1	2	1	6	13	5	8	S 52° W	15·5	15·7		14·6	92	+ 6	·992	+·079	7·9	—0·1	12	16·10	—4·10	15·44	17·68	—2·24	16·96	27·43	—10·4	5·48	Surat.

In the returns of any station, the data for that station are not utilized in calculating the provincial departures from normal.
columns Nos. 40, 42 and 44 are derived are incomplete.

Table

Abstract of Observations taken at 8 A.M. at 23

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
45	Ahmedabad	163	29·458	−·016	29·569	29·567	10th	29·262	23rd	·305	81·6	91·0	−0·4	78·3	+0·1	84·8	−0·2	12·7	100·3	1st	73·6	25th	26·7
	Deesa	466	29·127	−·009	29·544	29·229	18th	28·915	24th	·314	81·7	92·9	+1·2	78·8	+1·2	85·9	+1·2	14·1	106·6	2nd	73·5	26th	33·1
22	Agra	555	28·987	−·005	29·497	29·090	21st	28·830	5th	·260	85·9	96·0	+2·7	82·7	+2·3	89·4	+2·5	13·3	106·0	1st	76·4	12th & 13th.	29·8
21	Jhansi	858	28·714	+·001	29·521	28·819	10th	28·598	5th	·221	83·7	95·3	+4·1	80·9	+2·1	88·1	+3·1	14·4	104·8	1st	75·1	12th	29·7
	IX.—Deccan			+·009								87·7	+1·1	73·9	+0·7	80·8	+0·9	13·8					23·6
38	Belgaum	2,539	27·279	+·025	29·763	27·354	10th	27·212	7th	·142	70·6	76·1	+0·4	67·8	+0·9	72·0	+0·7	8·3	81·3	11th & 12th.	66·8	27th	14·5
	Sholapur	1,590	28·170	+·009	29·707	28·259	10th	28·082	7th	·177	78·7	91·0	+1·5	73·3	+1·6	82·2	+1·6	17·7	97·2	17th	70·0	23rd	27·2
	Poona	1,840	27·916	+·015	29·709	28·014	10th	27·843	7th	·171	74·9	82·7	+0·4	71·8	+1·0	77·3	+0·7	10·9	87·5	1st & 11th	70·4	6th, 24th & 28th.	17·1
	Bijapur	*1,948*	27·831	+·010	29·724	27·932	10th	27·756	21st	·176	76·7	88·7	+2·5	71·2	+0·4	80·0	+1·5	17·5	95·4	11th	69·2	23rd	26·1
40	Malegaon	1,430	28·252	−·002	29·634	28·358	10th	28·131	22nd	·227	78·0	86·3	−1·1	73·7	+0·4	80·0	−0·4	12·6	93·9	18th	71·0	23rd	22·9
	Ahmednagar	2,154	27·601	+·021	29·695	27·698	10th	27·515	22nd	·183	76·1	85·4	+0·2	70·9	+0·4	78·2	+0·3	14·5	90·9	18th	68·0	21st	22·9
41	Akola	930	28·745	+·008	29·623	28·865	10th	28·634	22nd	·231	80·2	89·8	+0·8	74·9	+0·6	82·4	+0·7	14·9	96·9	17th & 18th.	71·8	25th	25·1
	Amraoti	1,215	28·456	+·015	29·623	28·568	10th	28·333	7th	·235	78·6	88·6	+1·3	75·0	+1·5	81·8	+1·4	13·6	96·2	19th	71·5	1st	24·1
42	Khandwa	1,044	28·600	−·002	29·602	28·721	10th	28·391	22nd	·330	78·5	86·8	−0·8	75·3	0	81·1	−0·4	11·5	94·2	18th	72·6	8th, & 24th.	21·6
	Hoshangabad	1,006	28·63	+·009	29·596	28·768	10th	28·417	8th	·351	79·2	87·9	+1·2	75·9	+0·7	81·9	+1·0	12·0	93·3	19th	73·7	8th	19·6
	Nagpur	1,025	28·626	+·018	29·606	28·739	10th	28·495	7th	·244	79·3	88·6	+0·8	75·3	+0·3	82·0	+0·6	13·3	95·1	11th & 19th.	71·6	8th	23·5
43	Chanda	*634*	29·068	P	29·646	29·177	10th	28·944	7th	·233	81·5	90·9	+2·3	76·6	+0·7	83·8	+1·5	14·3	98·2	17th	71·0	8th	27·1
	Seoni	2,033	27·615	+·008	29·588	27·733	10th	27·427	7th	·306	76·2	84·9	+1·1	73·5	+0·9	79·2	+1·0	11·4	90·8	17th & 19th.	70·0	7th	20·6
	Jubbulpore	1,327	28·280	+·009	29·561	28·409	10th	28·058	7th	·351	78·4	87·3	+1·4	74·9	+0·3	81·1	+0·9	12·4	98·0	1st	72·1	8th	25·9
	Saugor	1,807	27·804	+·002	29·554	27·926	10th	27·634	7th	·292	78·1	87·9	+2·7	74·3	+0·4	81·1	+1·6	13·6	99·4	1st	71·6	8th & 23rd.	27·8
49	Sutna	1,040	28·524	−·001	29·520	28·636	9th	28·320	7th	·316	81·0	90·2	+2·8	78·7	+1·7	84·5	+2·3	11·5	100·0	1st & 4th	75·6	8th & 13th.	24·4
44	Raipur	970	28·651	+·009	29·571	28·758	9th	28·502	7th	·256	78·3	86·3	−0·2	73·8	−1·1	80·1	−0·7	12·5	91·1	17th	70·4	19th	20·7
	Pendra	2,123?	27·577		29·543	27·701	9th	27·374	7th	·327	76·5	84·3		73·5		78·9		10·8	89·8	17th	68·6	8th	21·2
	Sambalpur	486	29·115	−·005	29·548	29·238	9th	28·941	6th	·297	80·1	87·1	−0·4	77·3	0	82·2	−0·2	9·8	93·1	18th	73·6	19th	19·5
39	Aurangabad	1,905	27·810		29·656	27·904	10th	27·717	8th	·187	75·9	86·4		70·8		78·6		15·6	91·8	18th & 21st.	68·2	10th & 26th.	23·6
	Indur	1,260	28·521?		29·731?	28·569	2nd	28·465	30th	·104	80·0	89·6		72·8		81·2		16·8	98·0	17th	68·2	7th & 8th.	29·4
	Bidar	*2,165*	27·620?	*	29·723?	27·699	10th	27·545	7th	·154	76·7	88·8		71·3		80·1		17·5	95·7	13th	69·0	26th	26·7
* 53	Gulbarga	1,503	28·248	P	29·702	28·349	10th	28·175	21st	·174	77·1	91·0	+1·2	72·1	+0·3	81·6	+0·8	18·9	97·1	13th	70·5	6th & 29th.	26·6
	Raichur	1,326?	28·451	+·013	29·727	28·522	10th	28·379	6th	·143	78·5	92.0	+1·9	73·6	+0·5	82·8	+1·2	18·4	96·1	9th	70·1	21st	26·0
	Hyderabad (Dn.)	1,690	28·058	+·016	29·694	28·146	10th	27·967	7th	·179	79·9†	89·9†	+2·8†	74·2†	+2·5†	82·1†	+2·7†	15·7	96·4	16th	72·2	27th	23·1
	Hanumkonda	571	28·837		29·651	28·917	10th	28·734	21st	·183	81·7	91·3		77·8		84·5		13·5	97·4	16th	73·3	1st	23·1
	X.—West Coast			+·024								84·6	+1·5	76·8	+1·4	80·7	+1·5	7·9					13·6
37	Bombay	37	29·709	+·007	29·686	29·809	10th	29·638	24th	·171	81·6	85·3	+0·9	78·9	+1·4	82·1	+1·2	6·4	88·0	10th, 11th & 12th.	75·5	24th	12·5
	Ratnagiri	110	29·663	+·026	29·742	29·766	10th	29·624	21st	·142	81·3	85·0	+1·1	77·3	+1·6	81·2	+1·4	7·7	87·3	10th, 11th & 12th.	70·9	19th	16·4
	Mormugao*	*60*	29·783	+·032	29·778	29·843	13th	29·719	21st	·129		86·3	+2·6	78·0	+1·8	82·2	+2·2	8·3	88·5	6th & 13th.	74·9	18th	13·6
	Goa	199	29·625	P	29·762	29·701	12th	29·565	21st	·136	81·7	84·0	+1·6	78·5	+2·5	81·3	+2·1	5·5	86·0	5 days	75·0	1st	11·1
	Karwar	44	29·816	+·030	29·794	29·873	12th	29·758	21st	·115	81·2	84·7	+1·7	76·8	+1·7	80·8	+1·7	7·9	86·7	5th	73·5	8th	13·2
33	Cochin	10	29·920	+·025	29·858	29·953	25th	29·888	20th	·065	79·0	85·6	+2·1	75·2	+1·1	80·5	+1·6	10·4	87·8	3rd & 9th	70·7	24th	17·1
	Calicut	27	29·888	+·023	29·844	29·929	2nd	29·846	30th	·083	78·3	83·8	+1·3	75·1	+1·2	79·5	+1·3	8·7	87·3	7th	73·2	17th & 26th.	14·1
	Mangalore*	65	29·825	+·018	29·822	29·872	10th & 13th.	29·772	21st	·100	78·9	84·5	+1·5	75·3	+1·1	79·9	+1·3	9·2	86·7	15th	72·9	5 days	13·6
	Trivandrum	198	29·722	+·028	29·852	29·757	12th	29·682	6th	·075	77·7	82·6	+0·5	75·8	+0·6	79·2	+0·6	6·8	84·5	11th & 14th.	74·0	15th & 25th.	10·5

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any stati
Note 2.—The data from which divisional means of the figure columns Nos. 40,

* Mean of 30 days.
† Mean of 28 days.

—continued.

Stations in India, Burma, etc., in July, 1905—continued.

Wind Direction. Number of winds from									Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July 1905.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July 1905.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
					6	18	6	1	S 47° W	7·2			6·2	83	0	·892	+·002	9·2	+0·4	11	13·50	−2·50	37·50	12·59	+24·91	38·13	19·36	+18·77	14·27	Ahmedabad.
					10	17	3	1	S 36° W	18·0	14·5	+24		80	−3	·860	−·006	9·1	+0·6	11	10·73	+0·27	17·93	10·16	+7·77	17·96	12·68	+5·28	7·06	Deesa.
1				8		19		3	S 30° W	7·8	5·0	+56	9·2	68	−11	·841	−·081	5·3	−1·7	7	10·80	−3·80	4·00	10·60	−6·60	4·93	14·06	−9·13	1·61	Agra.
1	1	4	1	1	1	12	7	3	S 72° W	8·4	4·1	+105	10·2	86	P	·879	P	4·3	−2·2	7	13·10	−6·10	6·18	12·12	−5·94	7·16	18·59	−11·43	1·90	Jhansi.
														78	−3	·754	−·007	7·2	−0·6				8·44	11·05	−2·46					IX.—Deccan.
						17	14		S 65° W	24·7	27·9	−11		92	−1	·695	+·013	9·0	−0·3	22	21·80	+0·20	12·56	15·46	−2·90	19·64	26·39	−6·75	1·58	Belgaum.
						22	9		S 58° W	15·7	12·3	+28	19·9	69	−3	·682	+·001	7·5	−0·6	4	7·60	−3·60	2·20	4·19	−1·99	5·65	9·55	−3·90	0·86	Sholapur.
							31		W	18·6	16·9	+10		81	−1	·705	−·004	8·4	−0·4	15	12·50	+2·50	13·81	7·05	+6·76	18·73	13·11	+5·62	4·50	Poona.
					1	4	19	2	S 84° W	17·2			16·9	77	−3	·706	+·008	7·5	−0·6	1	5·10	−4·10	0·17	2·02	−1·85	2·47	7·36	−4·89	0·14	Bijapur.
						11	20		S 74° W	13·9	11·8	+18	16·0	76	−2	·741	−·014	6·4	−1·3	6	7·30	−1·30	4·31	5·00	−0·69	6·69	10·17	−3·48	0·78	Malegaon.
						9	21	1	S 79° W	12·2			14·9	75	−	·674	−·042	4·6	−3·2	5	6·40	−1·40	2·62	2·84	−0·22	5·71	8·86	−3·15	0·96	Ahmednagar.
						9	12	10	N 88° W	11·3	8·4	+35	9·9	76	−3	·779	−·003	8·3	+0·4	7	12·30	−5·30	7·62	10·57	−2·95	9·85	16·20	−6·35	3·03	Akola.
					1	9	20	1	S 76° W	11·6	7·6	+53	10·4	84	−2	·828	+·034	6·4	−1·4	9	12·30	−3·30	9·62	9·88	−0·26	11·40	17·33	−5·93	3·27	Amraoti.
6						2	13	10	N 75° W	11·5	8·4	+37	10·9	78	−3	·760	−·026	6·5	−1·0	11	11·10	−0·10	16·11	8·89	+7·22	19·19	15·05	+4·14	5·95	Khandwa.
					3	21	4	3	S 53° W	6·4	4·5	+42	6·5	85	−3	·838	−·014	7·7	−0·7	12	16·10	−4·10	20·76	16·82	+3·94	21·57	28·15	−2·58	7·19	Hoshangabad.
	1					8	17	5	S 88° W	11·7	10·1	+16	9·2	78	−5	·786	−·039	6·6	−1·8	11	15·80	−4·80	13·50	14·66	−1·16	21·35	23·90	−2·55	3·74	Nagpur.
				2	11	16	2		S 71° W	10·4	6·2	+68	9·3	80	+2	·873	+·077	5·8	−2·2	10	16·80	−6·80	5·42	18·08	−12·66	9·64	28·50	−16·86	2·24	Chanda.
	2	1		1	1	9	10	7	S 89° W	9·7	6·2	+56	8·1	83	−4	·740	−·049	8·0	−0·2	14	18·60	−4·60	12·28	17·09	−4·81	17·72	27·72	−10·00	4·18	Seoni.
1	1	1	1	1	3	6	13	4	S 79° W	6·0	5·0	+20	5·2	85	−2	·827	−·001	8·1	0	13	18·40	−5·40	18·63	20·15	−1·52	21·07	30·20	−9·13	7·50	Jubbulpore.
	1	1	1	2		6	19	1	S 81° W	12·2	5·1	+139	10·9	79	−8	·758	−·050	8·1	+0·9	11	16·50	−5·50	6·18	15·27	−9·09	6·83	24·56	−17·73	1·93	Saugor.
3	1	1	5	2	1	8	9	1	S 56° W	7·4	9·4	−21	6·8	80	−3	·844	−·014	9·4	+2·3	12	15·00	−3·00	7·88	14·28	−6·40	8·57	21·98	−13·41	1·42	Sutna.
2				1	1	25	2		S 44° W	10·0	11·6	−14	12·0	88	+2	·842	+·001	7·8	−0·8	17	15·80	+1·20	16·84	15·89	+0·95	18·78	25·71	−6·93	2·32	Raipur.
3	2	1	1	2	5	5	6	6	S 74° W	6·4			5·4	83		·759		8·7		15			10·16			15·51			1·92	Pendra.
		1		2	2	18	6	2	S 52° W	6·5	3·6	+81	6·4	84	−2	·868	−·022	9·0	+0·8	21	19·50	+1·50	18·18	22·82	−4·64	22·94	35·79	−12·85	5·30	Sambalpur.
					2	20	9		S 55° W	18·6			18·4	78		·700		7·9		8	11·60	−3·60	4·68	6·82	−2·14	6·55	13·81	−7·26	1·85	Aurangabad.
2		1				2	1	25	N 48° W	4·9			4·1	65		·666		4·9		8	15·70	−7·70	3·12	11·11	−7·99	5·91	16·15	−10·24	0·91	Indur.
					1	19	11		S 60° W	12·0			10·1	77		·705		3·7		4	12·60	−8·60	1·00	8·80	−7·80	6·46	15·54	−9·08	0·27	Bidar.
	1					1	23	6	N 80° W	11·3			10·0	78	−1	·730	+·012	6·6	−1·6	7	9·10	−2·10	2·80	5·31	−2·51	8·24	12·18	−3·94	0·93	Gulbarga.
						24	7		S 55° W	17·0			17·0	73	−2	·720	+·007	5·7	−0·9	6	9·20	−3·20	3·30	5·53	−2·23	12·23	9·37	+2·86	1·25	Raichur.
3							28		W	10·1			10·1	73†	−5	·690†	−·018	7·3	−0·2	6			2·66	6·73	−4·07	8·30	12·09	−3·79	1·17	Hyderabad (Dn.)
					10	16	5		S 86° W	12·7			11·2	63		·689		6·3		6	12·50	−6·50	3·00			11·40			0·91	Hanumkonda.
														85	−3	·875	+·016	7·6	−0·9				16·05	28·58	−12·53					I.—West Coast.
						14	17		S 70° W	15·1	19·1	−21		85	−1	·922	+·011	9·2	+0·2	21	23·00	−2·00	17·15	26·05	−8·90	21·83	46·39	−24·56	3·24	Bombay.
						20	10	1	S 62° W	16·2	13·7	+18	16·0	86	−2	·911	+·020	8·4	−0·3	23	25·90	−2·90	21·21	35·68	−14·47	33·06	67·33	−34·27	3·40	Ratnagiri.
	19							11	N 16° W	13·2								7·6	0	22			10·87	31·88	−21·01	44·04	58·08	−14·04	1·25	Mormugao.
1						8	19	3	S 82° W	12·2				82	−6	·891	+·004	7·8	−1·3	24			10·89	32·68	−21·79	38·70	63·73	−25·03	1·65	Goa.
				1	2	22	5	1	S 50° W	8·4				79	−7	·835	−·007	6·8	−1·2	26	27·40	−1·40	12·71	37·78	−25·07	51·15	77·04	−25·89	1·63	Karwar.
2	2	3	3	5	1	4	9	2	S 67° W	8·7				85	−3	·858	+·023	6·6	−1·7	19	23·40	−4·40	13·45	21·21	−7·76	53·53	62·59	−9·06	2·10	Cochin.
12	4	2		2		2	5	4	N 50° W	6·5			6·5	90	−1	·870	+·038	7·5	−1·1	27	26·20	+0·80	26·67	29·05	−2·38	72·09	72·44	−0·35	2·85	Calicut.
3		2	1	1		4	12	7	N 80° W	7·0	3·2	+118		89	−2	·885	+·024	7·9	−1·1	25	27·80	−2·80	27·95	36·03	−8·08	87·52	78·91	+8·61	3·75	Mangalore.
	10						2	19	N 33° W	8·9				85	−3	·827	+·016	6·8	−1·7	11	13·10	−2·10	3·56	6·86	−3·30	45·61	28·36	+17·25	0·86	Trivandrum.

the data for that station are not utilized in calculating the provincial departures from normal.
and 44 are derived, are incomplete.

Table

Abstract of Observations taken at 8 A.M. at 233

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XI.—South India	. .		+·019								93·5	+2·8	76·2	+1·2	84·8	+2·0	17·3					25·6
57	Pamban . .	37	29·815	+·018	29·779	29·882	2nd	29·781	5th & 6th.	·101	84·7	92·8	+3·7	81·0	+1·5	86·9	+2·6	11·8	93·8	4 days	79·2	17th, 19th & 28th.	14·6
	Tinnevelly . .	168	29·694	+·023	29·790	29·754	2nd	29·644	17th	·110	85·9	96·6	+0·8	80·0	+0·6	88·3	+0·7	16·6	100·3	4th & 11th.	76·9	21st	23·4
	Madura . .	447	29·403	+·029	29·783	29·469	12th	29·351	21st	·118	85·2	99·9	+2·7	77·9	+1·5	88·9	+2·1	22·0	103·0	4th & 10th.	72·5	7th	30·5
	Periyakulam .	944	28·915		29·797	28·958	10th	28·869	6th	·089	80·6	95·4		71·1		82·2		24·3	99·5	25th	65·7	7th	33·8
34	Salem . .	940	28·932	+·016	29·812	28·991	2nd	28·873	20th	·118	80·3	96·7	+3·6	74·5	+1·5	85·6	+2·6	22·2	100·2	9th	70·4	31st	29·8
	Coimbatore .	1,349	28·511	+·020	29·819	28·567	2nd	28·456	21st	·111	77·3	88·9	+0·9	71·6	+0·9	80·3	+0·9	17·3	91·4	5th & 6th.	69·3	16th & 17th.	22·1
35	Mercara . .	3,781	26·178	+·011	26·112	26·245	2nd	26·123	21st	·122	64·7	69·8	+0·9	62·4	+0·2	66·1	+0·6	7·4	73·0	11th & 12th.	61·1	6th, 17th & 20th.	11·9
36	Chitaldroog .	2,405	27·428	+·016	29·781	27·510	10th	27·382	7th	·128	73·5	84·1	+2·2	69·2	+0·8	76·7	+1·5	14·9	89·1	11th & 17th.	66·9	18th & 25th.	22·2
	Bangalore . .	3,021	26·879	+·017	29·823	26·940	10th	26·825	20th	·115	70·5	84·0	+2·1	66·1	+0·3	75·1	+1·2	17·9	89·3	10th & 11th.	63·3	6th	26·0
	Hassan . .	3,091	26·831	P	29·842	26·885	10th	26·786	20th	·099	70·5	79·5	+2·7	65·4	+0·5	72·5	+1·6	14·1	88·2	5th	63·9	25th	24·3
	Mysore . .	2,518	27·384	+·019	29·846	27·441	10th	27·327	20th	·114	72·4	82·4	−0·3	66·8	0	74·7	−0·2	15·5	86·5	11th & 17th,	65·0	14th	21·1
56	Negapatam .	31	29·797	+·011	29·756	29·860	2nd	29·754	5th	·106	84·2	99·8	+3·9	80·0	+1·8	89·9	+2·9	19·8	104·4	17th & 19th.	77·0	7th	27·4
	Cuddalore . .	37	29·786	+·026	29·752	29·853	2nd	29·732	20th	·121	85·3	100·0	+4·1	79·3	+1·6	89·7	+2·9	20·7	103·2	4 days	73·7	31st	29·5
	Trichinopoly .	255	29·586	+·017	29·773	29·645	2nd	29·534	20th	·111	83·9	99·4	+1·9	78·6	+0·7	89·0	+1·3	20·8	103·1	10th	76·4	16th	26·7
	Madras . .	22	29·773	+·007	29·725	29·834	2nd	29·699	20th	·135	86·2	100·7	+5·0	80·4	+1·7	90·6	+3·4	20·3	105·0	4th	75·5	11th & 30th.	29·5
	Vellore . .	707	29·100		29·744	29·162	10th	29·025	20th	·137	83·1	91·8		78·1		84·9		13·7	98·4	1st & 5th.	75·1	10th & 15th.	23·3
55	Nellore . .	52	29·728	+·035	29·713	29·793	10th	29·648	20th	·145	87·8	100·4*	+3·1*	81·5*	+1·9*	91·0*	+2·5	18·9	104·3	17th	76·6	30th	27·7
	Masulipatam .	15	29·723	+·021	29·672	29·800	2nd	29·628	20th	·172	85·6	98·0	+5·3	80·9	+2·8	89·5	+4·1	17·1	103·7	17th	77·1	31st	26·6
54	Cuddapah . .	433	29·366	+·020	29·735	29·434	13th	29·299	21st	·135	84·4	99·7	+4·4	78·8	+0·8	89·3	+2·6	20·9	104·2	6th	73·8	11th	30·9
	Kurnool . .	923	28·854	+·012	29·723	28·937	10th	28·781	7th	·156	80·7	94·5	+3·1	75·6	+0·9	85·1	+2·0	18·9	99·2	11th & 18th,	72·6	20th	26·6
	Bellary . .	1,475	28·319	+·011	29·737	28·396	10th	28·252	7th	·144	80·1	94·0	+3·1	75·9	+1·3	85·0	+2·2	18·1	99·0	10th & 11th.	74·2	18th & 21st,	24·8
52	Cocanada . .	26	29·680	+·023	29·642	29·776	9th	29·556	20th	·220	84·8	95·3	+3·6	80·8	+1·5	88·1	+2·6	14·5	101·6	16th & 18th.	76·5	30th & 31st.	25·1
	Waltair (Vizag.)	*226*	29·417	+·018	29·612	29·548	9th	29·315	20th	·233	82·7	90·2	P	79·1	P	84·7	P	11·1	98·4	4th	73·9	19th	24·5
	Gopalpur . .	72	29·553	+·015	29·566	29·673	9th	29·399	20th	·274	82·6	87·3	−0·1	79·3	+0·1	83·3	0	8·0	94·2	24th	74·5	19th & 20th.	19·7
	XII.—Hill Stations . .																						
48	Pishin . .											98·3		64·7		81·6		33·6	105·4	9th	58·1	4th & 5th.	47·3
	Quetta . .	5,502	24·425	−·001	24·385	24·541	1st	24·244	29th	·197	77·5	94·1	+1·4	63·4	−1·3	78·8	+0·1	30·7	99·1	8th & 9th,	54·9	4th	44·7
	Kalat . .										82·2	96·3	+3·2	53·8	+0·7	75·1	+2·0	42·5	105·9	7th	47·2	24th	58·1
	Chaman . .	4,311	25·436	−·003	25·398	25·560	1st	25·360	5th	·200	85·2	100·9	−0·6	73·2	−1·9	87·1	−1·3	27·7	107·7	7th	69·1	14th	38·1
30	Leh . . .	11,503	19·647	+·004	19·615	19·758	1st	19·529	13th	·229	55·	73·8	−4·4	47·8	−2·8	60·8	−3·6	26·0	82·2	11th	40·4	14th	41·8
	Srinagar . .	5,204	24·658	−·009	24·629	24·800	1st	24·547	28th	·253	71·8	88·2	+3·3	62·8	−1·8	75·6	+0·8	25·4	96·8	8th	51·2	10th	45·6
	Gulmarg . .	*8,569*	21·754		21·722	21·887	1st	21·363	29th	·224	63·9	72·2		49·1		60·7		23·1	80·6	8th	41·3	16th	39·3
	Sonemarg . .	*8,764*	21·751		21·719	21·884	1st	21·661	29th	·223	53·1	72·5		45·6		59·1		26·9	81·9	8th	40·1	5th & 16th,	41·8
	Skardu . .	*7,505*	22·679		22·649	22·818	1st	22·552	28th	·266	70·1	83·2		59·2		71·3		24·0	97·9	9th	53·2	15th & 31st.	44·7
	Dras . . .	*10,059*	20·723		20·691	20·859	1st	20·597	13th	·262	61·8	80·1		48·2		64·2		31·9	92·5	2nd	42·2	14th	50·3
	Gilgit . .	4,890	24·858		24·831	25·059	1st	24·694	5th	·365	81·5	97·2	+0·6	71·7	−1·6	84·5	−0·5	25·5	103·7	10th	60·1	15th	43·6
32	Chitral . .	*5,486*									81·4	99·4		66·8		83·1		32·6	105·2	8th, 9th & 11th.	60·0	15th	45·4
	Killa Drosh .	4,700?									79·5	97·6		73·2		85·4		24·4	105·2	8th	61·2	14th	44·0
	Para Chinar .	6,000	24·256		24·223	24·389	1st	24·133	29th	·256	77·2	89·9		67·7		78·8		22·2	98·3	6th	58·4	15th	39·9
	Cherat . .	*4,256*	25·469	−·013	25·437	25·608	1st	25·335	5th	·273	78·8	92·6	+4·0	73·8	+3·1	83·2	+3·6	18·8	102·4	6th	59·0	14th	44·0

N.B.—Elevations in italics indicate barometrical determinations.

* Mean of 30 days.

Note 1.—When a query is inserted against any reading or in the returns of a

Note 2.—The data from which divisional means of the figure columns Nos. 4

Note 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the elevatio

I—*continued.*

Stations in India, Burma, etc., in July, 1905—continued.

Wind Direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July 1905.	Normal rainfall for period 1st May to 31st July.	Departure from normal of period 1st May to 31st July 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														71	−3	·756	+·008	5·8	−1·3				1·72	3·14	−1·42					XI.—South India.
11					7	10	3		S 36° W	10·3			10·9	76		·901		2·7		0	0·60	−0·60	0	0·17	−0·17	1·03	0·84	+0·19	0	Pamban.
	1					7	15	8	N 86° W	10·8			10·4	52	−7	·649	−·048	5·1	−1·7	0	0·60	−0·60	0	0·27	−0·27	3·61	2·20	+1·41	0	Tinnevelly.
	2			1	3	7	18		N 62° W	8·2	4·6	+78	9·4	61	−3	·747	+·022	3·3	−1·9	0	3·00	−3·00	0·01	2·06	−2·05	4·59	5·96	−1·37	0·01	Madura.
14	5	4	1		1	1	5		N 5° W	4·4			4·8	61		·641		3·6		0	1·90	−1·90	0·14	0·69	−0·55	7·80	4·47	+3·33	0·07	Periyakulam.
1		1		3	14	12			S 60° W	6·5	4·7	+38	5·7	76	−2	·792	+·026	5·4	−1·0	4	7·00	−3·00	2·23	3·48	−1·25	10·03	11·46	−1·43	0·91	Salem.
					15	16			S 68° W	12·5	8·2	+52	11·5	76	−8	·720	−·028	4·7	−1·8	4	3·70	+0·30	0·68	12·3	−0·55	4·97	5·16	−0·19	0·19	Coimbatore.
	1				6	21	3		S 88° W	6·7	11·3	−41	6·2	92	−4	·579	−·008	9·9	+1·1	29	29·10	−0·10	30·85	40·35	−9·50	60·46	73·48	−13·02	4·29	Mercara.
					13	15	3		S 75° W	12·7			11·0	80	−2	·666	+·007	8·2	−1·1	5	8·60	−3·60	1·69	2·79	−1·10	7·58	10·33	−2·75	0·38	Chitaldroog.
					19	12			S 62° W	14·0	8·6	+63	12·5	83	−1	·623	+·004	8·1	−0·1	2	8·20	−6·20	2·32	4·06	−1·74	8·28	11·33	−3·05	1·25	Bangalore.
				1	12	14	4		S 74° W	5·3			4·6	86	+1	·649	+·026	9·0	+0·5	11	12·60	−1·60	5·36	3·85	+1·51	11·40	14·03	−2·63	1·42	Hassan.
				1	19	11			S 60° W	12·8			13·8	82	0	·645	+·013	8·5	0	8	7·30	+0·70	2·30	2·32	−0·02	9·90	9·50	+0·40	0·49	Mysore.
1	2				7	17	4		S 90° W	9·9	7·1	+39	8·7	65	−2	·775	−·002	3·9	−1·9	1	3·50	−2·50	0·18	1·88	−1·70	2·41	4·99	−2·58	0·18	Negapatam.
				6	19	6			S 45° W	4·5			5·6	68	−9?	·830	−·042?	4·4	−2·1	3	5·50	−2·50	3·12	3·53	−0·41	5·79	5·81	−0·02	2·48	Cuddalore.
3	1			5	10	9	3		S 63° W	9·7	9·9	−2		60	−2	·695	−·003	4·4	−2·7	1	1·90	−0·90	0·31	1·31	−1·00	3·04	5·75	−2·71	0·31	Trichinopoly.
					8	23			S 79° W	8·7	8·3	+5		63	−6	·785	−·007	5·2	−2·2	6	12·70	−6·70	2·44	4·02	−1·58	3·34	7·13	−3·79	0·77	Madras.
		7	1	5	2	9	2	5	S 34° W	6·0			6·0	61		·693		4·0		7	6·30	+0·70	2·60	3·58	−0·98	10·09	9·22	+0·87	0·72	Vellore.
					4	25	2		S 87° W	9·1				61	−7	·804	−·004	6·5	−1·1	3	4·80	−1·80	0·88	2·84	−1·96	3·45	4·43	−0·98	0·40	Nellore.
					3	12	16		N 70° W	12·5	9·7	+29	11·0	75	−4	·921	+·049	7·4	−0·6	4	9·40	−5·40	1·29	5·65	−4·36	7·86	11·75	−3·89	0·43	Masulipatam
					3	17	11		N 75° W					64	−4?	·762	+·009	5·8	−2·0	5	6·20	−1·20	2·28	3·72	−1·44	6·13	8·87	−2·74	1·04	Cuddapah.
					15	9	7		N 77° W	13·7				78	+6	·817	+·097	6·2	−1·9	4	9·30	−5·30	1·61	4·95	−3·34	9·02	9·26	−0·24	0·81	Kurnool.
					8	18	5		S 86° W	12·2	11·6	+14	11·6	67	+2?	·691	+·044	6·5	−1·7	3	3·70	−0·70	0·49	1·68	−1·19	4·89	5·44	−0·55	0·22	Bellary.
2					13	16			S 70° W	8·1			6·8	74	−3	·880	+·046	6·6	−1·4	6	9·90	−3·90	2·04	5·94	−3·90	4·71	11·63	−6·92	0·53	Cocanada.
					17	14			S 65° W	12·2				72	−4?	·806	−·061	8·8	+0·5	8	7·70	+0·30	3·08	4·53	−1·45	12·03	10·83	+1·20	0·64	Waltair (Vizag.).
3	1				6	18	3		S 42° W	13·5	11·3	+19	13·2	81	−4	·897	−·033	6·2	−2·1	9	9·40	−0·40	4·66	7·75	−3·09	11·45	15·99	−4·54	0·78	Gopalpur.
																														XII.—Hill Stations.
																				1	0·20	+0·80	0·10	0·08	+0·02	0·12	0·30	−0·18	0·10	Pishin.
29			1				1		S 24° W	1·3	5·1	−75	1·4	52	−5	·494	−·043	0·5	−0·6	0	0·60	−0·60	0	0·98	−0·98	0	1·57	−1·57	0	Quetta.
	14		2		12		3		N 27° W					26		·288		0		0	1·00	−1·00	0	0·62	−0·62	0	1·24	−1·24	0	Kalat.
		2	3	5	8	8	5		S 9° W	7·0			7·7	37	+3	·446	+·018	0·2	−0·4	0	0·30	−0·30	0	0·14	−0·14	0	0·28	−0·28	0	Chaman.
4		7	2	2	3	4	8		N 55° W*	1·3‖				62	+10	·278	+·023	4·4	+0·2	1	1·20	−0·20	0·70	0·40	+0·30	1·04	0·79	+0·25	0·50	Leh.
9	3	1	4	6	4			3	S 77° E	3·9			3·6	77	−8	·563	−·049	3·0	−1·6	4	5·30	−1·30	0·90	2·97	−2·07	4·88	7·36	−2·48	0·26	Srinagar.
17	2	9	1				1		N 33° E	3·4			3·9	70		·425		3·8		14			3·57			7·25§			0·65	Gulmarg.
21	8		2						N 19° E	3·6			3·3	87		·353		3·3		7			6·10			22·21			1·82	Sonemarg.
14		1	6	1	4	4	1		S 28° E	5·0			5·1	45		·820		2·7		2	0·70	+1·30	0·33	0·32	+0·01	1·80	1·76	+0·04	0·13	Skardu.
28			1			2			W	6·4			5·1	55		·299		2·9		2	0·90	+1·10	1·69	0·48	+1·21	8·19	4·01	+4·18	1·02	Dras.
18	2	1			1	5	2	2	S 86° W	3·6			3·2	36	−10	·373	−·078	2·6	−1·5	2	2·00	0	20·31	0·84	−0·53	2·71	1·76	+0·95	0·12	Gilgit.
23	3	2			3				N 45° E	7·0			6·1	45		·474		1·2		0			0			3·07			0	Chitral.
16		2	6		6	1			S 54° E					53†		·501†		1·1		0			0·04			2·29			0·02	Killa Drosh.
29					2				S	9·5			4·8	53		·480		7·3		5	7·80	−2·80	1·82	3·81	−1·99	5·54	7·26	−1·72	0·85	Para Chinar.
11	4		2	11	1	1	1		S 7° W	5·1			5·5	67	−5	·650	+·017	2·7	−1·5	3			3·10	4·88	−1·78	4·54	6·82	−2·28	1·17	Cherat.

station, the data for that station are not utilized in calculating the provincial departures from normal.
42a and 44 are derived, are incomplete.
of which exceed 3,200 feet.

‖ Mean of 29 days.

§ Since June 1905.

† Mean of 21 days.

* Mean of 30 days.

Table

Abstract of Observations taken at 8 A.M. at 23

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
29	Murree	6,333	23·706	+·002	23·674	23·828	1st	23·583	29th	·245	69·2	77·2	+0·2	59·9	−2·6	68·6	−1·2	17·3	88·1	1st	49·4	14th	38·7
	Kailang	*10,087*	20·845		20·800	20·923	9th	20·797	7th	·126	57·2	73·2	−0·7	50·2	−0·9	61·7	−0·8	23·0	82·1	9th	44·3	14th	37·8
	Poo											77·1		59·0		68·1		18·1	84·3	10th	52·6	16th	31·7
	Simla	7,224	22·970	−·004	22·932	23·088	1st	22·862	5th	·226	62·8	68·7	−0·5	58·9	−1·2	63·8	−0·9	9·8	74·3	5th	56·1	14th	18·2
	Sarain		23·009			23·114	21st	22·900	5th	·214	65·7	72·8		59·2*		66·1*		13·6	77·3	11th	55·5	16th	21·8
	Kalabagh		20·060			20·164	1st	19·938	4th	·226	52·0	56·6		47·4		52·0		9·2	60·6	10th	43·7	19th	16·9
	Chakrata	7,022	23·134	−·008	23·094	23·256	1st	23·010	29th	·246	63·4	68·7	−1·2	60·7	+0·5	64·7	−0·4	8·0	73·5	5th	55·8	14th	16·7
26	Ranikhet	6,069	23·924	−·019	23·884	24·052	1st	23·804	29th	·248	67·0	74·4	+0·5	63·4	+0·4	68·9	+0·5	11·0	77·5	24th	60·5	14th	17·0
	Muktesar	7,600	22·690		22·648	22·813	1st	22·566	29th	·247	61·7	69·7		58·7		64·2		11·0	74·3	8th	55·0	14th	19·3
13	Yatung	10,480										63·0		50·1		56·6		12·9	68·1	11th & 27th.	46·2	31st	21·9
	Darjeeling	7,376	22·903	−·010	22·858	23·013	1st	22·802	29th	·211	61·4	66·2	+0·3	57·9	+0·2	62·1	+0·3	8·4	71·7	28th	56·1	10th & 21st.	15·6
8	Shillong	4,920	25·018		24·970	25·163	1st	24·917	5th	·246	68·6	75·9		64·3		70·1		11·6	80·6	3rd	60·0	11th, 21st & 22nd.	20·6
	Cherra Poonjee	4,309	25·526		25·477	25·685	1st	25·387	5th	·298	67·4	72·8		65·0		68·9		7·8	78·2	28th	63·0	2nd, 19th & 29th.	15·2
50	Mount Abu	3,945	25·801	−·015	25·751	25·896	10th	25·648	24th	·248	67·7	74·1	−0·5	66·1	+0·4	70·1	−0·1	8·0	86·2	2nd	63·4	29th, 30th & 31st.	22·8
42	Pachmarhi	3,528									69·3	76·5	+0·7	62·6	+0·6	72·6	+0·7	7·9	85·6	2nd	65·2	12th	20·4
34	Wellington	6,200	24·205	+·021	24·139	24·257	10th	24·150	21st	·107	64·1	72·1	+1·0	57·5	−0·4	64·8	+0·3	14·6	76·7	4th	48·2	14th	28·5
	Ootacamund	*7,322*	23·012		22·948	23·055	10th	22·967	20th	·088	55·5	62·1		51·9		57·0		10·2	66·5	18th	49·3	6th & 7th	17·2
57	Kodaikanal	7,688	22·797		22·732	22·848	10th	22·747	20th	·101	58·3	64·6		52·7		57·2		11·9	69·4	5th	49·7	7th	19·7
	XIII.—Extra India.																						
	Trincomalee	12	29·845	+·033	29·783	29·899	2nd	29·796	5th & 6th.	·103	80·9	92·7	+1·1	78·3	+0·7	85·5	+0·9	14·4	95·0	3rd	77·5	5 days	17·5
	Colombo	40	29·888	+·013	29·854	29·921	2nd	29·851	16th	·070	80·8	86·5	+1·1	73·6	+1·0	82·6	+1·1	7·9	87·5	9th & 29th.	76·5	19th	11·0
—	Meshed	3,104									81·8	88·7		64·9	−0·6	76·8		23·8	94·6	5th	59·8	17th	34·8
	Teheran(*b*)	*4,002*																					
	Ispahan(*b*)	*5,817*	24·137			24·250	19th	24·000	6th, 7th & 17th	·250	76·8	98·6	+0·2	68·0	+1·7	83·3	+1·0	30·6	102·7	4th	61·3	1st	41·4
—	Bushire	14	29·476	−·005	29·449	29·571	1st	29·381	30th	·190	88·8	94·2	−1·1	84·4	+0·1	89·3	−0·5	9·8	99·5	25th & 28th.	76·9	4th	22·6
	Bahrein	30	29·518		29·470	29·599	20th	29·436	4th	·163	90·7	97·2		86·5		91·9		10·7	103·2	30th	82·1	10th	21·1
—	Jask	13	29·485	−·045	29·455	29·607	1st	29·417	30th	·190	90·4	96·5	+0·7	85·9	+1·1	91·2	+0·9	10·6	101·3	29th & 30th.	81·2	5th	20·1
	Muscat	20	29·487	−·029	29·454	29·562	2nd, 7th & 10th.	29·403	29th	·159	92·7	100·4	+3·6	89·6	+2·1	94·8	+5·4	10·4	107·2	30th	85·5	23rd	21·7
	Baghdad‖	220	29·446	+·001	29·633	29·591	1st	29·311	30th	·250	90·1	111·9	+4·7	81·3	+1·9	96·6	+3·3	30·6	116·4	30th	72·6	8th	43·8
	Busrah		29·528		29·487*e*	29·650	1st	29·426	30th	·224		100·6		83·0		91·8		17·6	107·4	29th	79·6	8th	27·8
	Aden	94	29·612	−·008	29·637	29·770	11th & 12th.	29·547	30th	·223	89·6	91·5	+1·4	83·9	+1·6	89·2	+1·5	10·6	96·8	2nd & 5th	80·8	24th	16·0
—	Perim	201	29·549	+·025	29·681	29·634	18th	29·497	6th	·137	90·6	97·3	+0·9	86·8	+3·4	93·0	+2·2	10·5	100·3	15th	83·5	24th	16·8
	Kabul		24·106		24·075	24·268	9th	24·015	28th	·253	81·4	96·2	+3·8	60·3*	−1·2	78·2*	+1·3	35·9	102·1	10th	55·9	14th & 16th.	46·2
—	Kashgar	4,255	25·418			25·610	1st	25·290	11th & 12th.	·320	76·7	91·2	−0·3	65·3	−3·3	78·3	−1·8	25·9	102·1	11th	49·7	14th	52·4
	Amini Divi	13									83·1	87·4	+2·4	78·7	+1·2	83·1	+1·8	8·7	90·1	12th	73·8	21st	16·3
	Minicoy	7	29·938		29·871	29·967	10th	29·907	8th	·060	82·7	87·1	+1·9						89·4	16th			
	Zanzibar**	72	30·083	−·015	30·082	30·157	13th	30·001	4th	·156	74·9	81·2	+1·1	73·1	+0·4	77·2	+0·8	8·1	83·6	1st	71·1	7th & 22nd.	12·1
	Do. Dunga	*154*	30·012		30·127	30·112	13th	29·988	1st	·124	73·3	82·8		70·3†		76·6†		12·5	84·2	27th & 28th	67·2	12th & 22nd.	17·0
	Penang (*c*)	20	29·897		29·842	29·927	4th	29·862	23rd	·065	81·0	89·7		74·1		81·9		15·6	92·0	12th & 16th.	72·0	17th & 22nd.	20·0
	Singapore (*c*)	10	29·939		29·870	29·983	31st	29·894	6th	·089	83·8	89·5		X		81·9		15·2	92·6	12th	70·4	28th	22·1

(*a*) 9 hours' observations.
(*b*) Aneroid uncorrected.
** Barometric readings are 10 hrs. observations.
(*c*) Reduced to gravity only.

* Mean of 30 days.
† Mean of 29 days.

‖ Observations of 30 days.

N.B.—Elevations in italics indicate barometrical determinations.
NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of wh

—*concluded.*

Stations in India, Burma, etc., in July, 1905—concluded.

Wind Direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
4	3				2	1		1	N 52° W	4·9	5·7	−14	5·3	74	− 3	·526	+ ·009	3·8	−0·9	14	16·20	−2·20	10·65	11·85	−1·20	13·57	18·34	− 4·77	3·09	Murree.
					2	10	14	5	S 76° W	1·4				68		·312		5·1		5			2·43	1·30	+1·13	4·15	5·22	− 1·07	0·65	Kailang.
1	1	2		1	2	3	1		S 27° W									4·9		1			0·17	1·14	−0·97	3·02	2·12	+ 0·90	0·12	Poo.
6	7	2		1	4		5	6	N 41° W	3·3	1·6	+106	3·2	87	− 1	·501	− ·011	8·2	−0·2	22	18·90	+3·10	17·03	16·94	+0·19	18·71	27·75	− 9·04	2·10	Simla.
2	3		1		4	1			S 19° E	2·2			2·1	77		·485		6·9		18			8·81			11·93			1·54	Sarain.
8	4							9	N 31° W	11·2			9·8	90		·352		8·5		17			13·23			16·27†			2·12	Kalabagh
4	1			1	15				S 3° E	6·3	4·6	+37	7·6	90	− 1	·532	−·005	7·8	+1·9	21	19·80	+1·20	14·07	20·07	−6·00	17·88	31·27	−13·39	2·48	Chakrata.
1	1	1				9	8	1	N 74° W	3·3	2·1	+57	3·8	87	− 1	·589	+ ·012	7·4	−0·8	15	18·30	−3·30	11·86	13·86	−2·00	17·52	22·61	− 5·09	1·74	Ranikhet.
3			7	5		4	11	1	S 24° W	8·8			8·2	94		·519		8·8		17			8·00			11·87			1·06	Muktesar.
																				21	23·86	−2·86	13·47	9·47	+4·00	21·59	21·52	+ 0·07	1·70	Yatung.
9		2	2	8	3	4	1	2	S 29° E	3·9	2·6	+50	3·6	96	− 1	·523	0	9·0	−0·6	23	22·94	+0·06	40·08	33·50	+6·58	65·99	66·05	− 0·06	6·58	Darjeeling.
6			2	1	1			1	S 63° E	2·7			3·1	92		·640		8·1		23	18·00	+5·00	11·01	13·19	−2·18	39·64	39·21	+ 0·43	1·62	Shillong.
4		3	5	7	4	4	4		S 29° E	7·2			6·3	95		·641		9·0		28	27·30	+0·70	95·49	96·70	−1·21	224·94	248·19	−23·25	10·68	Cherra Poonjee.
	1			2	1	23	3	1	S 18° W	16·2	10·5	+54	16·4	94	− 2	·640	−·005	9·7	+0·7	19	17·60	+1·40	26·97	23·23	+3·74	27·39	30·43	− 3·04	8·45	Mount Abu.
	1	1		1	2	9	15	2	S 74° W	16·4	9·5	+73	16·9	90	0	·653	− ·012	8·8	0	19	22·00	−3·00	32·99	25·11	+7·88	35·08	36·53	− 1·45	8·00	Pachmarhi.
3	4	1	1		2	17	2	1	S 19° W	4·9	5·8	−16		71	0	·424	+ ·001	6·8	−1·0	8	7·90	+0·10	3·77	3·38	+0·39	12·17	10·75	+ 1·42	1·87	Wellington.
						4	24	3	S 88° W	7·0			7·0	82		·362		9·0		8	12·30	−4·30	3·42	5·91	−2·52	21·69	18·05	+ 3·64	0·84	Ootacamund.
	2		1			1	15	12	N 67° W	16·4				71		·347		5·1		7	8·40	−1·40	2·68	3·89	−1·21	12·58	14·37	− 1·79	1·02	Kodaikanal.
																														XIII.—Extra India.
						31			S 45° W	14·5				81	+ 3	·863	−·004	1·7	−1·5	1			0·20	1·97	−1·77	1·60	5·94	− 4·34	0·20	Trincomale.
						1	17	12	S 63° W	8·7	9·0	− 3		84	+ 5	·886	+ ·034	6·3	+0·1	3			1·40	4·83	−3·43	19·19	24·18	− 4·99	0·31	Colombo.
														53		·570		0·3	−0·2	0			0	0·01	−0·01	0·82d	0·75d	+ 0·07	0	Meshed.
																							0·41				0·78			Teheran.
8	1						1	1	N 45° W	2·3			2·7	93	+44	·879	+ ·353	0·3	−0·5	0			0	0·06	−0·06	0·17	0·17	0	0	Ispahan.
1	5	2	1	2	2	1	4	13	N 41° W	10·4	9·2	+13	11·4	76	+12	1·014	+ ·098	0·7	−1·2	0			0	0	0	0·24	0	+ 0·24	0	Bushire.
	5					2	7	17	N 51° W	9·3			8·3	70		1·014		0		0			0			0			0	Bahrein.
8			19	3				1	S 86° E	8·7			7·2	79	+ 7	1·109	+ ·080	2·6	+0·9	0			0	0·02	−0·02	0	0·13	− 0·13	0	Jask.
1	1			5				1	S 56° E	2·8			2·9	67	− 9	1·032	+ ·001	5·6	+3·1	0			0	0·04	−0·04	0	0·40	− 0·40	0	Muscat.
3	2						4	21	N 48° W	6·8	4·8	+42	9·0	34	− 8	·479	− ·102	0·1	+0·1	0			0	0	0	0·03	0·24	− 0·21	0	Baghdad.
				1				30	N 45° W											0				0					0	Busrah.
	2	10	8	3		4	1	3	N 61° E	10·4	8·2	+11	8·4	69	− 2	·959	+ ·081	1·8	+1·1	0			0	0·03	−0·03	0·50	0·23	+0·27	0	Aden.
	11	5	3				6	6	N 12° W	13·6			13·7	67	+ 2	·962	+ ·076	0·6?	−3·0?	0			0	0·03	−0·03	0	0·40	−0·40	0	Perim.
	4	7	4	4	7	1	2	2	S 88° E					45		·490		0·1	0	0			0	0·20	−0·20	0·47	0·95	−0·48	0	Kabul.
3						1	3	4	N 74° W	3·6			3·4	62	+19	·566	+ ·155	1·2	−2·2	1			0·40	0·29	+0·11	2·17	1·48	+0·69	0·40	Kashgar.
						1	24	6	N 52° W					81		·922		8·1		10			5·55	9·91	−4·36	23·60	27·15	+ 0·90	1·57	Amini Divi.
						3	25	3	W	12·1			13·0	81	− 1	·900	+ ·027	4·7	−1·5	8			2·70	6·66	−3·96	25·05	21·66	+ 3·39	0·69	Minicoy.
	1				18	12			S 19° W	9·5			9·0	87	+ 2	·752	+ ·036	5·3	−0·7	2			4·08	2·74	+1·34	16·17	14·43	+ 1·74	2·15	Zanzibar.
					2	10			S 38° W	5·3			5·1	90		·742		6·6		6§			1·88			12·12			0·74	Do. Dunga.
		7	4	1	6			1	S 89° E	11·7								0·6	10				7·50			17·61			2·86	Penang.
	1			7	15	7	1	1	S 4°W	7·3§								5·0	8				6·77			22·08			2·93	Singapore.

† Since June 1905. § Mean of 21 days. (d) Rainfall for May and July 1906.

ted 3,200 feet.

TABLE II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 65 Stations in India, Burma, etc., in July, 1905.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. a

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three preceding columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Burma Coast and Bay Islands.	Port Blair	61	29·791	29·716	·075	29·758	+·017	29·749	86·0	78·5*	7·5	89·4	74·3	15·1	83·7	84·2	80·8*	+0·9	75·9	78·9	79·1	78·
	Rangoon	57	·740	·653	·087	·700	−·011	·694	84·1	75·8	8·3	88·9	74·0	14·9	80·8	79·8	78·2	−0·6	73·7	78·1	77·1	76·
	Diamond Island	41	·753	·673	·080	·717	−·007	·693	84·7	77·2	7·5	86·9	74·2	12·7	83·5	83·0	81·2	+1·0	74·1	79·2	78·8	77·
	Cocos Island	119	·662	·602	·080	·646		·696	86·0	77·6	8·4	90·2	74·0	16·2	82·6	83·4	80·3		75·0	79·2	79·6	77·
	Akyab	20	·684	·607	·077	·649	−·015	·611	84·5	77·0	7·5	89·9	74·2	15·7	81·5	82·3	80·9	−0·4		79·7	79·8	
Bengal and Orissa.	Chittagong	87	·561	·480	·081	·526	−·024	·560	85·9	76·3	9·6	92·4	74·2	18·2	82·3	82·1	80·8	−0·1	73·8	78·5	78·6	77·
	Calcutta (Alipore)	21	·562	·475	·087	·525	−·015	·491	85·3	78·1	10·2	53·9	74·7	19·2	83·9	85·3	82·9	−0·1	76·4	79·9	80·3	78·
	Saugor Island	25	·548	·461	·087	·511	−·027	·479	87·5	80·0	7·5	91·9	76·9	15·0	84·0	85·4	82·2	−0·4	77·7	80·6	81·3	79·
	False Point	21	·591	·509	·082	·556	−·004	·519	87·5	78·9	8·6	95·5	74·9	20·6	84·7	84·7	81·6	+0·1	76·8	79·8	79·6	78·
Gangetic Plain and Chota Nagpur.	Hazaribagh	2,007	27·577	27·499	·078	27·541	−·021	·468	84·8	74·0	10·8	91·2	71·3	19·9	79·9	81·4	78·2	+0·2	71·9	73·8	74·4	73·
	Allahabad	309	29·250	29·157	·093	29·208	+·003	·465	92·5	80·2	12·3	107·2	74·3	32·9	86·4	90·1	85·4	+0·9	76·6	79·6	81·1	79·
Upper Sub-Himalayas.	Dehra Dun	2,233	27·368	27·292	·076	27·327	−·033	·480	85·9	73·5	12·4	90·6	68·4	23·2	79·9	82·6	78·6	−0·1	71·5	75·1	76·3	74·
	Roorkee	899	28·642	28·555	·087	28·596	−·021	·441	93·4	78·6	14·8	103·0	74·5	28·5	86·5	91·2	85·0	+0·9	75·4	78·2	79·6	77·
	Meerut	738	·801	·705	·096	·750	−·015	·433	95·8	80·7	15·1	102·7	74·2	28·4	88·9	93·3	87·2	+2·2	76·1	79·0	80·1	78·
	Lahore	702	·783	·701	·082	·738	−·030	·383	100·7	83·4	17·3	108·2	73·2	35·0	92·7	98·5	91·1	+2·0	77·2	81·2	82·7	80·
	Ludhiana	812	·705	·612	·093	·655	−·020	·411	98·5	81·9	16·6	107·0	73·1	33·9	90·7	95·5	89·3	+1·6	76·6*	78·7	79·2	78·
Indus Valley and N.-W. Rajputana.	Peshawar	1,110	·386	·276	·110	·327	−·029	·372	105·2	81·5	23·7	116·0	72·4	43·6	85·7	62·4	92·5	+2·2	71·8	78·8	78·2	76·
	Jacobabad	186	29·244	29·133	·111	29·195	−·044	·332	111·3	85·5	25·2	121·5	78·7	42·8	99·4	103·8	97·3	+2·3	77·7	82·6	82·9	81·
	Kurrachee	30	·523	·456	·067	·495	−·011	·475	91·9	81·5	10·4	95·9	78·8	17·1	87·6	88·9	85·4	+1·1	78·0	81·1	81·9	80·
East Rajputana, Central India and Gujarat.	Jaipur	1,431	28·157	28·062	·095	28·108	−·007	·457	98·7	79·8	18·9	105·6	75·0	30·6	88·5	95·8	88·0	+3·3	73·6	76·6	78·0	76·
	Udaipur	1,925	27·703	27·632	·071	27·667		·513	87·4	75·3	12·1	96·0	70·3	25·7	81·4	84·3	80·2		72·5*	75·8	77·1	75·
	Deesa	466	29·130	29·040	·090	29·084	−·014	·495	92·5	78·7	13·8	106·8	73·7	33·1	85·0	89·9	84·5	+0·9	75·8	77·4	77·6	76·
	Jamnagar	61	·553	·491	·062	·525		·531	91·4	79·2	12·2	97·3	76·2	21·1	87·0	88·0	83·8		75·8	78·2	77·9	77·
Deccan.	Belgaum	2,539	27·291	27·224	·057	27·263	+·032	·733	76·1	67·8	8·3	81·3	66·8	14·5	72·9	73·4	70·7	+0·6	67·3	70·3	70·0	69·
	Sholapur	1,590	28·169	28·078	·091	28·131	+·016	·646	91·0	73·3	17·7	97·2	70·2	27·0	83·7	86·8	80·4	+1·5	69·5	72·6	73·5	71·
	Akola	930	·749	·650	·099	·702	+·011	·568	90·1	74·9	15·2	96·7	72·0	24·7	84·1	88·2	81·4	+0·8	71·9	75·9	76·6	74·
	Buldana	2,132	27·578	27·498	·080	27·538	−·003	·583	84·8	71·0	13·8	89·6	68·1	21·5	79·4	82·8	76·5	+0·6	68·5	72·1	72·6	71·
	Khandwa	1,044	28·606	28·523	·083	28·567	+·005	·558	87·0	75·3	11·7	94·2	72·4	21·8	81·6	85·8	80·1	−0·3	72·1†	74·5	75·2	73·
	Nagpur	1,025	·631	·534	·097	·585	+·019	·592	89·1	75·3	13·8	95·1	71·6	23·5	82·6	86·1	81·1	+0·7	72·7	75·3	76·0	74·
	Do (Sanitary Commr.'s Office)	1,013	·637	·523	·104	·587		·917	88·6	75·5	13·1	94·7	71·3	23·4	82·8	85·9	81·0		73·0	75·8	76·3	75·
	Hyderabad (Deccan)	1,690	·062	27·959	·103	·016	+·020	·626‡	90·1†	74·2†	15·9	96·4	73·2	24·2	82·1‡	88·4†	80·8‡	+2·9		72·7‡	74·5†	
West Coast.	Bombay	37	29·722	29·667	·055	29·694	+·022	·671	85·4	78·6	6·8	88·2	75·4	12·8	82·0	82·6	80·5	+1·0	76·5	78·9	78·5	77·
	Karwar	44	·829	·772	·057	·803	+·036	·781	84·7	76·8	7·9	88·5	73·5	13·0	82·0	83·6	79·5	+1·9	73·5	77·6	78·0	7

* Mean of 30 days. † Mean of 28 days. ‡ Mean of 27 days.

I.

5 Stations in India, Burma, etc., for July, 1905.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Total number of 10 hours and 16 hours winds from								Mean wind direction.	Normal mean wind direction of month.								
From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.				Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																									%	%						
·863*	·923	·925	·919	+·002	85*	81	78	82	− 4	7·2	7·1	7·2	−0·9						5	50	7		S 47° W	S 48° W	95	86	336*	278	14·51	2·53	Port Blair.	Burma Coast and Bay Islands.
·806	·928	·900	·892	−·010	90	88	88	92	− 1	8·2	9·3	8·8	−0·3	7			1	7	40	2	5		S 1° W	S 36° W	76	75	42	122	29·73	2·58	Rangoon.	
·799	·942	·934	·904	+·013	86	82	83	85	− 3	8·5	8·9	8·7	+0·3					4	9	36	12	1	S 44° W	S 42° W	82	80	291*	252	23·09	3·40	Diamond Island,	
·836	·955	·962	·933	+·009	89	85	84	87	− 1	8·9	9·3	9·1	+0·8											S 36° W		93	7		14·95	2·38	Cocos Island	
	·996	·988				92	89			8·5	8·6	8·6	−0·2			1		11	45	5			S 5° E	S 6° E	90	71	138*	94	71·94	12·34	Akyab.	
·799	·927	·935	·896	−·027	88	84	85	87	− 1	7·8	8·2	8·0	−0·1	1	1	1	1	27	13	16		2	S 11° E	S 27° E	66	67	199*	175	40·90	9·93	Chittagong.	Bengal and Orissa.
·890	·971	·971	·944	−·027	92	84	80	86	− 1	8·0	8·6	8·8	+0·2	1	1		3	7	15	23	7	5	S 31° W	S 1° W	59	63	156*	120	24·84	7·23	Calcutta (Alipore).	
·921	1·000	1·011	·986	−·013	90	86	83	87	+ 1	9·1	9·1	9·1	+0·4		1	1	2	3	20	24	6	5	S 38° W	S 19° W	64	58	504	367	17·63	4·07	Saugor Island.	
·897	·946	·938	·936	−·017	90	80	80	84	− 2	8·5	8·7	8·6	+0·3				2		5	30	22	3	S 61° W	S 54° W	79	63	295*	269	9·63	2·35	False Point.	
·759	·764	·770	·772	−·042	91	75	72	80	− 5	9·6	10·0	9·8	+0·3		7	1	7	4	4	8	16	15	N 75° W	S 6° E	35	13	214*	209	18·86	2·33	Hazaribagh.	Gangetic Plain and Chota Nagpur.
·867	·920	·943	·923	−·022	85	74	68	77	− 3	7·9	8·2	8·1	0	2	4	7	6	1	1	6	24	11	N 66° W	N 75° E	43	6	147*	175	11·82	4·79	Allahabad.	
·752	·814	·828	·825	+·004	91	80	75	85	− 1	6·7	6·7	6·7	−0·8	5	8	7	10	13	3	7	7	2	S 74° E	S 12° W	18	14	37	26	11·77	2·91	Dehra Dun.	Upper Sub-Himalayas.
·836	·856	·853	·875	−·020	86	69	59	74	− 4	4·6	4·2	4·4	−1·9	12	1	1	1	31	2	3	2	9	S 36 ° W	S 36° E	35	32	81	70	3·60	1·56	Roorkee.	
·842	·867	·856	·882	−·068	81	64	55	70	− 7	5·2	5·0	5·2	−1·4	18	2		9	10		9	11	3	S 20° W	S 69° E	16	21	24*	55	6·50	2·43	Meerut.	
·857	·911	·908	·910	+·047	75	60	51	63	− 2	2·3	1·7	2·0	−2·3	6	4	4	9	18	7	2	11	1	S 40° E	S 78° E	29	30	88	82	3·34	2·54	Lahore.	
·851*	·834	·792	·849	−·024	79*	58	49	64	− 6	3·0	4·3	3·7	−2·1	15		1		17			10	19	N 78° W	S 36° E	18	23	26*	58	4·59	1·80	Ludhiana.	
·664	·782	·672	·724	−·018	62	48	34	49	− 5	1·2	2·9	2·1	−0·8	14	11	16	12	1	3	3	1	1	N 50° E	N 48° E	43	47	47*	98	0·12	0·12	Peshawar.	Indus Valley and N.W. Rajputana.
·843	·691	·771	·853	+·004	69	48	32	51	− 2	0·8	0·6	0·7	−1·5	11	1	2	15	14	15	3	1		S 48° E	S 43° E	55	56	158*	134	0·46	0·42	Jacobabad.	
·912	·977	·998	·977	+·028	85	75	73	85	+ 4	7·8	7·1*	7·5	+0·8						2	24	35	1	S 71° W	S 69° W	90	84	428*	413	0·13	0·13	Kurrachee.	
·751	·769	·739	·762	−·072	74	58	44	61	−15	6·8	7·4	7·1	−0·3	1	1	7	4	4	6	29	10		S 39° W	N 18° W	48	30	162	130	0·40	0·23	Jaipur.	
·760*	·832	·855	·820		87*	77	73	79		7·8	7·1	7·2		2	2	1	2	1	7	27	18	2	S 57° W		68		178*		10·59	3·96	Udaipur.	East Rajputana, Central India and Gujarat.
·857	·841	·781	·830	+·006	88	71	59	73	+ 2	8·8	8·0	8·4	+0·4					1	6	44	8	3	S 49° W	S 45° W	87	66	427 †	367	17·93	7·06	Deesa.	
·846	·848	·822	·854		85	67	64	74		6·1	6·3	6·2							3	34	23	2	S 62° W		88		563*		6·03	1·83	Jamnagar.	
·664	·710	·694	·694	+·018	97	88	85	92	0	8·4	7·7	8·1	−1·0							22	22		S 68° W	S 69° W	92	92		634	12·56	1·58	Belgaum.‖	Deccan.
·675	·664	·660	·667	+·006	82	58	53	66	− 2	9·1	8·7	8·9	+0·4							28	29	5	S 73° W	S 78° W	84	86	461*	346	2·20	0·86	Sholapur.	
·744	·790	·765	·781	−·004	86	68	59	73	− 4	8·8	8·7	8·8	+0·3	1						7	24	30	N 72° W	N 75° W	85	72	243*	218	7·62	3·03	Akola.	
·671	·703	·678	·694	−·019	88	70	61	73	− 5	7·9	8·0	8·0	−0·2	1						15	33	13	S 88° W	N 78° W	85	75	280*	223	8·66	2·61	Buldana.	
·747*	·766	·742	·767	−·029	85†	72	62	75	− 3	6·6	6·2	6·4	−1·5	5						2	26	29	N 68° W	N 85° W	82	82	†† 426* ‡	226	16·11	5·85	Khandwa.	
·773	·787	·775	·793	−·034	88	71	63	76	− 6	7·2	7·8	7·5	−1·4		4			1	1	7	35	14	N 82° W	S 89° W	81	69	221*	209	13·50	3·74	Nagpur.	
·783	·807	·791	·809		88	72	65	77		7·2	7·7	7·5		2				1		53		6	S 51° W		85		77*		12·67	2·96	Do. (Sanitary Commrs.' Office).	
	·684‡	·680†				62‡	52†			6·7	7·2	7·0	−1·0								62		W	N 85° W	100	86	245*	238	2·66	1·17	Hyderabad (Deccan).	
·885	·935	·924	·930	+·009	91	83	83	87	0	8·7	9·2	9·0	+0·3							27	35		S 70° W	S 75° W	92	83	362	466	17·15	3·24	Bombay.	West Coast.
·783	·877	·883	·863	+·017	85	78	77	83	− 4	5·7	6·7	6·2	−1·7							35	18	9	S 69° W	S 75° W	85	75	201	139	12·71	1·63	Karwar.	

· Mean of 30½ days. ‡ Wind observations of 22 days. † Mean of 29 days. * Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M.

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Temperature of air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
South India.	Periyakulam	944	28·918	28·860	·118	28·873		29·738	95·4	71·1	24·3	99·5	65·7	33·8	87·9	90·2	82·2		67·3	73·2	73·9	71·3
	Salem	940	·926	·800	·126	·875	+·011	·738	96·6	74·5	22·1	100·0	70·4	29·6	85·5	92·9	83·7	+2·5	72·0	76·6	79·1	75·9
	Chitaldroog	2,405	27·442	27·368	·074	27·413	+·023	·730	84·0	69·2	14·8	89·1	66·9	22·2	77·4	79·9	74·7	+1·4	67·4	70·1	70·7	69·4
	Bangalore	3,021	26·884	26·799	·085	26·850	+·022	·742	83·9	66·1	17·8	89·5	63·3	26·2	76·1	81·1	73·1	+1·1	64·8	68·3	69·0	67·4
	Hassan	3,091	·840	·780	·060	·818	+·047	·804	79·5	65·4	14·1	88·2	63·9	24·3	74·5	74·3	70·6	+1·6	64·4	69·2	69·1	67·6
	Mysore	2,518	27·393	27·317	·076	27·363	+·029	·796	82·4	66·9	15·5	86·6	65·2	21·4	76·8	78·4	72·8	-0·1	65·9	69·3	70·2	68·5
	Madras	22	29·772	29·656	·123	29·725	+·007	·674	100·3	80·1	20·2	104·9	75·3	29·6	91·5	92·3	87·7	+2·0		78·1	79·0	77·8
	Bellary	1,475	28·321	28·226	·095	28·282	0	·678	93·9	75·9	18·0	99·0	74·2	21·8	85·3	89·9	83·0	+2·1	69·9	74·5	75·1	73·2
	Waltair	*226*	29·452	29·363	·089	29·414	+·023	·577	90·3	78·9	11·4	98·2	73·9	24·3	86·0	86·4	83·1	+0·2	73·7	76·8	77·1	75·9
Hill Station, Baluchistan.	Quetta	5,502	24·428	24·356	·072	24·390	−·001	24·350	94·1	63·0	31·1	99·1	54·8	44·3	86·4	91·7	78·2	−0·1	56·1	63·1	63·0	60·7
Hill Stations, Northern India.	Leh	11,503	19·633	19·540	·093	19·591	−·002	19·559	73·8	47·9	25·9	82·2	40·4	41·8	64·2	71·2	59·1	−3·5	43·8	52·2	56·1	50·7
	Srinagar	5,204	24·650	24·571	·079	24·607	−·023	24·578	88·3	63·4	24·9	96·8	57·2	39·6	77·3	85·6	74·1	+1·1	60·4	70·8	75·6	68·9
	Saraln		23·017	22·967	·050	22·988			72·7	59·2*	13·5	77·3	55·5	21·8	67·2	69 0	65·5*			61·8	62·7	
	Kalabagh		20·073	20·042	·031	20·054			56·5	47·3	9·2	60·6	43·7	16·9	53 3	54·6	51·6			51·5	52·2	
	Simla (Ridge)	7,224	22·981	22·944	·037	22·961	−·004	22·923	68 6	58·9	9·7	74·3	56·1	18·2	64·0	66·0	66·6	+2·3	57·1	61·3	63·2	60·5
	Chakrata	7,022	23·143	23·106	·037	23·119	−·005	23·078	68·7	60·7	8·0	73·5	56·8	16·7	64·8	65·8	64·3	-0·4	59 5	63·1	64·0	62·2
	Ranikhet	6,069	·937	·882	·055	·908	−·016	·867	71·4	63·3	11·1	77·5	60·3	17·2	69·2	70·7	68·5	+0·4	62·1	65·7	66·6	64·8
	Muktesar	7,600	22·702	22·652	·050	22·675		22·633	69·6	58·6	11·0	74·3	55·0	19·3	63·4	65·7	63·7		58·1*	61·8	63·4	61·1
	Katmandu	4,388	25·444	25·363	·081	25·402	+·012†	25·356	82·4	69·0	13·4	87·4	66·7	20·7	76·9	78·2	75·3	+0·2†	68·4	71·0	72·0	70·5
	Darjeeling	7,376	22·905	22·872	·033	22·887	−·009	22·842	66·6	57·9	8·7	71·6	56·1	15·5	64·2	65·0	61·9	+0·4	57·8	63·0	63·9	61·3
Hill Stations, C. India.	Mount Abu	3,945	25·812	25·760	·052	25·786	−·018	25·737	73·8	66·0	7·8	86·2	63·4	22·8	70·2	72·4	69·5	-0·3	65·2	67·6	68·6	67·1
	Pachmarhi	3,528		Not recorded					76·8	68·1	8·7	85·6	65·2	20·4	70·9	75·1	72·1	+0·6	66·8	67·9	69·8	68·2
	Chikalda	3,642	26·139	26·072	·067	26·106	0	26·050	74·7	65·9	8·8	82·2	63·2	19·0	70·3	73·9	69·9	+0·2	65·1	68·4	70·2	67·9
Hill Stations, S. India.	Kodaikanal	7,688	22·812	22·758	·054	22·782		22·717	64·6	52·7	11·9	69·4	49·7	19·7	61·5	59·5	57·2		48·2	55·4	56·2	53·3
	Ootacamund	*7,329*	23·022	·972	·050	·996		·932	62·1	51·9	10·2	66·3	49·5	16·8	58·8	58·0	56·7		49·5	54·5	54·7	52·9
	Dodabetta	8,539?	22·018	21·967	·051	21·992		21·928	55·9	47·3	8·6	60·4	41·7	18·7	53·0	52·8	51·2			51·9	52·0	
Extra India.	Aden	94	29·661	29·542	·119	29·597	+·037	29·619	94·5	83·9	10·6	96·7	81·2	15·5	91·7	93·4	89·1	+1·5	78·2	83·2	81·5	81·0
	Perim	201	·556	·443	·113	·495	+·031	·625	97·4	86·8	10·6	100·3	83·5	16·8	93·3	94·9	92·0	+2·2	77·4	82·1	82·8	80·8
	Minicoy	7	·943	·894	·049	·926		·859	87·2			89·4			84·5	84·6				79·0	79·1	
	Zanzibar	73		30·008					81·2	73·2	8·0	83·4	71·1	12·3		79·9	77·1	+0·7	70·0		73·5	
	Port Victoria (Seychelles).	15	30·020	29·946	·074	29·984	−·009†	29·923	81·6	76·5	5·1	82·6	71·4	11·2	79·9	80·7	77·8	+1·4†	70·9	73·8	74·0	72·9
	Mauritius (Pamplemouses).	181				·993	−·022	30·124				79·1	56·5	22·6			68·6	+1·1				64·3

N.B.—Elevations in italics indicate barometric determinations.

* Mean of 30 days.

† Departures from old normals.

Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

—conciuded.

5 Stations in India, Burma, etc., for July, 1905—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Total number of 10 hours and 16 hours winds from																	
From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S. W.	S.W.	W.	N.W.	Mean wind direction.	Normal mean direction of month	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																									%	%						
·622	·621	·621	·607		82	47	44	55		3·9	5·7	4·8		3	12	5	1	5	17	15	2	2	S 22° W		24		114*		0·14	0·07	Periyakulam.	South India.
·750	·802	·820	·789	+·045	88	66	54	70	− 1	5·4	7·8	6·6	−0·2	3	1				6	20	32		S 67° W	S 54° W	81	71	136*	113	2·23	0·91	Salem.	
·651	·647	·635	·644	+·001	91	69	63	75	− 3	7·7	8·2	8·0	−1·1		1					21	29	11	S 83° W	S 75° W	84	93	264*	278	1·69	0·38	Chitaldroog	
·598	·602	570	·590	−·017	93	67	54	72	− 5	8·2	7·9	8·1							1	29	31	1	S 68° W	S 72° W	90	88	298*	230	2·32	1·25	Bangalore.	
·597	·656	·655	·636	+·027	94	77	77	84	+ 1	9·1	9·2	9·2	−0·1							17	35	10	S 85° W	S 89° W	87	91	111*	120	5·36	1·42	Hassan.	
·626	·628	·641	·632	+·015	95	68	67	78	+ 2	9·5	8·7	9·1	−0·1							27	34	1	S 71° W	S 78° W	92	91	330*	346	2·30	0·49	Mysore.	
	·785	·812	·822	+·010		53	55	63	− 5	4·5	6·8	5·7	−1·6			1	22	26	12	1			S 53° E	S 51° W	82	66	207	190	2·44	0·77	Madras.	
·659	·720	·688	·692	+·047	73	59	49	61	− 1	7·4	7·5	7·5	−1·3		1					10	37	14	N 86° W	S 87° W	87	90	278*	286	0·49	0·22	Bellary.	
·764	·801	·809	·806	−·045	77	65	65	70	− 1	8·2	8·5	8·4	+1·1						11	39	12		S 46° W	S 52° W	89	77	138		3·08	0·64	Waltair.	
·380	·341	·281	·338	−·090	64	27	18	36	− 9	0·6	1·7	1·2	−0·5	34	2			1	2	2	12	9	N 77° W	S 84° W	32	29	32*	79	0	0	Quetta.	Hill Station, Baluchistan.
·254	·290	·324	281	+·031	76	49	44	56	+10	4·2	4·7	4·5	−0·8		4	1	3	2	9	16	25	2	S 65° W	S 75° W	58	39	38‖	50	0·70	0·50	Leh.	
·494	·690	·786	·603	−·036	84	73	63	73§	− 9	2·5	3·8	3·2	−0·8	11	7	6	2	6	5	4	12	9	N 63° W	N 48° W	19	15	83*	94	0·90	0·26	Srinagar.	Hill Stations, Northern India.
	·498	·567				75	72			7·6	6·2	6·9		19	3	3	3	1	14	14	5		S 25° W		35		51*		8·81	1·54	Sarain.	
	·367	·373				90	87			9·3	8·1	8·7		11	7			11	2		1	30	N 38° W		37		234		13·23	2·12	Kalabagh.	
·451	·518	·553	·511	−·019	90	86	87	88	0	9·8	8·6	9·2	+0·4	12	20	2		1	14	1	5	7	N 38° W	N 15° E	23	24	77	6	17·03	2·10	Simla (Ridge)	
·498	·561	·582	·551	+·025	94	91	91	92	+ 3	8·6	8·4	8·5	+0·2	15	1			3	42	1			S 2° E	S 66° W	71	42	181*	149	14·07	2·48	Chakrata.	
·547	·595	·613	·589	+·004	94	84	81	86	0	8·8	8·5	8·7	+0·2	26	2	1	1		1	18	12	1	S 67° W	S 60° W	42	25	91*	62	11·86	1·74	Ranikhet.	
·481*	·536	·562	·527		97*	92	88	92		9·0	8·5	8·8		1		4	5	6	2	16	27	1	S 62° W		48		191*		8·00	1·06	Muktesar.	
·690	·694	·717	·705	+·012	97	75	74	82	+ 1	7·0	7·5	7·3	+0·5	8	2		18	5		2	24	3	S 82° W	S 63° W	10	11	19	21	10·13	1·32	Katmandu.	
·481	·565	·585	·548	+·024	99	93	94	95	0	8·2	8·3	8·3	−0·7	26				5	1	14	10	6	S 61° W	S 75° E	37	32	87*	86	40·08	6·59	Darjeeling.	
·614	·651	·658	·611	−·002	96	89	84	90	+ 2	9·1	8·6	8·9	+0·4		4	2		1	6	46	1	2	S 45° W	S 51° W	74	68	395*	276	26·97	8·45	Mount Abu.	Hill Stations, C. India.
·643	·646	·667	·662	−·024	93	86	77	85	− 3	8·8	8·6	8·7	−0·4		3	2			4	26	18	9	S 74° W	N 87° W	69	75	407*	259	32·99	8·00	Pachmarhi.	
·615	·670	·697	·671	+·005	96	91	84	90	− 1	8·1	7·7	7·9	−1·0	2	13	1			2	6	4	34	N 45° W	N 54° W	72	67	214*	240	19·41	5·28	Chikalda.	
·294	·381	·421	·365		74	70	83	75		5·7	8·1	6·9			10	2	1		1		16	30	N 48° W		76		389		2·68	1·02	Kodaikanal. ‖‖	Hill Stations, S. India.
·333	·382	·396	·367		86	77	82	82		7·8	9·0	8·4								12	46	4	S 81° W		93		150*		3·42	0·84	Ootacamund.	
	·376	·383				93	96			9·0	9·6	9·3							2	9	34	17	N 86° W		84		428		4·34	1·40	Dodabetta.	
·892	1·022	·912	·964	+·142	76	69	58	67	+ 4	1·0	0·4	0·7	−1·8			12	8	17	4	15	2	4	S 41° E	S 1° W	32	73	198*	254	0	0	Aden.	Extra India.
·817	·950	·963	·932	+·059	64	61	59	62	+ 2	0·1?	0·1?	0·1?	−2·4? †		13	1	2	2	1	1		42	N 33° W	N 88° W	77	46	427*	367	0	0	Perim.	
	·919	·917				78	78			4·5	4·8	4·7								5	47	10	N 86° W		93		314*		2·70	0·69	Minicoy.	
·696		·743			85		73				5·3							13	18				S 19° E	S 6° E	94	83	214*	197	4·08	2·15	Zanzibar. ††	
·686	·756	·756	·748	−·003	75	74	72	75	− 3	5·8	5·2	5·5	−0·1 †	1		1	5	35	17	3			S 33° E	S 33° E	84	81	256	287	0·64	0·10	Port Victoria (Seychelles).	
			·536	+·029				77	+ 1			6·1	+0·9										S 58° E	S 61° E			230	287	1·66	0·35	Mauritius (Pamplemouses)	

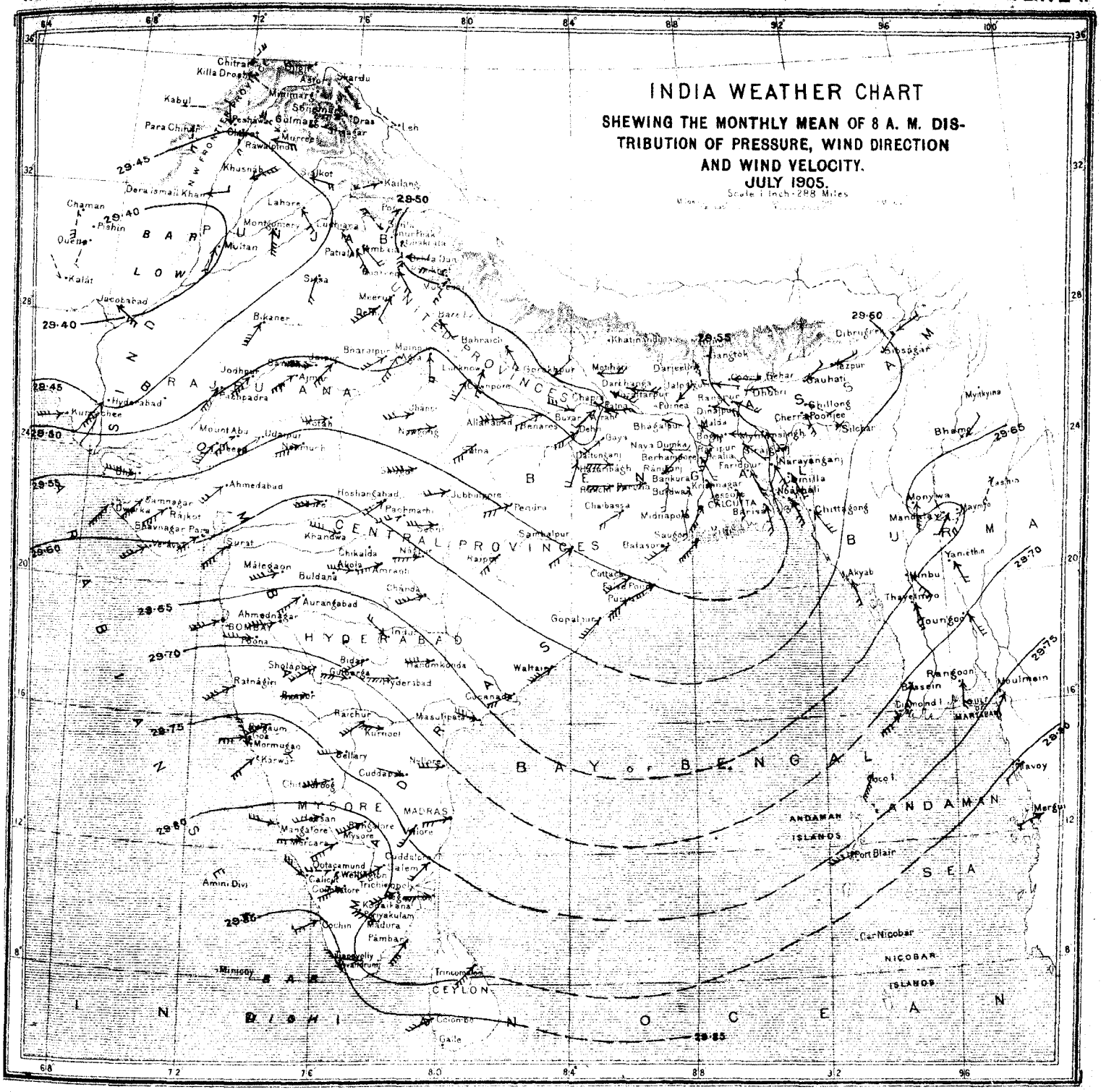
§ Mean of three previous columns.

†† Observations of 16 hours only.
‖‖ Wind variable 2.

‖ Mean of 27½ days.
¶ ,, ,, 29½ ,,

* Corrected.

G. I. C. P. O.—No. 500 Meteor.—24 1-1906—385.



No. 9, W., I.—Jan. 05.—5,600

LITHO. BY S. B. MUNDLE.
Zinco, S. I. O., Calcutta.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of Lambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are indicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the month is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one feather added to the wind arrow.
,, ,,	2 to 5	,, ,, ,,	...	two feathers ,, ,, ,, ,,
,, ,,	5 to 10	,, ,, ,,	...	three ,, ,, ,, ,, ,,
,, ,,	10 to 20	,, ,, ,,	...	four ,, ,, ,, ,, ,,
	over 20	,, ,, ,,	...	five ,, ,, ,, ,, ,,

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal amounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020″ or two hundredths of an inch, &c. Continuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted lines that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuous and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative departures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

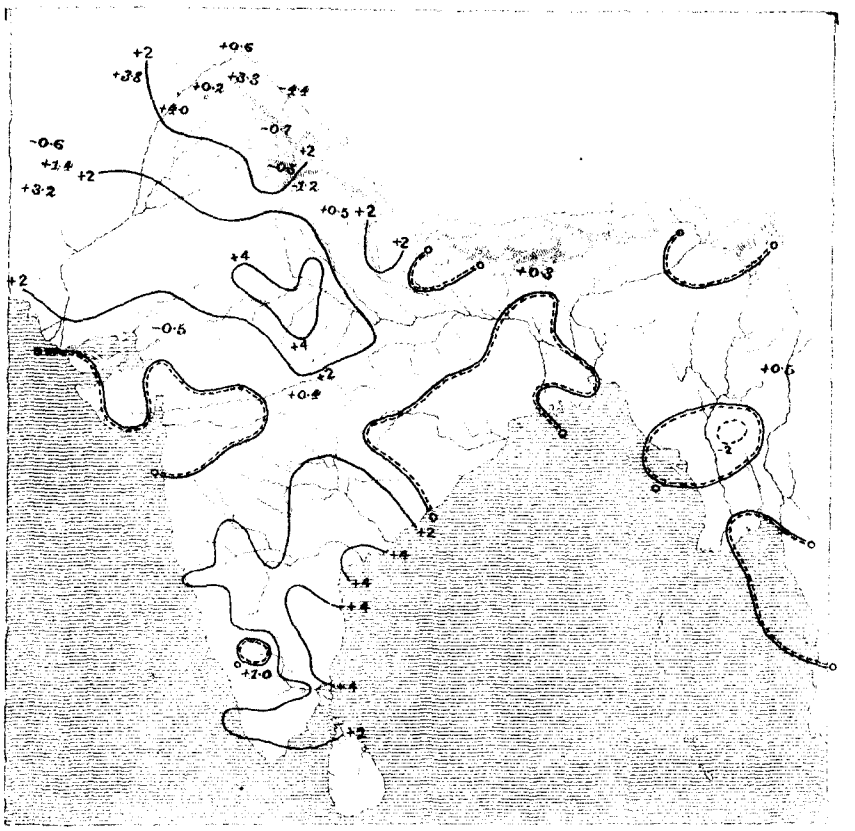
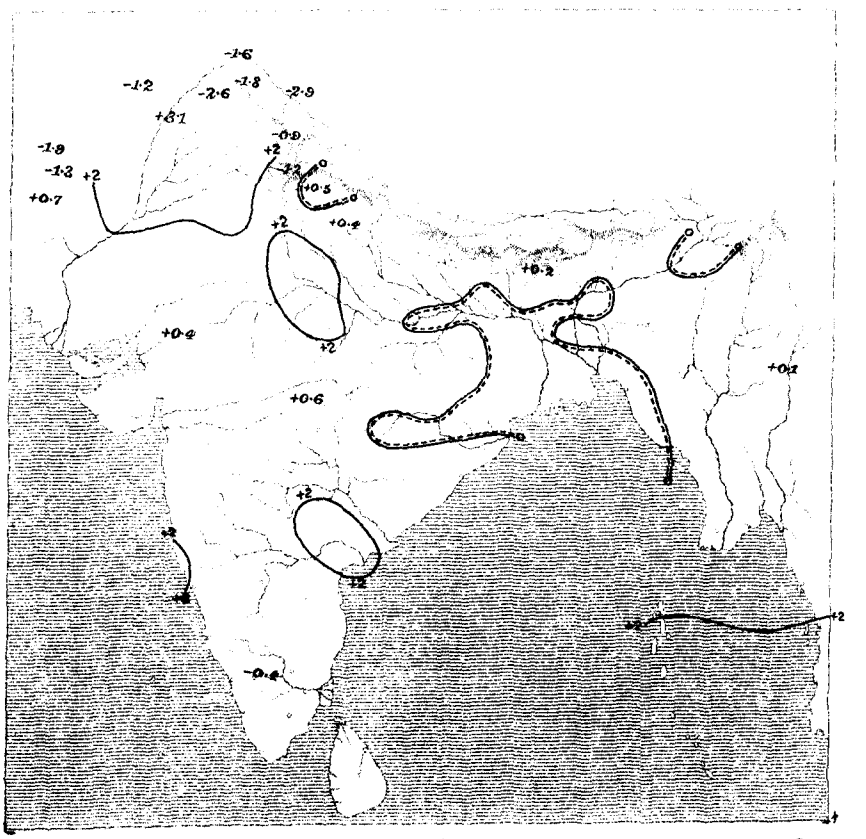


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S. S. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

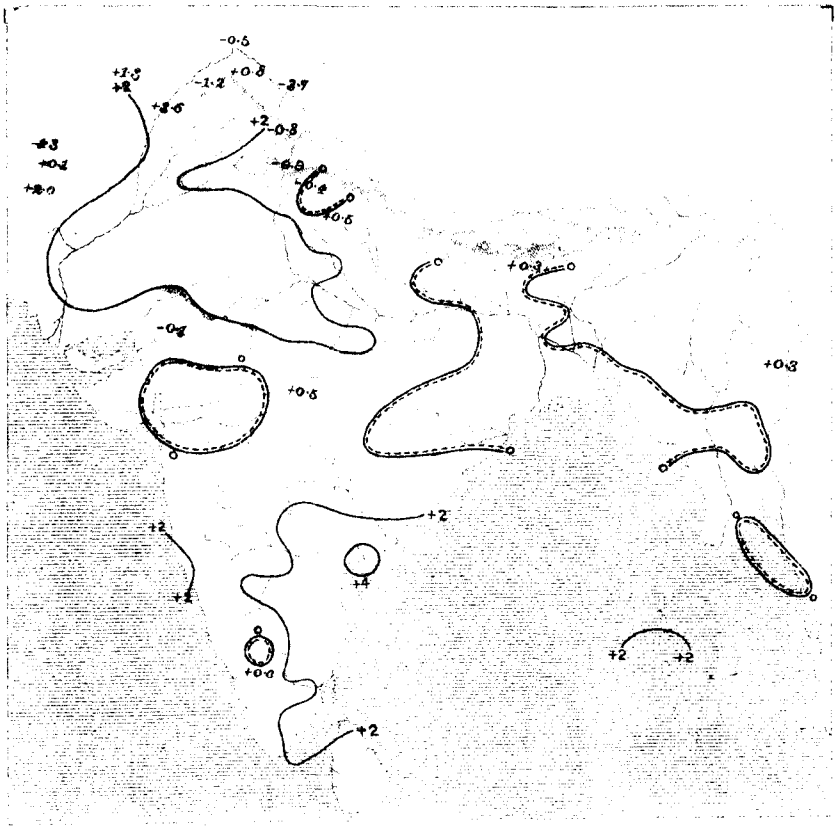
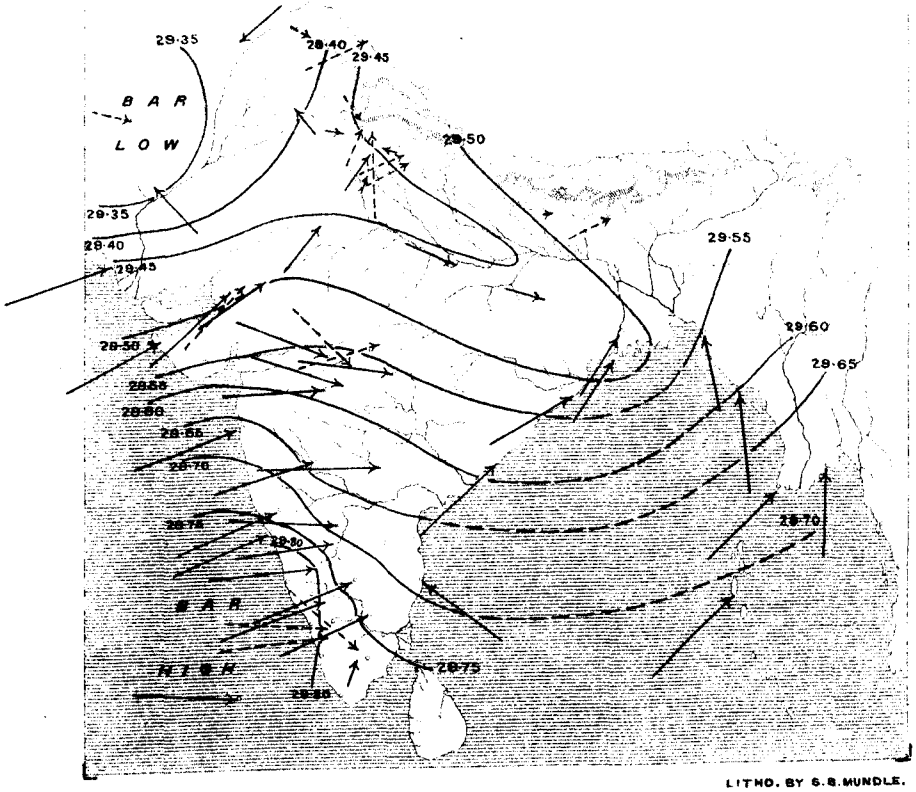


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S.S.MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF ABSOLUTE
HUMIDITY AT 8 A. M.

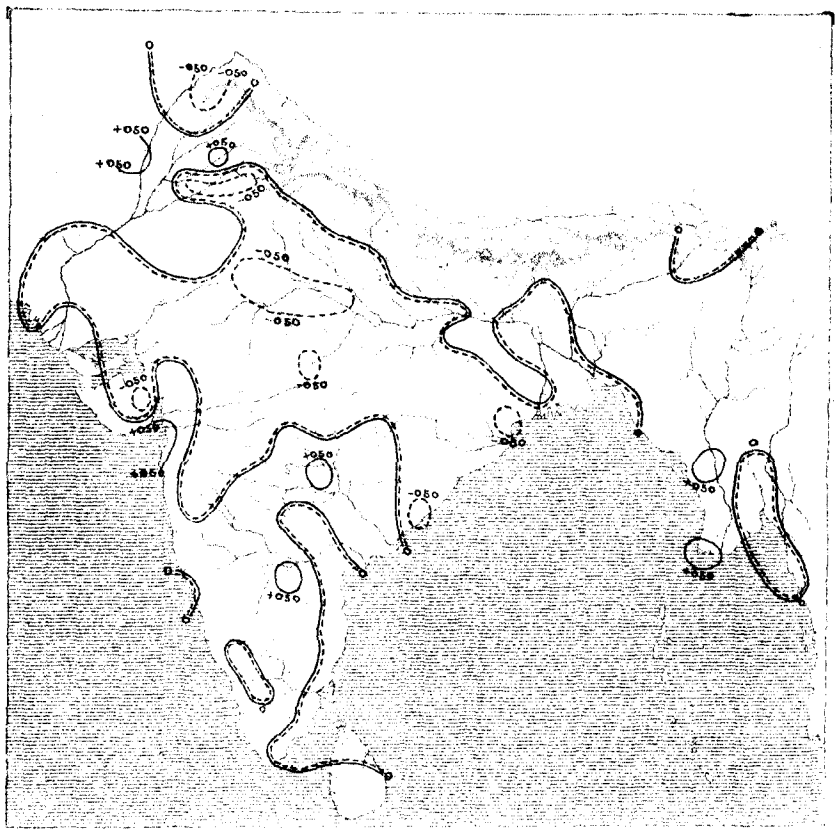
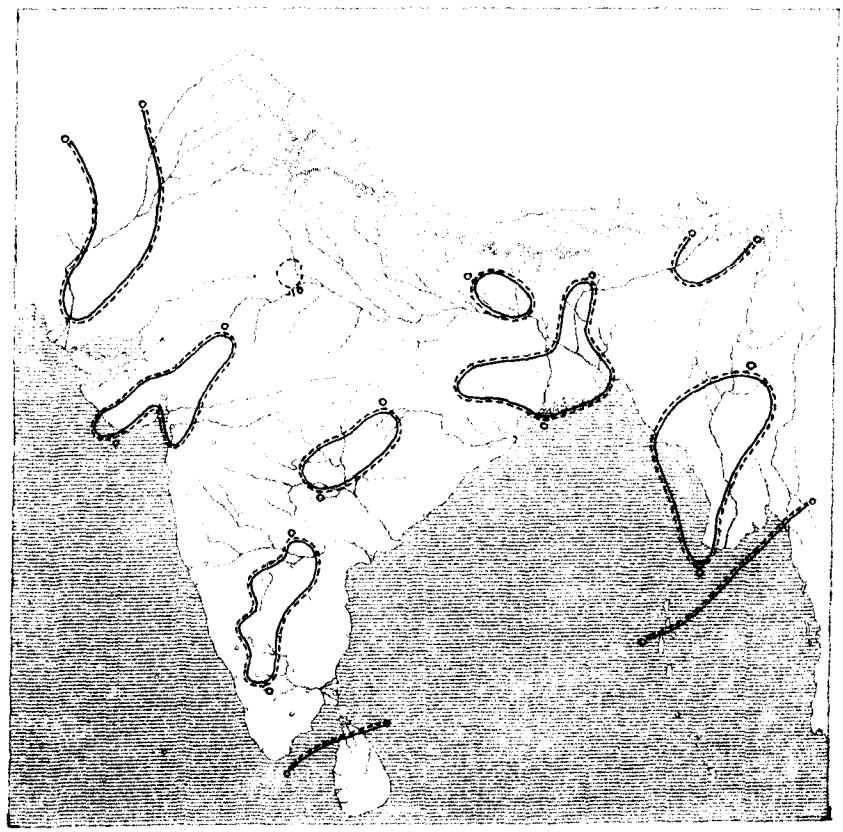


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF RELATIVE
HUMIDITY AT 8 A. M.



LITHO. BY S. E. MUNDLE

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF CLOUD
AMOUNT AT 8 A. M.

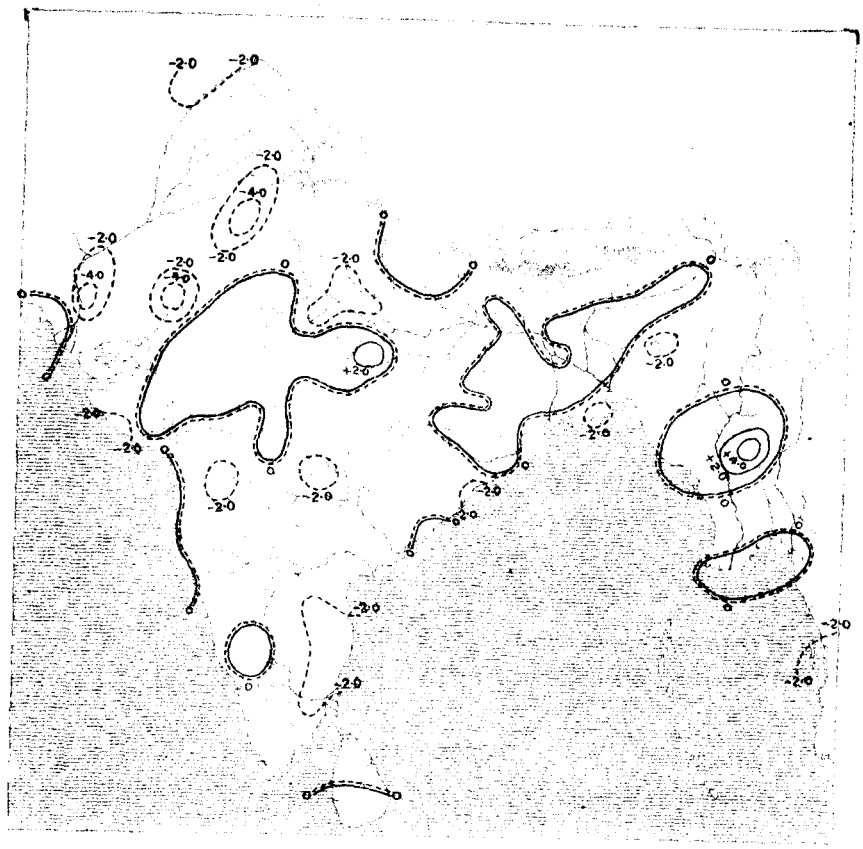


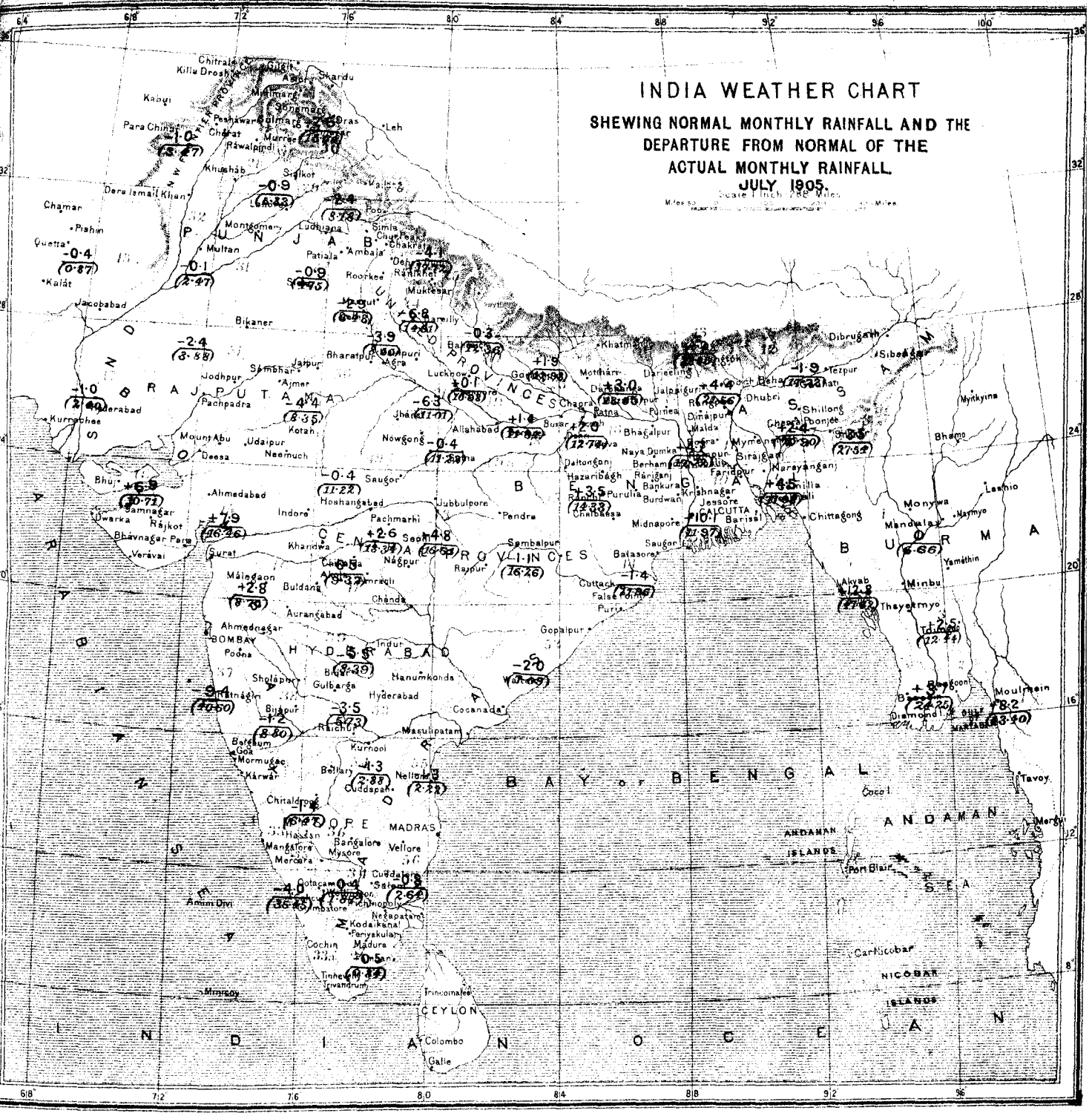
CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE
MONTH ON WHICH RAINFALL EQUALLED OR
EXCEEDED 0·10 INCH.

LITHO. BY S. B. MUNDLE.

G. O. W., I.—Jan. 05.—1,000.

Litho. at I.G. Survey Calcutta.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S. E. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above these give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained by referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, AUGUST, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of August 1905, is based on observations taken daily at 8 A.M. at 232 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 65 stations. In the rainfall summary the rainfall data of the meteorological observatories, and the rainfall statements of the month published b the Provincial Governments that had been received up t the date of the preparation of the review, are utilized an brief notes on Solar and Magnetic disturbances are supplie by the observatories.

Summary of the chief features of the weather in India during the month of August, 1905.

At the commencement of August there existed a trifling depression over the head of the Bay, and, during the first three or four days of the month, rain was received over the Madras coast, Burma, north-east India and the submontane districts of northern India and the mean temperature was generally lower than usual within these areas of rainfall. In the dry region of the north-west there was no rain and between the 1st and the 4th mean temperature was more than 7° above the normal at the following stations :—

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
1st August, 1905	Mainpuri ...	+8·4
	Jhánsi ...	+7·9
	Agra ...	+7·2
2nd " "	Jhánsi ...	+9·2
	Sutna ...	+7·6
	Nowgong ...	+7·2
3rd " "	Jhánsi ...	+9·2
	Agra ...	+8·2
4th " "	Dêlhi ...	+7·8

The excess was most marked in the day temperatur which were more than 10° higher than usual at the fo lowing places on the following dates : —

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure fro normal of dat
		°	°	°
1st August ...	Mainpuri...	103·3	90·9	+12·4
	Jhánsi ...	100·3	88·7	+11·6
2nd " ...	Jhánsi ...	100·3	88·7	+11·6
3rd " ...	Jhánsi ...	100·3	88·7	+11·6
	Agra ...	102·0	91·2	+10·8
4th " ...	Jaipur ...	101·7	91·3	+10·4

Between the 5th and the 14th the principal charac teristic of the weather was the hot, dry, westerly (south west to north-west) winds which prevailed over a large par of the country. At this time barometric pressure wa generally lower than usual over northern India and highe than usual over the Peninsula, so that not only was the baro metric gradient steeper than the average, but the monsoo trough of low pressure was transferred northward and la over and at the foot of the hills. As is usual under thes conditions of pressure, dry, westerly winds prevailed ove

occasional thundershowers on and near the hills. Higher temperatures than usual consequently prevailed over a wide area, the excess having been particularly marked over the west of the United Provinces and east Rajputana and over the submontane Punjab. At the following large number of places, between the 5th and the 14th, the mean temperature was more than 8° above the normal :—

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
5th August, 1905	Lahore ...	+ 9·1
6th " "	Lahore ...	+ 8·9
	Jaipur ...	+ 8·8
7th " "	Jaipur ...	+ 8·1
8th " "	Sialkot ...	+10·3
	Rawalpindi ...	+ 9·8
	Agra ...	+ 9·5
	Delhi ...	+ 9·2
	Khushab ...	+ 8·5
9th " "	Agra ...	+10·5
	Mainpuri ...	+ 9·6
	Delhi ...	+ 9·2
	Rawalpindi ...	+ 8·9
	Jhánsi ...	+ 8·8
	Lahore ...	+ 8·6
	Peshawar ...	+ 8·3
10th " "	Rawalpindi ...	+10·1
	Agra ...	+ 9·1
	Peshawar ...	+ 8·6
	Sialkot ...	+ 8·5
	Jhánsi ...	+ 8·5
	Delhi ...	+ 8·3
11th " "	Rawalpindi ...	+10·7
	Peshawar ...	+ 9·5

A slight change of weather occurred after the 14th. Pressure became lower than usual over the south of the Peninsula and higher than usual over northern India, so that the steepness of the barometric gradient diminished and showers extended over a considerable part of the country except the north-west. The departures from normal of mean temperature consequently became irregular except in the north-west where the excess remained though in places in diminished amount. These conditions continued until the 18th. Between the 19th and the 21st or 22nd the showery area contracted and very little rain was received except in Burma and north-east India. Temperature again rose generally. A period of great heat was experienced in the north-west and the maximum temperatures of the month were generally recorded during this period. The following gives examples of some of the most excessive readings registered:—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	
19th August ...	Ajmer ...	102·9	87·9	+15·0
	Sambhar ...	102·5	90·9	+11·6
20th " ...	Do. ...	105·5	91·0	+14·5
	Ajmer ...	102·4	88·0	+14·4
	Bikanir ...	108·5	96·8	+11·7
21st " ...	Sambhar ...	106·5	91·1	+15·4
	Ajmer ...	101·9	88·0	+13·9
	Mainpuri ...	103·3	90·7	+12·6
	Jaipur ...	103·2	91·3	+11·9
	Agra ...	102·5	91·0	+11·5
	Sialkot ...	105·7	94·3	+11·4
	Bikaner ...	108·0	96·8	+11·2
	Delhi ...	102·7	91·6	+11·1
22nd " ...	Mainpuri ...	105·8	90·7	+15·1
	Agra ...	105·0	91·1	+13·9
	Sambhar ...	104·5	91·1	+13·4
	Sialkot ...	106·7	94·3	+12·4
	Ajmer ...	100·4	88·1	+12·3
	Jhánsi ...	101·3	89·1	+12·2
	Cawnpore ...	101·4	89·8	+11·6
	Delhi ...	103·2	91·7	+11·5
	Bikaner ...	108·0	96·8	+11·2
	Jaipur ...	102·7	91·5	+11·2
	Rawalpindi ...	104·5	93·4	+11·1

On the 22nd the barometer was falling over the north of the Bay and across the head of the Peninsula and a depression commenced to form over the north-west of the Bay, while rain increased over central India. This depression moved very slowly, but eventually advanced westward into the central parts of the country and finally disappeared over the western districts of the Central Provinces on the 27th. It occasioned a distinct increase of the rainfall area and the mean temperature was reduced to below the normal over the Peninsula. In the north-west the heat remained excessive. During the last four days of the month very slight depressions continued to appear over north-eastern India and the Bay area. Scattered local rain fell over a considerable part of the country except the Deccan and the north-west, and except in these two areas the departures of temperature from the normal were irregular. The above account shows that the rains never penetrated into parts of north-west India and the area outlined by the stations of Dera Ismail Khan, Montgomery, Lahore, Sirsa, Delhi, Jodhpur and Kurrachee was actually or practically rainless throughout the month.

Solar and Magnetic disturbances

The following reports on solar, magnetic and seismic disturbances during the month of August 1905 have been received from the Observatories :—

Kodaikanal :—Solar Observations, August 1905 :—

The sun was examined for spots and faculæ on every day of the month, but on six days the weather was not good enough to permit of observations of prominences.

Sun spots.—At the end of July only a small number of spots were visible, but the number rapidly increased and by the 8th August there were nine groups visible. This was the largest number seen on any day during the month, while the minimum was two groups on the 14th. The average daily number for the month was 5·1 against 5·0 in July. In all 28 groups were recorded, of which three were returns of spots seen during the previous rotation. During June and July the spots were nearly equally distributed between the northern and southern hemispheres, but in August no less than 22 out of the 28 were in the northern hemisphere. This shows a distribution closely resembling that of May when 20 out of 27 were in the northern hemisphere. Taking both the hemispheres together nine groups had latitudes between 0° and 10°, thirteen between 10° and 20°, four between 20° and 30°, and two between 30° and 40°. The irregularity of the distribution in longitude, if not quite so conspicuous as in July, was still well-marked. The quadrant from longitude 45° to longitude 135° had eleven of the groups while the adjacent quadrant (135° to 225°) had only four groups. Several moderate sized spots were seen and there were two that should be classed as "great." They were both the returns of the big groups seen in July. The first of these, No. 613, was the return of the group 589, 590 and reappeared on the 1st. In last month's notes it was pointed out that this group first appeared as a regular double spot and then broke up into a number of small scattered spots before disappearing round the west limb. On its return it was found to have recombined again into a double spot, but while in the former apparition the larger spot was the leader it was now the follower. During this transit across the sun's disc it did not suffer very much change but the rear spot increased and the leader decreased in size. On its appearance at the eastern limb for the third time (as No. 637) on the 28th it consisted of a single round spot of regular outline in the position of the rear spot of the previous apparition. The spectrum of this spot showed but little disturbance. The other great spot of the month was No. 620, which was a return of the very large spot (594) of July. It reappeared on the 6th. It was then considerably smaller than when last seen and had lost all its companions. It crossed the disc with little change and disappeared at the west limb on the 18th. Spot No. 623 was the return of No. 604, seen in July.

Prominences.—The number of large prominences observed in this month was greater than in either June or July. Those exceeding 1' in height numbered 44, and on twelve days prominences covering 15° or more of the limb were observed. The tallest prominence seen was one $3\frac{1}{2}$' high, which was photographed on the 15th. This was rather a remarkable prominence though of a well-known type. The gas was apparently streaming up at position angle 100° in a nearly vertical jet which reached a height of 90". It then streamed away northward reaching its maximum height over about position angle 80°, where it seemed to settle down again towards the sun's surface. The vertical jet was well seen in the spectroscope but no trace of the long streamer was visible ; either it was too faint to be seen against the bright sky or it consisted mainly of calcium gas. For the four days, 10th to 13th, prominences covered practically the same part of the limb (position angle 70°—90°). They showed great changes in form from day to day, and it is at least worth noting that while on the 10th there was a strong drift of the ejected matter northward, on the 11th the drift was strongly southward. Possibly this indicated the existence of a cyclonic circulation over an enormous area of the sun's surface. Five eruptive prominences were seen during the month, all of them connected with spots near the limb. On the 30th, the day of the total eclipse, a group of four fine prominences about 1' in height and joined at the tops formed a very conspicuous feature of the east limb.

There was a moderate magnetic disturbance on the 7th when 613 was just past the central meridian.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay :—Note on the Magnetic Record :—

During the month the traces showed 10 calm days, 20 days of small and one day of moderate disturbances.

Movements suspected to be due to seismic causes occurred on the 16th at about 11 A.M., the strain apparently lasting for about six hours.

The selected quiet days of the month were the 1st, 10th, 19th, 21st and 26th.

The mean observed absolute values of the several elements, as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follows :—

Declination ...	... 0° 11' 55" East.
Horizontal Force ...	... ·37391 C. G. S. Unit.
Dip	... 21° 59'·3
Horizontal Force range	... ·00048 C. G. S. Unit.
Horizontal Force summed range...	·00311 ditto.
Declination range ...	... 5'·56
Declination summed range	... 21'·64

NOTE.—[Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.]

No seismic disturbance was recorded during the month.

Magnetic Disturbances.

August 1905.		August 1905.		August 1905.	
1	C.	11	S.	21	C.
2	M.	12	S.	22	S.
3	S.	13	S.	23	S.
4	S.	14	S.	24	C.
5	C.	15	C.	25	S.
6	S.	16	S.	26	C.
7	S.	17	S.	27	S.
8	S.	18	C.	28	S.
9	C.	19	C.	29	S.
10	C.	20	S.	30	S.
				31	S.

The magnitudes of the disturbances are determined from Horizontal Force traces.

C=Calm, S=Small, M=Moderate, G=Great, V. G=Very great. Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Government Observatory, Bombay.

Alipore Observatory, Calcutta.—List of displacements recorded by the Seismograph at the Alipore Observatory during August, 1905.

Date 1905.	P. T. commencement. G. M. T.	L. W. commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum amplitude in M. M.	Duration.	Remarks.
	H. M.	H. M.	H. M.	H. M.		H. M.	
Aug. 25th	9-59·8	10-3·8	10-6·9	10-19·1	0·75	0-19·3	Sensibility 1m m =0·38" of tilt.

The Local times of the commencement :—

Date.	H. M.
August, 25	15-53·1

J. A. CUNNINGHAM,
Offg. Asst. Meteorological Reporter to the Government of India.

Simla Observatory.—List of earthquakes recorded by the Omori-Ewing Seismograph at the Simla Observatory, during August, 1905.

Date.	Commencement of P. T. G. M. T.	End of P. T. G. M. T.	Beginning of L. W. G. M. T.	Maxima. G. M. T.	End approximately. G. M. T.	Maximum amplitude in M. M.	Duration.	Remarks.
	H. M.			H. M.	H. M.		H. M.	
3	15 10	...	...	15 10·3	15 12	0·2	0 2	Local.
12	16 44·5	...	...	16 44·8	16 45·5	0·04	0 1	Ditto.
15	...	...	...	2 23	...	0·15	0 0·2	Ditto.
15	...	...	...	13 27	...	0·1	0 0·4	Ditto.
19	1 56·4	...	...	1 58	2 1	0·05	0 4·6	Source at some distance.
21	5 31	...	...	5 31·3	5 31·5	0·03	0 0·5	Local.
29	...	...	...	9 35	...	0·05	0 0·4	Ditto.

J. PATTERSON,
Deputy Meteorologist to the Government of India, Simla.

Royal Alfred Observatory, Mauritius.—(illegible) sun spots and faculæ were observed on all days except the 19th and 29th, when the weather was overcast, and in addition isolated spots were observed on the 3rd to 12th, 18th, 20th to 23rd, 25th to 28th and the 30th. On the 29 days on which groups of spots were observed the following were the numbers recorded :—

1 Group was observed on the 26th, 27th and 28th.
2 Groups were observed on the 1st to 3rd, 8th, 11th to 14th, 25th and 30th.
3 Groups were observed on the 4th, 9th, 10th, 15th, to 18th and 22nd.
4 Groups were observed on the 5th to 7th, 20th, 21st, 23rd, 24th and 31st.

The magnetic disturbances during August 1905, were as follows :—

Day.	Hours.		Disturbances.
2	0	24	Large disturbance.
3	2¾	7¼	Wave in H. F. (+·00030).
	7¼	18¾	Wave in H. F. (+·00046).
	18¾	19¼	Increase of H. F. (·00018).
4	13	16½	Accentuated diurnal variation range (·00039).
7	7¼	16	„ „ „ (·00072).
13	18¾	22	Wave in H. F. (—·00020).
14	9	14	Wave in H. F. (—·00023).
16	10	18½	Two successive waves in H. F. (—·00019) and (—·00026).
30	1	21	Occasional small rapid fluctuations in H. F. with wave.
	1½	3½	(+·00033).
31	14	16¾	Decrease of H. F. (·00038).
	19	20	Increase of H. F. (·00023).

T. F. CLAXTON,
Director.

Weather in Indian Monsoon region.

Over the south and west of the Trades-monsoon area the general conditions of the weather were approximately normal. The following gives departure data of the stations in the South-east Trades region :—

August.	Mauritius.	Zanzibar.	Seychelles.
Pressure departure	—·003	—·018	—·012
Actual mean wind direction ...	S55E	S31E	S35E
Normal mean wind direction ...	S68E	S9E	S33E
Actual mean wind velocity (miles per diem)	235	164	298
Normal mean wind velocity (miles per diem)	296	166	323
Rainfall departure	—0·49	+0·71	+3·13

The above shows that pressure was slightly below the normal in this region, but that the departures were unimportant. The Trades were more easterly than usual at Zanzibar and less easterly at Mauritius and blew from the normal direction at the Seychelles, but at all three stations the mean velocity was below the normal. At Mauritius the month's rainfall was about the average, while at the Seychelles and Zanzibar it was in excess.

The following gives extracts from the logs of vessels traversing the Arabian Sea during August :—

The Mail steamer *Oriental* left Aden on the 6th August and experienced from Long. 49° E. to Long. 68° E. a moderate monsoon occasionally blowing freshly to strongly and moderate sea and swell. Thence to arrival at Bombay on the morning of the 11th a moderate to gentle monsoon, cloudy weather and light rain near coast.

The Mail steamer *Egypt* left Aden on the 13th and experienced from Long. 52° E. to Long. 62° E. a strong monsoon ... blowing with a moderate gale and high ... Thence to Long. 68° E. a moderate monsoon, ... weather and moderate sea and swell; thence to arrival at Bombay on the morning of the 18th moderate to light west north-westerly winds and cloudy weather

The s. s. *Reichstag* left Lamu on the 11th and experienced up to Lat. 3° N. in Long. 47° E. moderate to fresh south easterly and southerly winds, blue sky and moderate to rough sea; thence to Lat. 10° N. in Long. 55° E. a strong monsoon blowing with a moderate gale, blue sky and high sea: thence to Lat. 16° N. in Long. 66° E a moderate to fresh monsoon, cloudy weather and a rough sea; thence to arrival at Bombay on the 20th moderate to light north-westerly winds, cloudy weather, light showers and a moderate to smooth sea.

The Mail steamer *Peninsular* left Aden on the 20th and experienced from Long. 52° E. to Long. 61° E. a fresh monsoon, cloudy weather and moderate sea; thence to arrival at Bombay on the morning of the 25th a moderate monsoon, cloudy weather and a moderate sea.

The Mail steamer *Caledonia* left Aden on the 27th and experienced from Long. 53° E. to Long. 62° E. a fresh to strong monsoon and moderate to considerable sea; thence to Long. 71° a moderate monsoon, passing clouds and moderate sea; thence to arrival at Bombay on the morning of the 1st September gentle north-westerly and variable winds and fine weather.

So far as can be estimated from the above extracts there was less cloud than usual over the south and west of the monsoon area, the *Reichstag* reporting a blue sky from Lamu up to Lat. 10° N. in Long. 55°E. Further, during the greater part of the month the vessels only carried monsoon weather with them as far east as Long. 66° or 68° E. beyond which the wind died down and light north-westerly and west north-westerly winds were experienced until their arrival in Bombay. These conditions are very similar to those reported by ships traversing the Arabian Sea during August 1899 when also the western branch of the monsoon current failed almost completely.

The following table shows the diurnal departure of the pressure gradient from normal over the Equatorial Belt and over the Arabian Sea, the departures from normal of the direction and force of the wind at Mauritius and the Seychelles and the mean rainfall departure of India:—

Day of month, August.	Diurnal departure of pressure gradient from normal between Mauritius & Seychelles.	Diurnal departure of pressure gradient from normal between Seychelles & Bombay.	Easterly deflection of wind at Mauritius.	Easterly deflection of wind at Seychelles.	Departure of hourly wind velocity at Mauritius.	Departure of daily wind velocity at Seychelles.	Mean rainfall departure of India.
	"	"	°	°			"
1	+·012	—·086	—25	— 9	—3·0	— 31	—0·10
2	—·016	—·060	—31	+12	—4·1	—113	—0·07
3	+·003	—·103	...	+12	—5·1	— 48	—0·08
4	+·053	—·085	—44	— 9	—2·6	+ 9	—0·18
5	+·066	—·065	—19	—33	—1·5	+ 30	—0·09
6	+·094	—·083	— 7	— 9	+1·2	+ 18	—0·08
7	+·086	—·086	— 5	+12	—0·6	+ 89	—0·01
8	+·042	—·063	+ 9	+12	—1·5	— 22	—0·13
9	—·010	—·051	+15	+12	—3·0	+ 88	—0·05
10	—·026	—·045	+13	+12	—3·1	— 1	—0·03
11	—·050	+·008	+17	—57	—3·4	+ 41	—0·02
12	—·060	+·037	—39	— 9	—8·0	— 18	—0·10
13	—·062	—·006	—33	— 9	+3·7	— 3	—0·04
14	—·013	—·041	—20	— 9	+1·2	— 17	—0·03
15	—·015	—·030	—12	— 9	—1·4	— 81	—0·03
16	—·034	—·023	— 22	+12	—0·5	—116	—0·13
17	—·044	—·007	+10	— 4	—2·0	— 87	+0·07
18	—·053	—·002	+ 5	+12	—2·9	— 62	—0·07
19	—·041	—·022	...	+12	—0·1	— 59	—0·07
20	—·028	—·057	—30	— 9	—1·7	— 40	—0·07
21	+·031	—·015	—22	—57	+2·5	— 99	0
22	+·036	—·009	—13	—33	+7·1	—257	—0·03
23	+·075	—·015	+ 6	+57	+5·5	—141	+0·01
24	+·062	—·008	+ 6	+12	+0·5	+101	—0·05
25	+·024	+·025	— 8	— 9	—3·7	+ 94	—0·02
26	+·016	—·041	—11	+12	—1·5	— 15	—0·06
27	+·052	—·049	—23	+12	—2·9	— 26	+0·01
28	+·015	+·005	—11	+12	—0·8	— 8	—0·01
29	—·004	+·038	— 6	+12	—3·7	+ 82	+0·14
30	+·031	+·010	—12	+12	—2·4	— 50	+0·09
31	+·006	+·012	—17	— 9	—2·0	— 24	—0·09

The pressure gradient was steeper than usual over the Equatorial Belt from the 1st to the 8th and from the 21st to the 31st, but was slighter at other times, while over the Arabian Sea it was slighter than usual except quite at the close of the month. The mean rainfall of India slightly exceeded the average on some days towards the close of the month, but there is no evidence that this was connected with the baric gradients The wind was unsteady both as regards direction and force at Mauritius and the Seychelles, but there does not appear to be any connection between the departures of these elements from the normal and the departures of rainfall over India from normal.

The European charts apparently show that pressure was low over south-east Europe and the Caspian area between the 7th and the 21st when the barometer was high over western and central Europe, but was high from the 22nd to the 27th when depressions were affecting the west coasts of Europe. Between the 28th and the close of the month pressure again became low over south-east Europe owing to the advance of depressions from the west-

Depressions and Cyclonic Storms.

The monsoon was generally weak during the month of August and the depressions and cyclonic storms which appeared during the month were few in number and of feeble intensity.

At the commencement of the month the winds were irregular around the head of the Bay and during the 2nd and 3rd a shallow and small depression developed in this area. The depression apparently filled up without moving and was throughout quite unimportant.

On the 4th pressure was above the normal everywhere, and on the 5th the monsoon trough of low pressure was shown close to the hills and westerly winds were reported over a large part of the country. Generally high pressures over the Peninsula and generally low pressures in the submontane regions of northern India and the abnormally northerly position of the monsoon trough of low pressure continued till the 15th and during these eleven days the winds were more westerly than usual over a large part of the country and there were no signs of a depression or storm. During the 16th and 17th pressure was relatively low over the south of the Peninsula and was higher than usual over northern—more particularly north-eastern India, and the monsoon trough was displaced somewhat to the southward. A slight change of weather consequently set in, pressure becoming more uniform over the Bay and the extent and strength of the westerly winds diminishing over the land area, but it was not till the 22nd that any signs of a depression in the Bay were disclosed. On that day a shallow storm was formed over the north of the Bay. The storm hovered over the north-west of the Bay and the north-east of the Peninsula till the 25th. It then moved westward and was shown over the east of the Central Provinces on the 26th, and the west of the Central Provinces on the 27th after which it filled up. Between the 25th and the 30th pressure was lower than usual generally, but particularly in the north, and within this low pressure area very shallow local depressions were shown. On the 31st the barometer was giving way briskly over Burma and the east of the Bay and a shallow depression was shown over Deltaic Bengal and the north of the Bay where it apparently hung about without developing during the next few days.

Pressure.

The mean 8 A. M. pressure of the Indian land area for the month of August 1905 was 0·010" above the normal. The trifling deficiency which appeared in July was thus only a temporary change and the excess which has prevailed over the Indian area since August 1904 was only temporarily interrupted.

The actual distribution of pressure at 8 A. M. on the mean of the month, is shown in Plate I. Pressure was highest (29·85") over Malabar and Mysore and was lowest (29·50") over the Central and South-West Punjab, the south of the North-west Frontier Province and upper Sind, while the monsoon trough of low pressure over northern India lay further to the northward than is usual. Pressure on the mean of the month was higher than usual except over upper Sind, the Punjab, the North-west Frontier Province, the north of the United Provinces, Bihar and the Brahmaputra Valley where it was in trifling defect. The greatest excess was shown over the head of the Peninsula, the greatest defect over north-west India, and the departures from normal exceeding 0·025" were as follow:—

Station.	Positive pressure departure from normal, Aug. 1905.	Station.	Negative pressure departure from normal, Aug. 1905.
	"		"
Indore	+·042	Dera Ismail Khan ...	—·037
Rajkot	+·042	Jacobabad ...	—·036
Bhuj	+·036	Lahore	—·036
Surat	+·035	Ludhiana ...	—·029
Neemuch ...	+·034	Multan	—·026
Veraval	+·033		
Deesa	+·031		
Pachpadra ...	+·031		
Sambhar ...	+·031		
Barisal	+·031		
Ajmer	+·030		
Jubbulpore ...	+·030		
Bassein	+·030		
Cocanada ...	+·029		
Akola	+·028		
Amraoti	+·028		
Nellore	+·028		
Balasore	+·028		
Poona	+·027		
Narayanganj ...	+·027		
Tavoy	+·027		
Ahmednagar ...	+·026		
Nagpur	+·026		
Mergui	+·026		

Relatively to the general condition, *viz.*, + ·010," pressure was low over the greater part of northern India to the north of a line running roughly eastward from Hyderabad (Sind) through Bikaner, Jhánsi, Sutna, Burdwan, Jessore and Silchar to the neighbourhood of Bhamo. Pressure was also low over the south of the Peninsula and part of central Burma. Elsewhere pressure was relatively high. The anomalies amounted to more than ·020' at the following stations:—

Station.	Positive pressure anomalies, August 1905.	Station.	Negative pressure anomalies, August 1905.
	"		"
Indore	+·032	Dera Ismail Khan ...	—·047
Rajkot	+·032	Jacobabad	—·046
Bhuj	+·026	Lahore	—·046
Gopalpur ...	+·026?	Ludhiana	—·039
Surat	+·025	Multan	—·036
Neemuch ...	+·024	Sialkot	—·032
Veraval	+·023	Peshawar	—·031
Deesa	+·021	Rawalpindi ...	—·030
Pachpadra ...	+·021	Lucknow	—·028
Sambhar ...	+·021	Roorkee	—·027
Barisal	+·021	Delhi	—·026
		Sibsagar	—·024
		Patna	—·024
		Darbhanga ...	—·023
		Meerut	—·023
		Dehra Dun ...	—·023
		Montgomery ...	—·022?

Pressure, on the mean of the month, was normal at the Himalayan hill stations and at Lashio and was slightly excessive at the hill stations in Rajputana and South India. The vertical pressure gradients were hence slight-

er than usual in most parts of the Indian area, as is shown by the following data for ten pairs of stations :—

HILL STATION.	Departure from normal pressure, Aug. 1905.	PLAIN STATION.	Departure from normal pressure, Aug. 1905.	Departure of pressure difference.
	"		"	"
Quetta ...	+·102	Jacobabad ...	—·036	—·048
Leh ...	+·004	Lahore ...	—·036	—·040
Murree ...	+·003	Peshawar ...	—·021	—·024
Simla ...	+·009	Ludhiana ...	—·029	—·038
Chakrata ...	—·006	Roorkee ...	—·017	—·011
Ranikhet ...	—·006	Bareilly ...	—·007	—·001
Darjeeling ...	—·005	Dhubri ...	+·006	+·011
Lashio ...	—·004	Bhamo ...	+·017	+·021
Mount Abu ...	+·023	Deesa ...	+·031	+·008
Wellington ...	+·013	Coimbatore ...	+·008	—·005

The departures of mean pressure from normal at the extra-Indian stations for August 1905 were as follow:—

STATION.	Departure from normal of mean 8 A. M. pressure of August 1905.
	"
Trincomalee	+·014
Colombo	—·004
Bushire	+·020
Jask	—·005
Muscat	+·016
Baghdad	—·035
Aden	+·019
Perim	+·018
Zanzibar	—·028
Seychelles	—·012
Mauritius	—·003

The preceding data show that the deficiency of pressure prevailing over north-west India did not extend westward into Persia and Arabia where the mean pressure slightly exceeded the normal. On the other hand, pressure was about normal over Ceylon and was in defect over the region of South-east Trade winds and also in Asiatic Turkey.

The following summarises the chief features of the pressure distribution :—

(1) The mean pressure of the whole Indian land area was 0·010" above the normal.

(2) The mean pressure was slightly lower than usual over upper Sind, the Punjab, the North-west Frontier Province, the North Gangetic Plain, Bihar and the Brahmaputra Valley and was higher than usual elsewhere.

(3) The barometric gradient was hence steeper that usual over India.

(4) The mean pressure was normal at the Himalayan stations, but was somewhat higher than usual at the central and southern hill stations.

(5) Pressure was lower than usual at the stations in the South-east Trades region.

The following table gives the mean pressure departures and anomalies of the month for the eleven meteorological provinces of India :—

Meteorological Province.	Departure from normal of mean 8 A.M. pressure of August 1905.	Pressure anomaly, August 1905.
	"	"
Burma Coast and Bay Islands...	+·023	+·013
Burma, Inland	+·011	+·001
Assam	—·002	—·012
Bengal and Orissa	+·013	+·003
Gangetic Plain and Chota Nagpur.	—·001	—·011
Upper Sub-Himalayas ...	—·018	—·028
Indus Valley and North-West Rajputana.	—·005	—·015
East Rajputana, Central India and Gujarat.	+·029	+·019
Deccan	+·021	+·011
West Coast	+·014	+·004
South India	+·012	+·002

Temperature.

The feebleness of the Arabian Sea monsoon current and the lightness or absolute absence of rain over parts of the Peninsula and of north-west India during the month under review occasioned large departures from normal in the temperature conditions.

The mean maximum temperature of the month was below the normal at some stations in the Peninsula, as well as over the greater part of Burma, Assam, north Bengal, Bihar and the east of the United Provinces. The deficiency was, however, small and unimportant except along the foot of the hills in the north-east and in Upper Burma where at the following places the departure from normal exceeded 2°:—

Station.	MEAN MAXIMUM TEMPERATURE.		
	Actual, August 1905.	Normal, August.	Departure from normal August 1905.
	°	°	°
Gorakhpur	86·0	89·8	—3·8
Purnea	86·2	89·2	—3·0
Sibsagar	86·4	89·2	—2·8
Bhamo	85·3	88·1	—2·8
Jalpaiguri	85·6	88·1	—2·5
Darbhanga	86·2	88·5	—2·3

In all other places the mean maximum temperature was higher than usual, the excess having been greatest over Rajputana and the adjoining districts of the Punjab, the United Provinces and Central India. The excess was more than 6° at the stations for which comparative data are given below :—

Station.	Mean maximum temperature. Actual August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°	°
Jaipur	101·3	91·6	+9·7
Sambhar	100·8	91·3	+9·5
Ajmer	97·6	88·2	+9·4
Agra	99·3	91·1	+8·2
Delhi	99·7	91·8	+7·9
Jhánsi	96·5	88·9	+7·6
Mainpuri	97·4	90·8	+6·6
Sirsa	104·5	98·4	+6·1

The following shows the highest recorded reading in each division of India during the month under review together with the highest temperatures previously recorded at the different stations quoted :—

Province or division	Station.	Highest maximum temperature recorded in August 1905.	Date on which recorded.	Highest maximum temperature recorded in August previous to 1905.	Year in which recorded.
		°		°	
Burma ...	Mandalay ...	97·5	18th	103·4	1891
Assam ...	Tezpur ...	97·2	20th	97·1	1904
Bengal ...	Saugor Island...	97·9	23rd	93·9	1899
Orissa ...	Cuttack ...	96·4	14th	99·4	1880
Bihar ...	Gaya ...	94·9	20th	101·2	1903
Chota Nagpur.	Purulia ...	95·0	20th	96·6	1901
U. Provinces ...	Mainpuri ...	105·8	22nd	101·3	1900
Punjab ...	Montgomery ...	111·3	21st	113·8	1903
N.-W. F. P. ...	Peshawar ...	109·5	9th	112·7	1877
Baluchistan ...	Chaman ...	107·2	10th	107·0	1895
Sind ...	Jacobabad ...	110·8	20th	116·6	1902
Rajputana ...	Bikaner ...	108·5	20th	110·0	1899
Gujara East ...	Bhavnagar Para.	99·6	10th	101·6	1902
Central India...	Nowgong ...	97·5	15th	100·0	1883
C. Provinces ...	Hoshangabad...	98·8	29th	96·7	1899
Berar ...	Amraoti ...	95·2	14th	98·2	1902
West Coast ...	Cochin ...	90·3	9th	89·5	1899
Bombay Deccan.	Sholapur ...	95·2	11 & 29th	101·0	1877
Mysore ...	Chitaldroog ...	90·6	6th	91·1	1902
Madras Coast...	Nellore ...	103·8	10th	105·4	1899
Madras Deccan.	Cuddapah ...	101·7	12th	104·2	1899
South India ...	Madura ...	103·0	12th	105·5	1877

The above shows that at some places in northern India the maxima recorded during August 1905 were higher than had previously been registered.

At the hill stations with the exception of Chaman, Leh, Darjeeling and Lashio, the mean maximum temperature exceeded the average and the excess was more than 2° at the following places :—

Hill Station.	Mean maximum temperature. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°	°
Cherat	91·9	86·9	+5·0
Srinagar	88·6	83·9	+4·7
Kalat	94·1	90·4	+3·7
Kabul	95·4	92·4	+3·0
Quetta	93·0	90·5	+2·5
Gilgit	96·7	94·2	+2·5

The only stations at which the deficiency was of any importance were Leh (—1·5°) and Lashio (—1·7°). At the former station the relative lowness of the temperature was probably again attributable to abnormal snowfall conditions on the higher Himalayas.

The departures of the mean minimum or night temperatures from normal were generally similar in distribution to those of the maximum temperature, but the amount of the departures was generally smaller. Over Assam and neighbouring districts, over Bihar, the east of the United Provinces, the lower Indus Valley and some districts of the Peninsula and of Burma the mean night temperature was in trifling defect while in all other places it was more or less in excess. The excess was greatest and more than 4° at the stations for which comparative data are given below :—

Station.	Mean minimum temperature. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°	°
Lahore	84·5	77·8	+6·7
Sirsa	86·1	80·2	+5·9
Agra	84·1	78·8	+5·3
Delhi	83·9	79·3	+4·6
Sialkot	82·0	77·7	+4·3

The preceding data show that the position of the area of greatest excess of night temperature was the northward of that of the greatest excess of day temperature.

The mean minimum temperature was generally lower than usual at the north-western hill stations and about normal at the remaining hill stations.

The mean temperature of the month was lower than usual over the greater part of Burma, Assam, North Bengal, Bihar and the east of the United Provinces. The deficiency amounted to 1·5° or more at the following stations :—

Station.	Mean temperature. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°	°
Gorakhpur	82·2	84·5	—2·3
Bhamo	80·1	81·8	—1·7
Darbhanga	82·4	84·0	—1·6

With the exception of the areas mentioned above the mean temperature was in excess. The departures from normal were greatest over the Central and South Punjab and Rajputana and exceeded 5° at the stations given below:—

Station.	Mean temperature. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°	°
Agra	91·7	84·9	+6·8
Jaipur	90·7	83·9	+6·8
Ajmer	88·4	81·7	+6·7
Sambhar	90·6	84·2	+6·4
Delhi	91·8	85·5	+6·3
Sirsa	95·3	89·3	+6·0
Lahore	94·0	88·0	+6·0
Jhánsi	88·7	83·0	+5·7

The mean temperature at most of the hill stations was approximately normal.

The following table gives comparative temperature data for the 57 meteorological divisions of the Empire:—

Province.	Division.	Actual temperature.					Departure from normal of month of		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
BURMA ...	Tenasserim ...	84·3	76·0	80·1	8·3	14·6	+0·4	+1·6	−1·2
	Lower Burma Deltaic ...	84·3	76·5	80·4	7·8	13·6	−0·4	+0·8	−1·2
	Central do. ...	88·2	75·3	81·8	12·9	19·6	+0·4	−0·3	+0·7
	Upper do. ...	89·1	76·8	83·0	12·3	21·0	−1·4	+0·4	−1·8
	Arakan	83·9	77·1	80·5	6·8	11·7	−0·5	−0·2	−0·3
BENGAL AND ASSAM...	Eastern Bengal	86·3	77·6	81·9	8·6	15·4	−0·5	+0·1	−0·6
	Assam Surma	87·7	76·6	82·2	11·1	16·2	−1·3	−0·2	−1·6
	Do. Hills	72·4	64·5	68·5	7·9	15·7	...	...	...
	Do. Brahmaputra ...	86·4	77·1	81·8	9·3	17·4	−2·1	0	−2·1
	Deltaic Bengal	89·1	79·7	84·4	9·4	16·9	+1·0	+1·0	0
	Central do.	88·7	79·0	83·9	9·7	17·2	0	+0·6	−0·6
	North do.	86·2	77·8	82·1	8·4	15·7	−2·1	−0·3	−1·8
	Bengal Hills	62·8	54·3	58·6	8·5	17·8	−0·5	+0·7	−1·2
	Orissa	90·1	79·8	84·9	10·3	16·6	+2·4	+1·2	+1·2
	Chota Nagpur	87·7	76·2	82·0	11·5	19·0	+1·3	+1·3	0
	South Bihar	88·0	78·6	83·3	9·4	18·6	−1·2	−0·4	−0·8
	North do.	87·1	78·6	82·9	8·5	17·3	−2·7	−0·4	−2·3
UNITED PROVINCES OF AGRA AND OUDH.	United Provinces East ...	88·8	78·4	83·6	10·5	20·0	−0·9	−0·4	−0·5
	South Oudh	89·5	78·6	84·1	10·9	20·0	−0·8	0	−0·8
	North do.	88·1	77·7	82·9	10·4	21·8	−1·8	−0·3	−1·5
	United Provinces, Central ...	95·8	80·8	88·3	15·0	28·0	+5·9	+2·9	+3·0
	Do., West ...	97·4	82·2	89·8	15·2	24·5	+6·4	+3·7	+2·7
	Do., East Submontane.	86·0	78·1	82·2	7·9	16·2	−3·8	−0·7	−3·1
	Do, West do. ...	88·6	76·2	82·5	12·4	20·7	+0·4	+0·2	+0·2
	Do., Hills ...	70·5	60·6	65·5	9·9	16·2	+0·6	+0·9	−0·3
PUNJAB ...	South-East Punjab	99·7	83·9	91·8	15·8	24·4	+7·9	+4·6	+3·3
	South do.	100·1	83·0	91·5	17·1	26·5	+6·1	+5·9	+0·2
	Central do.	103·5	84·5	94·0	19·0	33·2	+5·3	+6·7	−1·4
	Punjab Submontane	97·9	80·4	89·2	17·5	30·8	+3·8	+2·9	+0·9
	Do. Hills	79·3	56·8	68·1	22·4	36·0	+1·5	−1·5	+3·0
	West Punjab	104·6	84·8	94·7	19·9	30·8	+3·7	+3·3	+0·4
NORTH-WEST FRONTIER PROVINCE.	North-West Frontier Province ...	103·4	82·0	92·7	21·4	37·1	+3·2	+2·6	+0·6
BOMBAY AND MALABAR COAST DISTRICT (MADRAS).	Malabar	83·4	74·5	79·0	9·0	14·8	+0·5	0	+0·5
	Madras South Central ...	91·7	72·6	82·2	19·1	25·7	+1·2	+1·1	+0·1
	Coorg	70·3	62·3	66·3	8·0	13·4	+0·6	+0·3	+0·3
	Mysore	83·2	66·6	75·0	16·6	23·9	+1·7	+0·5	+1·2
	Konkan	83·9	76·7	80·3	7·2	12·1	+0·8	+1·0	−0·2
	Bombay Deccan	83·8	69·8	76·9	14·0	22·1	+0·6	+0·8	−0·2
	Hyderabad North	86·2	71·3	78·8	14·9	24·6	...	...	...
	Khandesh	85·7	69·6	77·7	16·1	27·4	+0·9	+0·6	+0·3
CENTRAL PROVINCES AND BERAR.	Berar	87·9	74·3	81·1	13·6	22·7	+1·3	+1·4	−0·1
	Central Provinces, West ...	87·0	75·1	81·1	11·9	22·1	+1·2	+0·9	+0·3
	Do., Central ...	86·4	74·0	80·2	12·4	21·9	+1·7	+0·7	+1·0
	Do., East ...	86·3	75·6	81·0	10·6	19·1	+0·6	+0·7	−0·1
BOMBAY (NORTH) ...	Gujarat	91·3	77·6	84·5	13·7	20·1	+2·6	+1·2	+1·4
	Kathiawar and Cutch ...	89·5	77·6	83·6	12·0	17·9	+1·7	+0·8	+0·9
	Sind	97·8	79·4	88·6	18·4	24·3	+1·9	−0·2	+2·1
	Baluchistan Hills	95·2	60·1	77·7	35·1	53·7	+1·9	−0·3	+2·2
RAJPUTANA AND CENTRAL INDIA.	Central India	88·0	75·6	81·8	12·5	22·6	+2·6	+1·5	+1·1
	Rajputana, East	97·9	79·8	88·9	18·1	26·8	+9·5	+6·7	+2·8
	West Rajputana	99·7	79·7	89·7	19·9	29·1	+4·7	+1·6	+3·1
MADRAS ...	East Coast, North	89·3	79·0	84·1	10·3	19·8	+1·4	+0·6	+0·8
	Hyderabad, South	87·5	73·4	80·5	14·1	24·2	−0·7	+1·1	−1·8
	Madras, Central	91·4	74·5	83·0	16·9	26·3	0	−0·2	+0·2
	East Coast, Central	94·3	78·2	86·3	16·1	27·4	+0·8	+0·1	+0·7
	Do., South	94·4	77·4	85·9	17·0	26·9	+1·3	+0·8	+0·5
	Madras, South	96·0	78·4	87·2	17·7	24·0	+2·0	+0·5	+1·5

The highest mean day temperatures were recorded over the extreme north-west where in the districts of the South, Central and West Punjab and the North-West Frontier Province the maximum temperature, on the mean of the month, exceeded 100°. The hottest area as defined by the mean temperature included the Central and West Punjab where the mean temperature was 94°. The mean daily range of temperature was generally less than usual in the north-east and greater than usual elsewhere.

The following gives the mean temperature departures of the month at the extra-Indian stations :—

STATION.	MEAN TEMPERATURE.		
	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°	°
Trincomalee	85·0	84·5	+0·5
Colombo	83·1	81·5	+1·6
Amini Divi	82·1	81·3	+0·8
Kashgar	79·3	76·8	+2·5
Kabul	77·5	75 9	+1·6
Ispahan	81·9	77·5	+4·4
Bushire	89·9	90·6	—0·7
Jask	90·3	89·2	+1·1
Muscat	87·5	86·1	+1·4
Baghdad	95·5	93·5	+2·0
Aden	88·4	85·9	+2·5
Perim	91·9	90·1	+1·8
Zanzibar	77·8	77·1	+0·7
Seychelles	77·8	76·6	+1·2
Mauritius	67·7	68·0	—0·3

The preceding data show that more or less excess prevailed very generally over the extra-Indian regions.

The chief abnormal features of the temperature conditions of the month were as follows :—

(1) Both the day and night temperatures and consequently also the mean temperature were lower than usual over the greater part of Burma and north-east India.

(2) Both the day and night temperatures and consequently also the mean temperature were higher than usual in nearly all other parts of the country.

(3) The excess was greatest in the north-west but while the greatest excess of the day temperature was shown over eastern Rajputana, that of the night temperature was shown over the Central and South Punjab.

(4) The day temperature was generally in excess and the night temperature generally in defect at the north-west hill stations.

(5) The absolutely highest temperature recorded during the month was 111°·3 at Montgomery on the 21st.

The following table gives comparative temperature data for the eleven meteorological provinces of India :—

Meteorological Province.	DEPARTURE FROM NORMAL OF		
	Mean Maximum temperature. August 1905.	Mean minimum temperature, August 1905.	Mean temperature. August 1905.
	°	°	°
Burma Coast and Bay Islands	+0·1	+0·5	+0·3
Burma Inland	—1·1	+0·5	—0·3
Assam	—2·0	—0·1	—1·0
Bengal and Orissa ...	+0·1	+0·6	+0·3
Gangetic Plain and Chota Nagpur.	+0·1	+0·4	+0·2
Upper Sub-Himalayas ...	+3·6	+2·8	+3·3
Indus Valley and North-West Rajputana.	+3·3	+1·7	+2·5
East Rajputana, Central India and Gujarat.	+4·5	+2·1	+3·3
Deccan	+0·9	+0·9	+0·9
West Coast	+0·7	+0·6	+0·6
South India	+1·2	+0·5	+0·8

The following gives a brief summary of the more important changes of temperature during the month :—

The rainfall during August was, over a large part of the country, irregularly distributed, periods of showers alternating with periods of fine weather, so that the temperature was unsteady and the departures from normal varied considerably from day to day. In the extreme north-west there was no rain throughout and the temperature of that area was almost uninterruptedly much higher than usual.

During the first five days of the month local rain fell over Burma, north-east and central India, the hill and submontane districts of northern India and the east and west coasts of the Peninsula and the mean temperature was generally normal or below the normal over those areas.

The following gives comparative temperature data for these areas for these days :—

Province or Division.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	1st August.	2nd August.	3rd August.	4th August.	5th August.
	°	°	°	°	°
Burma	—1·9	—1·5	—0·8	—0·2	—0·9
Bengal	—0·3	—1·0	—0·3	—0·2	—0·3
Orissa	+1·3	+1·0	+0·7	+0·8	—0·4
Bihar	—3·0	—1·0	—0·5	—0·1	—0·6
United Provinces ...	+1·3	+1·3	+0·8	+1·1	+0·7
Madras Coast ...	—2·0	—3·4	—1·9	—1·7	+0·8

At this time the hottest area was shown over the west of the United Provinces, east Rajputana and the east and south of the Punjab. This is shown below :—

Station.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	1st August.	2nd August.	3rd August.	4th August.	5th August.
	°	°	°	°	°
Jhánsi	+7·9	+9·2	+9·2	+7·7	+7·3
Agra	+7·2	+6·8	+8·2	+7·0	+6·0
Jaipur	+5·5	+6·1	+6·9	+6·9	+8·0
Sambhar ...	+4·5	+5·1	+5·2	+6·3	+7·1
Delhi	+3·3	+4·2	+7·0	+7·3	+5·6
Sirsa	+4·5	+5·0	+5·5	+6·8	+7·3

On the 6th temperature rose over the Peninsula and between the 6th and the 14th the mean temperature was generally higher than usual except over parts of Burma, north-east India and along the foot of the hills in northern India. The following gives data for all divisions for the 10th illustrating the general conditions prevailing during this interval :—

Province or division.	Departure from normal of		
	Mean maximum temperature, 10th August 1905.	Mean minimum temperature, 10th August 1905.	Mean temperature, 10th August 1905.
	°	°	°
Burma	−0·1	+1·0	+0·5
Assam	−3·3	−1·3	−2·3
Bengal	−2·2	−0·8	−1·5
Orissa	+0·9	+0·8	+0·9
Bihar	−6·0	−1·9	−4·0
Chota Nagpur	−0·3	+0·9	+0·3
United Provinces of Agra and Oudh.	+2·7	+3·0	+2·9
Punjab	+1·5	+6·7	+5·6
North-West Frontier Province	+5·4	+6·3	+5·9
Baluchistan	+7·8	+2·8	+5·3
Sind	+1·9	+0·7	+1·3
Rajputana	+9·1	+1·1	+5·1
Gujarat East	+3·5	+1·5	+2·5
Central India	+4·0	+1·5	+2·8
Central Provinces ...	+2·9	+0·5	+1·7
Berar	+5·1	+1·4	+3·3
West Coast	+2·3	+2·4	+2·4
Bombay Deccan	+3·6	+0·3	+2·0
Mysore	+3·3	−0·6	+1·4
Madras Coast	+1·4	+2·4	+3·4
Madras Deccan	+1·8	+2·2	+2·0
South India	+4·0	+0·9	+2·5

The above shows that the greatest excess of temperature was reported from the Punjab and adjoining districts. The excess was most marked in the day temperature which was more than 11 degrees above the normal at the following places on the following days during this period :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
6th August ...	Jaipur ...	104·2	91·1	+13·1
	Sambhar ...	102·5	91·1	+11·4
7th „ ...	Jaipur ...	102·2	91·1	+11·1
8th „ ...	Jaipur ...	102·7	91·1	+11·6
	Agra ...	102·5	90·9	+11·6
	Delhi ...	103·2	91·8	+11·4
9th „ ...	Agra ...	104·0	90·9	+13·1
	Jaipur ...	103·7	91·1	+12·6
	Jhánsi ...	101·3	88·8	+12·5
	Sambhar ...	103·0	90·9	+12·1
	Delhi ...	103·2	91·8	+11·4
10th „ ...	Jaipur ...	103·2	91·1	+12·1
	Jhánsi ...	100·3	88·8	+11·5

Between the 15th and the 18th the weather was more or less showery over a large part of the country except the

the 21st the rainfall fell off and the heat was greater than usual almost everywhere and in the north-west was very great. The following gives data for all divisions for these three days :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	19th August.	20th August.	21st August.
	°	°	°
Burma	0	+0·5	+0·9
Assam	+0·3	0	+1·1
Bengal	+2·6	+1·0	+1·0
Orissa	+2·7	+3·0	+2·0
Bihar	+2·2	+2·7	−0·3
Chota Nagpur	+2·6	+1·5	+1·4
United Provinces of Agra and Oudh.	+0·7	+3·4	+5·1
Punjab	+4·5	+5·7	+8·3
North-West Frontier Province	+2·0	+4·2	+4·8
Baluchistan	−0·1	+2·3	−0·3
Sind	+1·0	+3·1	+2·3
Rajputana	+8·3	+9·8	+9·9
Gujarat, East	+3·0	+1·3	+1·9
Central India	+2·0	+4·0	+1·8
Central Provinces ...	+1·0	+3·4	+3·7
Berar	+1·5	+4·0	+2·1
West Coast	−0·8	−0·2	+0·7
Bombay Deccan	+1·2	+2·0	+2·4
Mysore	+1·1	+0·5	+1·5
Madras Coast	+0·2	+0·8	+1·8
Madras Deccan	−0·1	+0·6	+1·3
South India	−0·5	+0·6	+0·7

The day temperature was again very high over the Punjab and Rajputana at this time and the following maxima more than 12° above the normal were recorded :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
19th August ...	Ajmer ...	102·9	87·9	+15·0
20th August ...	Sambhar ...	105·5	91·0	+14·5
	Ajmer ...	102·4	88·0	+14·4
21st August ...	Sambhar ...	106·5	91·1	+15·4
	Ajmer ...	101·9	88·0	+13·9
	Mainpuri ...	103·3	90·7	+12·6

Between the 22nd and the 27th the weather became unsettled over the Peninsula and a shallow depression appeared over the Circars coast districts and as a result

The following gives comparative data for each alternate day from the 22nd to the 26th for the Peninsular districts :—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	22nd August.	24th August.	26th August.
	°	°	°
Central Provinces ...	+1·4	—0·9	+0·7
Berar	+3·3	—3·5	—0·3
West Coast	+0·9	—0·2	+0·2
Bombay Deccan	+1·8	+0·7	—3·1
Mysore	—0·4	—0·4	—2·2
Madras Coast	+1·9	—0·3	+0·4
Madras Deccan	—1·5	—1·7	—4·6
South India	+1·1	0	+1·2

Comparatively little change occurred in the north-west at this time and maxima between 12° and 15° above the average were reported from the following places during this interval :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
22nd August ...	Mainpuri ...	105·8	90·7	+15·1
	Agra ...	105·0	91·1	+13·9
	Sambhar ...	104·5	91·1	+13·4
	Sialkot ...	106·7	94·3	+12·4
	Ajmer ...	100·4	88·1	+12·3
	Jhánsi ...	101·3	89·1	+12·2
24th August...	Ajmer ...	101·4	88·2	+13·2

Between the 28th and the close of the month the weather was showery over all parts of the country except the north-west and the distribution of temperature, relatively to the normal, was irregular except in the rainless area where the mean temperature remained high.

Winds.

The wind was generally more westerly and steadier and stronger than usual at the stations in the east of the Bay. This is shown below :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, August 1905.	Normal, August.	Actual percentage, August 1905.	Normal percentage, August.	Departure from normal, August 1905.	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°						
Port Blair ...	S62W	S51W	84	81	+3	269	259	+10
Diamond Island.	S53W	S4W	79	77	+2	231	214	+17
Akyab ...	S13W	S 5 E	61	64	—3	134	82	+52

Around the head of the Bay the wind's direction was fairly normal except that at Chittagong and False Point it was somewhat more southerly than usual and at Calcutta the wind blew from the west of south instead of as normally from the east of south. At all stations the wind was remarkably steady and was considerably stronger than usual, more particularly at Saugor Island.

In the Gangetic Plain and Chota Nagpur the increased westing in the direction and the increased steadiness were very strongly marked, but the velocity was somewhat lower than usual. The following gives data :

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, August 1905.	Normal, August.	Actual percentage, August 1905.	Normal percentage, August.	Departure from normal, August 1905.	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°						
Hazaribagh ...	S78W	S9W	29	9	+20	148	185	—37
Allahabad ...	N62W	N6E	27	5	+22	87	158	—71

At the stations in the Upper Sub-Himalayas Division, the winds' direction varied irregularly from the average, but at some places, notably at Meerut, Lahore and Ludhiana the increased westing was very noticeable.

In the Indus Valley the winds were approximately normal.

At Jaipur, as in other parts of northern India, the wind was more westerly, steadier and stronger than usual, while at Deesa the mean wind direction was about normal though both steadiness and velocity exceeded the average.

The following gives comparative data of the air movement over the different divisions of northern India, as well as over Burma and the Bay Island :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, August 1905.	Normal percentage, August.	Departure from normal, August 1905.	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
Bay Islands	84	81	+ 3	269	259	+10
Burma	70	69	+ 1	134	134	0
Bengal	73	58	+15	247	195	+52
Chota Nagpur	29	9	+20	148	185	—37
Orissa	77	54	+23	278	235	+43
United Provinces of Agra and Oudh.	26	13	+13	51	72	—21
Punjab	34	18	+16	49	55	— 6
North West Frontier Province.	52	47	+ 5	49	86	—37
Rajputana	84	59	+25	257	201	+56
Sind	74	71	+ 3	279	248	+31

Over the Deccan the winds were unusually northerly at the majority of stations, but at Akola, Buldana and Hyderabad the mean directions were approximately normal. The percentage of steadiness ordinarily exceeded the average but the velocity varied irregularly from the normal. At Bombay the mean wind direction and steadiness were fairly normal but the velocity of the wind was much less than usual,* while at Karwar the wind's direction was somewhat more southerly than the average and both the

steadiness and the velocity slightly exceeded the normal. This is shown below :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, August 1905.	Normal, August.	Actual percentage, August 1905.	Normal percentage, August.	Departure from normal, August 1905.	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°						
Bombay ...	S88W	S81W	82	79	+3	283	370	—87
Karwar ...	S77W	S84W	77	74	+3	129	103	+26

In South India the wind exhibited irregular departures from normal as regards mean direction, steadiness and velocity, but at the following stations the increased northing in the directions, which was so marked in the Deccan, was shown to some extent.

Station.	Mean wind direction.		
	Actual, August 1905.	Normal, August.	Northerly deflection.
	°	°	
Chitaldroog	N81W	S81W	+18
Hassan	N83W	W.	+ 7
Bellary	N82W	N87W	+ 5

The following gives comparative data of air movement over the different divisions of the Peninsula :—

Province or Division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, August 1905.	Normal percentage, August.	Departure from normal, August 1905.	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
Central Provinces ...	78	74	+ 4	159	173	—14
Berar	85	80	+ 5	215	206	+9
Bombay Deccan ...	85	84	+ 1	323	412	—89
Madras Deccan ...	84	87	— 3	216	269	—53
West Coast	80	77	+ 3	206	237	—31
Mysore	85	87	— 2	202	216	—14
Madras Coast	65	62	+ 3	166	166	0
South India	64	75	—11	106	96	+10

At the Himalayan hill stations the winds, as over the plains at their foot, were generally more westerly, steadier and stronger than usual. At the following places these characteristics are shown :—

Hill Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, August 1905	Normal, August.	Actual percentage, August 1905	Normal percentage, August.	Departure from normal, August 1905.	Actual, Aug. 1905.	Normal, Aug.	Departure from normal, August 1906.
	°	°						
Simla ...	N9W	N33E	74	19	+55	94	86	+ 8
Ranikhet ...	S87W	S60W	37	26	+11	90	55	+35
Katmandu ...	W	N66W	3	2	+ 1	17	18	— 1
Darjeeling ...	N78W	S84E	35	28	+ 7	49	89	—40

At the central hill stations the winds were steadier than usual and in some cases the direction was more northerly than the average.

At Aden and Perim the departures of the wind from the normal conditions were irregular. The following gives data :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, August 1905.	Normal, August.	Actual percentage, Aug. 1905.	Normal percentage, August.	Departure from normal, August 1905.	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°						
Aden ...	S30E	S 3 E	39	70	—31	199	257	—58
Perim ...	N20W	N88W	37	41	—4	370	331	+39

The South-East Trades were lighter than usual and at Mauritius the mean direction was less easterly than the average. This is shown below:—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, August 1905.	Normal August.	Actual percentage, Aug. 1905.	Normal percentage, August.	Departure from normal, August 1905.	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	°	°						
Zanzibar ...	S31E	S 9E	74	77	—3	164	166	—2
Seychelles ...	S35E	S33E	87	85	+2	298	323	—25
Mauritius ...	S55E	S68E	...	...	...	235	296	—61

The following summarises the principal abnormal features of the wind circulation :—

(1) The pressure differences were greater than usual over the Indian land area and the steadiness and velocity of the air currents generally exceeded the normal.

(2) Over northern India, both on the hills and plains and also over the Bay area the wind's direction was generally more westerly than the average and the usual south-east winds up the Gangetic Plain were largely absent.

(3) Over the Deccan the winds were unusually northerly.

(4) The South-east Trades were weak.

Humidity and Cloud.

The mean absolute humidity of the month of August at 8 A.M. was in defect of the normal over north-west and part of central India. It was also in trifling defect at a few places in the Peninsula, north-east India and Burma. The deficiency was most marked over the western desert and neighbouring regions and amounted to more than

·050″ at the places for which comparative data are given below :—

Station.	Absolute Humidity. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	″	″	″
Montgomery ...	·685	·831	—·146
Agra	·812	·913	—·101
Bikaner... ...	·737	·830	—·093
Bhavnagar Para ...	·793	·880	—·087
Jaipur	·733	·813	—·080
Multan	·797	·868	—·071
Delhi	·791	·861	—·070
Sirsa	·786	·855	—·069
Pachpadra ...	·802	·855	—·053

Except over the above areas the mean absolute humidity of the month exceeded the normal, but except at a few places the excess was generally small and unimportant. The following gives comparative data for those stations at which the excess was ·050″ or more :—

Station.	Absolute Humidity. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	″	″	″
Cocanada ...	·943	·850	+·093
Mergui	·883	·794	+·089
Kurnool	·803	·715	+·088
Chanda	·882	·799	+·083
Thayetmyo ...	·944	·873	+·071
Diamond Island ...	·944	·890	+·054
Colombo	·898	·846	+·052

The distribution of the departures from normal of the mean relative humidity of the month was generally similar to that of the mean absolute humidity, but owing to the high temperatures prevailing generally, the areas of deficient mean relative humidity were generally more extensive than those of deficient absolute humidity. The mean relative humidity was below the normal over the whole of north-west India, as well as across the head of the Peninsula, over the Bombay Deccan and over the south of the Peninsula. The deficiency was very large in the north-west where both the absolute humidity was relatively low and the mean temperature was excessive. The following gives comparative data for stations at which the deficiency equalled or exceeded 10 :—

Station.	Relative Humidity. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	%	%	
Agra	62	82	—20
Delhi	61	78	—17
Jaipur	63	79	—16
Rawalpindi ...	64	80	—16
Montgomery ...	49	63	—14
Sirsa	58	71	—13
Ajmer	69	82	—13
Lahore	63	75	—12
Sambhar... ...	65	77	—12
Peshawar ...	60	71	—11
Pachpadra ...	69	79	—10

Over the other areas of deficiency the departures from normal were generally much smaller than in the north-west but amounted to —5 or more at the following stations :—

Station.	Relative Humidity. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	%	%	
Gopalpur ...	77	85	—8
Hazaribagh ...	82	89	—7
Ahmednagar ...	76	83	—7
Goa	82	89	—7
Tinnevelly ...	52	59	—7
Cuddalore ...	75	80?	—5?

Over the remainder of the Indian area the mean relative humidity exceeded the average but except over North Bihar, where the absolute humidity was in excess and the mean temperature in defect, and the centre of the Peninsula and west Ceylon where the absolute humidity was in excess and the temperature normal, the departures from normal were small and unimportant. The following gives data for those stations where the departure from normal was +5 or more :—

Station.	Relative Humidity. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	%	%	
Kurnool	85	75	+10
Colombo	84	77	+ 7
Bahraich	95	88	+ 7
Darbhanga	94	89	+ 5
Gulbarga	85	80	+ 5
Trincomalee	83	78	+ 5

Both the absolute and relative humidities were, with a few exceptions, generally lower than usual at the hill stations in the north-west Himalayas and at the central and southern hill stations. This is shown below :—

Hill Station.	Absolute Humidity. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.	Relative Humidity. Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
	″	″	″	%	%	
Gilgit ...	·350	·494	—·144	35	50	—15
Quetta ...	·490	·479	+·011	48	58	—10
Murree ...	·516	·514	+·002	75	82	— 7
Srinagar ...	·578	·625	—·047	79	86	— 7
Cherat ...	·659	·588	+·071	70	73	— 3
Mount Abu ...	·590	·609	—·019	93	96	— 3
Wellington ...	·415	·432	—·017	68	71	— 3
Simla ...	·497	·506	—·009	89	91	— 2
Pachmarhi ...	·610	·651	—·041	91	92	— 1
Chakrata ...	·544	·531	+·013	93	93	0
Ranikhet ...	·573	·571	+·002	90	90	0
Lashio ...	·738	·742	—·004	91	91	0
Darjeeling ...	·522	·514	+·008	97	96	+ 1
Chaman ...	·388	·369	+·019	39	33	+ 6

The following table shows the stations at which the mean relative humidity of the month at 8 A.M. exceeded 94 per cent. and was less than 65 per cent. and thus defines the areas of greatest and least relative humidity at 8 A.M. on the mean of the month :—

Station.	Mean relative humidity exceeding 94 %.	Station.	Mean relative humidity less than 65 %.
Akyab ...	96	Rawalpindi ...	64
Sibsagar ...	96	Lahore ...	63
Dibrugarh ...	96	Multan ...	63
Moulmein ...	95	Jaipur ...	63
Bhamo	95	Agra	62
Dhubri	95	Delhi	61
Jalpaiguri ...	95	Khushab ...	61
Muzaffarpur ...	95	Peshawar ...	60
Bahraich ...	95	Bikanir ...	60
		Sirsa ...	58
		Kotah ...	58
		Tinnevelly ...	52
		Montgomery ...	49

At Aden the mean monthly absolute humidity, on the mean of the day, is reported to have been in large excess and the mean relative humidity in considerable excess, while at Perim the mean absolute humidity was in slight excess and the mean relative humidity in slight defect. This is shown below :—

Station.	Absolute Humidity.			Relative Humidity.		
	Actual, August 1905.	Normal, August.	Departure from normal, Aug. 1905.	Actual, August 1905.	Normal, August.	Departure from normal, Aug. 1905.
	"	"	"	%	%	
Aden ...	·942	·811	+·131	70	65	+5
Perim ...	·895	·876	+·019	60	62	—2

In the South-east Trades region the mean absolute humidity was in slight excess at the Seychelles but owing to the prevailing high temperature the mean relative humidity was in slight defect. The following gives data :—

Station.	Absolute Humidity.			Relative Humidity.		
	Actual, August 1905.	Normal, August.	Departure from normal, Aug. 1905	Actual August, 1905.	Normal August, 1905.	Departure from normal, Aug. 1905.
	"	"	"	%	%	
Seychelles ...	·757	·747	+·010	76	78	—2
Mauritius ...	·502	·508	—·006	74	75	—1

The following summarises the chief abnormal features of the humidity conditions of the month :—

(1) The mean absolute humidity was generally in defect of the normal over north-west and part of central India and with a few local exceptions was generally in excess elsewhere.

(2) The departures from normal were generally unimportant except in the north-west where the deficiency was very large.

(3) Owing partly to the above and partly to the prevailing high temperatures, the mean relative humidity of the month was below the normal over the greater part of the country and was largely below in the north-west.

The following table gives comparative data of the mean absolute and relative humidities for the nine meteorological provinces for August 1905 :—

Meteorological Province.	Mean Absolute Humidity.		Mean Relative Humidity.	
	Average actual, August 1905.	Departure from normal, August 1905.	Average actual, August 1905.	Departure from normal, August 1905.
	"	"	%	
Burma Coast & Bay Islands.	·907	+·004	88	—2
Bengal and Orissa ...	·966	+·010	86	—1
Gangetic Plain and Chota Nagpur ...	·886	+·008	85	0
Upper Sub-Himalayas ...	·878	—·003	73	—7
Indus Valley and North-West Rajputana ...	·841	—·004	64	—3
East Rajputana, Central India & Gujarat ...	·748	—·067	61	—16
Deccan	·739	+·009	80	—1
West Coast ...	·871	+·010	86	—2
South India ...	·717	+·019	76	+1

The sky was more cloudy than usual at 8 A.M. on the mean of the month, over a considerable part of north-east India, over central Burma, over part of the west of the Peninsula, over the Deccan and over the west of Central India and the east of Gujarat. The excess was generally small and unimportant except at the stations for which comparative data are given below where the departures exceeded +2 :—

Station.	Mean cloud amount.		
	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
Yamethin	9·6	5·0	+4·6
Bahraich	8·8	6·0	+2·8
Sutna	9·6	7·4	+2·2
Gorakhpur	8·0	5·9	+2·1
Bogra	9·3	7·2	+2·1

In practically all other parts of the country the cloud amount at 8 A.M. on the mean of the month was less than the average. The deficiency was greatest in the north-west, where the failure of the rains was most strongly marked, and at the following places the departure from normal amounted to —3 or more :—

Station.	Mean cloud amount.		
	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
Rajkot	2·4	7·5	—5·1
Sirsa	0·2	4·7	—4·5
Pachpadra	3·0	7·5	—4·5
Ludhiana	1·9	6·3	—4·4
Hyderabad (Sind) ...	0·9	5·1	—4·2
Sambhar	2·8	6·3	—3·5
Bikaner	1·1	4·5	—3·4
Lahore	0·4	3·8	—3·4
Bhuj	4·0	7·3	—3·3
Veraval	5·1	8·2	—3·1
Jaipur	3·8	6·9	—3·1
Jhansi	3·6	6·7	—3·1

At the hill stations the departures from normal were smaller than on the neighbouring plains and at the majority of these stations the mean cloud amount was approximately normal.

The mean cloud amount was 9·5 or more and 1·9 or less at the following stations, which stations hence outline the areas of greatest and least cloud amount at 8 A.M. on the mean of the month :—

Station.	Mean cloud amount exceeding 9·0.	Station.	Mean cloud amount less than 2·0.
Toungoo ...	9·9	Ludhiana ...	1·9
Sibsagar ...	9·9	Sialkot ...	1·8
Yamethin ...	9·6	Peshawar ...	1·2
Tezpur ...	9·6	Khushab ...	1·1
Cooch Behar ...	9·6	Bikaner ...	1·1
Indore ...	9·6	Hyderabad (Sind)...	0·9
Sutna ...	9·6	Dera Ismail Khan...	0·9
Mandalay ...	9·5	Jacobabad ...	0·5
Dhubri ...	9·5	Lahore ...	0·4
		Sirsa ...	0·2
		Multan ...	0·2
		Montgomery ...	0

The daily cloud amount was less than usual, on the mean of the month, at Aden and Perim. This is shown below :—

Station.	MEAN CLOUD AMOUNT.		
	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
Aden	0·9	2·0	—1·1
Perim	0·9	2·6	—1·7

The mean daily cloud amount was slightly above the average over the South-east Trades region. The following gives data :—

Station.	MEAN CLOUD AMOUNT.		
	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.
Seychelles ...	6·8	6·4	+0·4
Mauritius ...	6·3	5·5	+0·8

The following summarises the principal abnormal features of the cloud distribution of the month :—

(1) The sky at 8 A.M., on the mean of the month was more cloudy than usual over parts of central Burma and of north-east India where the monsoon was active.

(2) The cloud amount was also in trifling excess over part of the west of the Peninsula, of the Deccan and of the west of Central India where, however, monsoon rainfall was in defect.

(3) The mean cloud amount was generally in defect elsewhere and over north-west India, where the monsoon failed, the deficiency was large.

The following table gives comparative data of the mean cloud amount for the nine meteorological provinces :—

Meteorological Province.	MEAN CLOUD AMOUNT.	
	Average actual, August 1905.	Departure from normal, August 1905.
Burma Coast and Bay Islands ...	8·1	—0·3
Bengal and Orissa ...	8·2	—0·2
Gangetic Plain and Chota Nagpur ...	8·8	—0·1
Upper ub-Himalayas	3·8	—2·2
Indus Valley and North-West Rajputana	3·1	—0·9
East Rajputana, Central India and Gujarat	5·2	—2·7
Deccan	8·1	—0·1
West Coast	7·7	—0·2
South India	7·8	—0·1

Rainfall.

The distribution of the rainfall of the month of August, 1905, was largely determined (1) by the abnormal pressure conditions and (2) by the weakness of the Arabian Sea monsoon current. The Arabian Sea monsoon current was weaker than usual in the north, and the Bombay coast received little more than half the usual amount though Malabar reported daily falls and the total for the month was about average. Over parts of the interior of the Peninsula the rainfall was intermittent and in Khandesh less than half the normal fall was obtained, but the Bay monsoon was stronger than usual and the eastern half of the Peninsula including the East Coast divisions, Central Madras and Hyderabad had normal or more or less excessive rain.

The rainfall was exceptionally deficient over north-west India, where drought prevailed persistently almost throughout the month. In Rajputana, the west of Central India, the west and centre of the United Provinces, the greater part of the Punjab, Sind and Gujarat the deficiency amounted to between 60 and 100 per cent, many stations recording no rain whatever during the month.

The Bay monsoon current was stronger than the western branch and Burma, Assam, Bengal, the east of the United Provinces and North Oudh received normal or heavier rain than usual, on the mean of the month. The cyclonic storms of the month were generally of slight intensity, but occasioned some heavy falls of rain in the north-east.

The only periods of moderately general rain were as follows :—

(1) The 1st to the 6th when local rain fell except in the north-west.

(2) The 7th to the 14th when rain fell over north-east India and Burma and some local rain in the submontane districts of northern India.

(3) The 17th and 18th when heavyish local rain fell except in the north-west.

(4) The 24th to the 28th when rain fell accompanying a cyclonic storm in the Bay.

The chart Pl. VII shows the actual rainfall of the month as measured at the meteorological observatories. No rain whatever fell during the month at the stations of Kurrachee, Hyderabad (Sind), Jacobabad, Bikaner, Delhi, Sirsa, Lahore, Montgomery, Multan and Pamban and less than one-tenth of an inch at Dera Ismail Khan, Jodhpur, Pachpadra and Tinnevelly. From these areas of light rainfall the amounts increased and measured 30·24 inches at Mangalore, 33·02 ins. at Moulmein, 56·90 ins. at Akyab, and 67·06 ins. at Cooch Behar.

The following table gives comparative rainfall data for the 57 meteorological provinces of the empire :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, August 1905.	Average *normal*, August.	Average actual, August 1905.	Average *normal*, August.	Departure of actual from normal, August 1905.
				Inches.	Inches.	Inches.
BURMA ...	1. Tenasserim ...	26·8	26·9	34·37	42·56	—8·19
	2. Lower Burma Deltaic ...	24·8	24·9	19·21	22·25	—3·04
	3. Central do. ...	16·2	17·9	10·45	10·71	—0·26
	4. Upper do. ...	8·6	10·3	5·45	7·29	—1·84
	5. Arakan ...	27·5	26·0	47·67	39·76	+7·91
BENGAL AND ASSAM ...	6. Eastern Bengal ...	22·2	18·0	22·58	16·46	+6·12
	7. Assam Surma ...	25·0	21·6	27·10	20·82	+6·28
	8. Do. Hills ...	24·5	21·4	36·03	23·05	+12·98
	9. Do. Brahmaputra ...	21·6	16·2	22·43	14·60	+7·83
	10. Deltaic Bengal ...	15·8	16·0	10·96	12·11	—1·15
	11. Central do. ...	17·7	15·1	14·88	11·33	+3·55
	12. North do. ...	24·6	15·8	37·56	17·60	+19·96
	13. Bengal Hills ...	26·7	23·5	32·30	22·69	+9·61
	14. Orissa ...	11·9	15·2	7·87	11·94	—4·07
	15. Chota Nagpur... ...	14·9	16·7	9·62	13·79	—4·17
	16. South Bihar	16·5	13·4	14·77	11·52	+3·25
	17. North do.	18·7	13·4	23·78	12·16	+11·62
UNITED PROVINCES OF AGRA AND OUDH.	18. United Provinces East ...	16·3	13·1	12·21	11·38	+0·83
	19. *South Oudh*	11·3	12·3	7·59	11·23	—3·64
	20. North do.	17·0	12·4	15·78	11·70	+4·08
	21. United Provinces Central... ...	6·8	12·0	3·99	10·56	—6·57
	22. Do. West	2·9	9·3	1·47	7·78	—6·31
	23. Do. East Submontane ...	18·4	12·7	18·11	11·71	+5·40
	24. Do. West do. ...	10·1	12·8	7·73	14·13	—6·40
	25. Do. Hills	16·2	17·6	14·93	17·40	—2·47
PUNJAB	26. South-East Punjab	1·9	7·3	0·94	6·47	—5·53
	27. South do.	1·1	5·0	0·51	4·18	—3·67
	28. Central do	1·7	5·1	1·08	4·92	—3·84
	29. Punjab Submontane	5·3	8·0	3·43	8·13	—4·70
	30. Do. Hills	12·8	14·7	10·34	16·35	—6·01
	31. West Punjab	0·5	2·9	0·23	2·12	—1·89
NORTH-WEST FRONTIER PROVINCE.	32. North-West Frontier Province ...	3·0	4·6	1·94	3·56	—1·62
BOMBAY AND MALABAR COAST DISTRICTS (MADRAS).	33. Malabar	21·7	21·4	17·16	20·32	—3·16
	33-A. Travancore	9·5	...	6·40	...	...
	34. Madras South Central	5·7	5·8	3·63	3·64	—0·01
	35. Coorg	20·6	...	11·39	...	...
	36. Mysore	9·2	8·3	4·97	5·13	—0·16
	37. Konkan	21·2	24·7	13·41	24·84	—11·43
	38. Bombay Deccan	8·0	9·8	4·07	5·93	—1·86
	39. Hyderabad North	11·2	11·4	9·29	7·92	+1·37
	40. Khandesh	5·9	10·3	2·69	6·30	—3·61
CENTRAL PROVINCES & BERAR.	41. Berar	9·0	10·3	4·99	6·94	—1·95
	42. Central Provinces West	11·6	13·0	9·47	10·57	—1·10
	43. Do. Central ...	13·3	15·1	10·73	13·81	—3·08
	44. Do. East	15·2	15·0	10·62	13·90	—3·28
BOMBAY (NORTH) ...	45. Gujarat East	4·0	13·3	1·60	9·79	—8·19
	46. Kathiawar and Cutch	1·5	8·4	0·71	6·77	—6·06
	47. Sind	0	2·2	0	2·21	—2·21
	48. Baluchistan Hills	0	1·3	0	0·81	—0·81
RAJPUTANA & CENTRAL INDIA.	49. Central India East	8·7	13·0	5·94	11·44	—5·50
	50. Rajputana East, Central India West ...	2·1	9·2	1·14	7·46	—6·32
	51. West Rajputana	0·1	4·3	0·03	3·32	—3·29
MADRAS	52. East Coast North	11·3	10·9	8·64	7·40	+1·24
	53. Hyderabad South	12·4	10·4	8·43	6·43	+2·00
	54. Madras Central	10·6	6·6	8·67	4·12	+4·55
	55. East Coast Central	7·1	5·5	3·85	3·34	+0·51
	56. East Coast South	7·9	7·2	5·96	4·99	+0·97
	57. Madras South	2·7	2·8	1·42	1·62	—0·20

The preceding data show that the average actual rainfall was *nil* in Baluchistan and Sind, less than one-tenth of an inch in West Rajputana, less than one quarter of an inch in the West Punjab and less than one inch in the South-east Punjab, the South Punjab and Kathiawar and Cutch. On the other hand, the average actual fall exceeded 30" in Tenasserim, the Assam Hills, North Bengal and the Bengal Hills and exceeded 40" in Arakan.

The average actual fall was more than 50 per cent in excess of the normal in the divisions for which comparative data are given below:—

Division.	Rainfall.			
	Average actual, August 1905.	Average normal, August.	Departure from normal, August 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Assam Hills ...	36·03	23·05	+12·98	+ 56
Assam Brahmaputra...	22·43	14·60	+ 7·83	+ 54
North Bengal ...	37·56	17·60	+19·96	+113
North Bihar ...	23·78	12·16	+11·62	+ 96
United Provinces east submontane.	18·11	11·71	+ 6·40	+ 55
Madras Central ...	8·67	4·12	+ 4·55	+110

It was more than 80 per cent. in defect of the normal in the following divisions:—

Division.	Rainfall.			
	Average actual, August 1905.	Average normal, August.	Departure from normal, August 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
United Provinces West.	1·47	7·78	—6·31	—81
South-East Punjab...	0·94	6·47	—5·53	—85
South Punjab ...	0·51	4·18	—3·67	—88
West Punjab ...	0·23	2·12	—1·89	—89
Gujarat East ...	1·60	9·79	—8·19	—84
Kathiawar and Cutch.	0·71	6·77	—6·06	—90
Sind ...	0	2·21	—2·21	—100
Baluchistan Hills ...	0	0·81	—0·81	—100
Rajputana East, Central India West.	1·14	7·46	—6·32	—85
West Rajputana ...	0·03	3·32	—3·29	—99

The mean departure of the whole country (excluding the hill divisions) derived from the fifth figure column of the table on page 235 was—0·78". The mean deficiency of August, 1905, was thus not very large and was much less than in August, 1899, when it amounted to as much—2·81",

The following gives the rainfall of the month at the extra-Indian stations:—

Station.	Rainfall.			
	Actual, August 1905.	Normal, August.	Departure from normal, August 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee ...	5·43	4·64	+0·79	+17
Colombo ...	0·62	3·90	—3·28	—84
Amini Divi ...	11·84	5·04	+6·80	+115
Minicoy ...	14.86	6·49	+8·37	+129
Kashgar ...	0	1·10	—1·10	—100
Kabul ...	0	0·18	—0·18	—100
Meshed ...	0·33	0·01	+0·32	...
Ispahan ...	0·09	0	+0·09	...
Bushire ...	0	0	0	...
Jask ...	0	0	0	...
Muscat ...	0	0	0	...
Baghdad ...	0	0·09	—0·09	—100
Aden ...	0·14	0·14	0	...
Perim ...	0·01	0·43	—0·42	—98
Zanzibar ...	2·61	1·90	+0·71	+37
Seychelles	6·33	3·20	+3·13	+98
Mauritius ...	2·43	2·83	—0·40	—14

The preceding data show that rain was very irregularly distributed. There was no rain over Kashgar, Afghanistan and the Persian Gulf region, but elsewhere more or less rain was received and in places, *e.g.*, Amini Divi, Zanzibar and Seychelles the month's rainfall exceeded the normal.

The following summarises the principal abnormal features of the rainfall distribution of the month.

The month's rainfall was normal or in excess over Burma, Assam, Bengal, the east of the United Provinces, North Oudh and the east of the Peninsula.

It was generally in greater or less defect elsewhere.

Several stations in north-west India received no rain whatever during the month and over the west and centre of the United Provinces, the Punjab, Rajputana, the west of Central India and North Bombay, the deficiency was very serious.

In the South-east Trades region the rainfall was irregularly distributed and over a large part of Arabia, Persia and Asiatic Turkey there was no rain during the month.

The following gives comparative rainfall data of the eleven meteorological provinces:—

Meteorological Province.	Rainfall.			
	Mean actual for August 1905.	Mean normal for August.	Departure from normal, August 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands.	24·29	28·79	—3·09*	—11
Burma Inland ...	6·37	7·18	—3·02*	—42
Assam	22·00	15·51	+6·49	+42
Bengal and Orissa ...	18·88	13·67	+5·21	+38
Gangetic Plain and Chota Nagpur.	14·87	12·09	+2·77	+23
Upper Sub-Himalayas ...	4·14	10·72	—6·71*	—63
Indus Valley and North-West Rajputana.	0·06	2·57	—2·51	—98
East Rajputana, Central India and Gujarat.	1·53	7·32	—5·55*	—76
Deccan	7·69	8·92	—1·22*	—14
West Coast	11·40	17·08	—5·67	—33
South India	4·64	4·25	+0·38	+ 9

* A reference to table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

Daily rain fell in Tenasserim and the total fall of the month was nearly normal. The heaviest falls generally occurred on the 21st or 22nd or 30th and 31st and amounts exceeding 4 inches in 24 hours were recorded on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Amherst ...	Amherst ...	21st August ...	4·26
,, ...	Moulmein ...	31st ,, ...	6·50
,, ...	Amherst ...	,, ,, ...	4·94

Similar conditions prevailed in Lower Burma where daily rain fell and the total for the month nearly equalled the average. The fall was, as usual, lighter than in Tenasserim and the only amounts exceeding 3 inches in 24 hours were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Toungoo ...	Thandaung ...	2nd August ...	3·50
Pegu ...	Pegu ...	4th ,, ...	3·26
,, ...	Nyaunglebin ...	10th ,, ...	3·15
Toungoo ...	Thandaung ...	11th ,, ...	4·00
Pegu ...	Pegu ...	12th ,, ...	3·32
Toungoo ...	Thandaung ...	18th ,, ...	5·50
Pegu ...	Nyaunglebin ...	30th ,, ...	3·68
Toungoo ...	Shwegyin ...	31st ,, ...	5·21

In Central Burma more or less local rain was reported and about the middle of the month the weather was comparatively fine. The total amount received during the month was about the normal. Occasional heavy falls were recorded and the following amounts exceeding 3 ins. in 24 hours were registered at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Henzada ...	Lemyethna ...	3rd August ...	3·05
,, ...	Henzada ...	5th ,, ...	3·12
Tharrawaddy...	Gyobingauk ...	11th ,, ...	3·35
,, ...	Monyo ...	,, ,, ...	3·30
Thayetmyo ...	Mindon ...	22nd ,, ...	3·11

In Upper Burma the month's rainfall was somewhat less than usual and except in the neighbourhood of the hills, only local rain was received. The first half of the month was fine to showery over a large part of this division. Occasional heavy falls were, however, registered and the following amounts exceeding 3 ins. in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Chin Hills ...	Fort White ...	1st August ...	3·66
Upper Chindwin	Homalin ...	7th ,, ...	4·04
Do. ...	Paungbyin ...	11th ,, ...	3·62
Do. ...	Maingkaing ...	,, ,, ...	3·30
Do. ...	Homalin ...	,, ,, ...	3·18
Katha ...	Banmauk ...	,, ,, ...	3·05
Upper Chindwin	Maingkaing ...	12th ,, ...	4·02
Yamethin ...	Pyinmana ...	18th ,, ...	4·15
Chin Hills ...	Tiddim ...	19th ,, ...	3·60
Pakokku ...	Myaing ...	,, ,, ...	3·55
Ruby Mines ...	Thabeitkyin ...	22nd ,, ...	4·56
Chin Hills ...	Kanpetlet ...	23rd ,, ...	3·55
Do.	Do. ...	24th ,, ...	3·15
Upper Chindwin	Homalin ...	27th ,, ...	3·78
Mandalay ..	Sidaw ...	,, ,, ...	3·02
Upper Chindwin	Maingkaing ...	28th ,, ...	4·50
Katha ...	Mohnym ...	,, ,, ...	3·04
Chin Hills ...	Kanpetlet ...	31st ,, ...	3·05

In Arakan rain fell daily and the normal monthly amount was slightly exceeded. Falls of over 5" in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Sandoway ...	Sandoway ...	1st August	6·23
Do. ...	Gwa ...	,, ,,	5·40
Akyab ...	Pabru ...	7th ,,	6·70
Do. ...	Do. ...	8th	6·35
Kyaukpyu ...	Kyaukpyu ...	,, ,,	5·81
Akyab ..	Pabru ...	9th ,,	7·18
Do. ...	Maungdaw ...	10th ,,	6·55
Sandoway ...	Taungup ...	,, ,,	5·38
Akyab ...	Pabru ...	,, ,,	5·30
Kyaukpyu ...	Kyaukpyu ...	11th ,,	8·57
Akyab ...	Akyab ...	,, ,,	8·33
Sandoway ...	Taungup ...	,, ,,	6·47
Do. ...	Do. ...	12th ,,	5·50
Akyab ...	Maungdaw ...	19th ,,	5·23
Kyaukpyu	Kyaukpyu ...	30th ,,	5·97

Rain fell daily over Assam and the total of the month exceeded the normal in all three divisions, but particularly over the Hills and the Brahmaputra Valley. On the plains falls of over 5 inches in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Goalpara ...	Marnai ...	9th August.	7·35
Sylhet ...	Lalakhal ...	10th ,,	6·50
Kamrup ...	Barpeta ...	,, ,,	5·75
Do. ...	Bajali ...	,, ,,	5·20
Sylhet ...	Sunamganj ...	15th ,,	6·15
Goalpara ...	Kachugaon ...	16th ,,	5·78
Sylhet ...	Sunamganj ...	24th ,,	7·21
Lakhimpur ...	Pathalipam ...	,, ,,	5·20
Sylhet ...	Sunamganj ...	27th ,,	6·27
Lakhimpur ...	Pathalipam ...	,, ,,	5·15
Nowgong ...	Nowgong ...	,, ,,	5·13
Lakhimpur ...	Harmati ...	28th ,,	5·03
Goalpara ...	Kachugaon ...	29th ,,	5·65
Sylhet ...	Sylhet ...	30th ,,	7·41

At Cherra Poonjee the total fall (149·32 inches) was nearly twice as heavy as the average (76·50 inches) and the following amounts exceeding 10 inches in 24 hours were recorded during the month :—

Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
		Inches.
Cherra Poonjee, Mr. Shadwell's house.	8th August ...	14·27
,, Police Station ...	15th ,, ...	13·70
,, Mr. Shadwell's house...	,, ,, ...	13·01
,, Welsh Mission House,	,, ,, ...	10·97
,, Roman Catholic Mission House.	,, ,, ...	10·38
,, Police Station ...	30th ,, ...	15·60
,, Mr. Shadwell's house ...	,, ,, ...	15·44
,, Welsh Mission House...	,, ,, ...	15·15
,, Roman Catholic Mission House.	,, ,, ...	14·37

In Bengal the rainfall of the month was irregular distributed. In the divisions of Orissa and Chota Nagp the total was less than usual, in Deltaic Bengal it w almost exactly normal while in the remaining divisions was more or less excessive. The fall was particular heavy in North Bengal where more than twice the usu amount was received. The following gives data for t districts in this division :—

Division.	District.	RAINFALL. Average actual, August 1905.	Average normal, August.	Departure from normal, August 1905.	Percenta departu from norma
		Inches.	Inches.	Inches.	
North Bengal	Rajshahi ...	15·66	10·39	+ 5·27	+ 51
	Dinajpur ...	29·34	12·41	+16·93	+136
	Jalpaiguri ...	50·14	26·60	+23·54	+ 88
	Cooch Behar,	47·09	19·28	+27·81	+144
	Rangpur ...	25·85	12·58	+13·27	+105
	Bogra ...	24·66	11·48	+13·18	+115
	Pabna ...	18·03	11·04	+ 6 99	+ 63
	Darjeeling ...	36·20	24·86	+11·34	+ 46

In south-west Bengal fairly fine weather, with scattere showers, prevailed between the 15th and the 20th and th 22nd and 24th, but at other times daily general rain fe and falls of 4·00 inches or more in 24 hours were registe ed at the following places during the month :—

District.	Station.	Date.	Rainfall durin 24 hours pre ceding 8 A.M of date.
			Inches.
Khulna ...	Bagerhat ...	10th ...	4·00
Jessore ...	Magura ...	15th ...	4·20

In North Bengal heavy rain fell almost daily throughout the month and falls exceeding 6" in 24 hours were r gistered at the following places on the following date during the month :—

District.	Station.	Date.	Rainfall durin 24 hours pre ceding 8 A.M of date.
			Inches.
Jalpaiguri ...	Buxa ...	1st August.	7·90
Do. ...	Alipur Duars ...	2nd ,,	9·35
Do. ...	Buxa ...	,, ,,	6·90
Cooch Behar ...	Cooch Behar ...	,, ,,	6·75
Jalpaiguri ...	Buxa ...	5th ,,	8·14
Cooch Behar ...	Mathabhanga ...	10th ,,	6·17
Darjeeling ...	Siliguri ...	13th ,,	7·13
Jalpaiguri ...	Buxa ...	15th ,,	11·70
Do. ...	Kalchini ...	,, ,,	7·41
Dinajpur ...	Ramganj ...	17th ,,	6·06
Jalpaiguri ...	Kalchini ...	23rd ,,	7·42
Do. ...	Buxa ...	,, ,,	6·97
Do. ...	Do.	26th ,,	7·40
Cooch Behar ...	Mathabhanga ...	28th ,,	6·26
Dinajpur ...	Churaman ...	29th ,,	6·20

East Bengal also received almost daily rain and the following falls exceeding 5" in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Chittagong ...	Chittagong ...	6th August.	9·82
Noakhali ...	Harishpur ...	" "	5·15
Chittagong ...	Kodala ...	" "	5·04
Do.	Do. ...	7th "	5·89
Do.	Do. ...	9th "	6·16
Do.	Chittagong ...	" "	5·85
Mymensingh ...	Durgapur ...	18th "	8·35
Do.	Diwanganj ...	29th "	7·26
Chittagong ...	Cox's Bazar ...	" "	5·80
Mymensingh ...	Durgapur ...	30th "	6·85
Noakhali ...	Harishpur ...	31st "	5·30

Bihar reported general rain during the first fortnight and again at the close of the month, but between the 18th and the 27th, the weather was showery. The heaviest falls exceeding 6" in 24 hours during the month were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Muzzaffarpur ...	Sitamarhi ..	2nd August.	7·31
Darbhanga ...	Laukahi ...	6th "	7·08
Saran	Siwan ...	9th "	7·48
Do.	Boreh ...	" "	7·06
Do.	Sripur ...	" "	6·10
Champaran ...	Burhurwa ...	10th "	7·46
Malda	Gajol ...	11th "	6·20
Purnea	Forbesganj ...	16th "	6·77
Malda	Gajol ...	17th "	7·00
Saran	Amnor ...	24th "	7·10
Darbhanga ...	Roserba ...	25th "	7·42
Malda	Gajol ...	29th "	9·00

In Orissa general rain fell on the first three days of the month, on the 21st and between the 24th and the end of the month, but at other times only local rain was received. The falls were seldom heavy and exceeded 4 ins. in 24 hours only at the following places during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Orissa Tributary Mahals.	Nayagarh ...	1st August.	4·16
Angul ...	Balandapara ...	2nd "	6·47
Puri ...	Pipli ...	" "	4·08

Similar conditions prevailed in Chota Nagpur where the falls exceeding 3 ins. in 24 hours during the month were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Palamau ...	Husainabad ...	6th August.	3·36
Do ...	Patan	7th "	4·70
Ranchi ...	Tamar ...	9th "	3·57
Hazaribagh ...	Pachamba ...	11th "	3·75
Palamau ...	Garu	14th "	3·10
Singhbhum ...	Seraikella ...	21st "	3·38
Ranchi ...	Lohardaga ...	24th "	5·45
Chota Nagpur Tributary States.	Jashpur ...	30th "	4·02

In the United Provinces the rainfall was unevenly distributed. In the east and east submontane divisions and North Oudh rain fell almost daily and the total fall of the month exceeded the normal, while in the remaining divisions there was local rain between the 2nd and the 7th, the 14th and the 19th and the 22nd and the 29th and the total fall except on the hills was below the normal. The deficiency was greatest in the west division and the following gives comparative data of the districts in this division :—

Division.	District.	RAINFALL.			
		Average actual, August 1905.	Average normal August.	Departure from normal, August 1905.	Percentage departure from normal.
		Inches.	Inches.	Inches.	
U. P. West.	Agra ...	1·08	7·53	—6·45	—86
	Muttra ...	0·78	7·42	—6·64	—89
	Aligarh ...	1·34	7·81	—6·47	—83
	Bulandshahr,	1·82	7·89	—6·07	—77
	Meerut ...	2·31	7·56	—5·25	—69

At Baroda, Chhota Kosi (Muttra) and Baghpat (Meerut) no rain was received, and at Agra, Muttra and Dayanatpur (Bulandshahr) less than ½ inch during the month. The rainfall was, on the contrary, occasionally heavy in the east and the following amounts exceeding 5 ins. in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Gorakhpur ...	Bansgaon ...	2nd August.	7·30
Bara Banki ...	Fatehpur ...	"	5·85
Basti	Khalilabad ...	"	5·20
Kheri	Kheri ...	6th "	6·04
Ballia	Bansdih ...	8th "	5·07

In the Punjab the drought was very severely felt and except on and near the hills very little rain was received throughout the month. The driest divisions were the south-east, the south and the west and the following gives comparative data for the contained districts :—

Division.	District.	Rainfall. Average actual, August, 1905.	Average normal, August.	Departure from normal, August, 1905.	Percentage departure from normal.
		Inches.	Inches.	Inches.	
South-East Punjab.	Gurgaon ...	1·04	7·07	—6·03	— 85
	Rohtak ...	0·81	5·29	—4·48	— 85
	Delhi ...	0·27	6·95	—6·68	— 96
	Karnal ...	1·26	5·72	—4·46	— 78
South Punjab	Hissar ...	0·10	3·78	—3·68	— 97
	Ferozepore	1·38	3·63	—2·25	— 62
West Punjab.	Montgomery	0·07	2·03	—1·96	— 97
	Mianwali ...	0·15	1·87	—1·72	— 92
	Shahpur ...	0·79	3·07	—2·28	— 74
	Jhang ...	0·09	2·36	—2·27	— 96
	Lyallpur ...	0	2·06	—2·06	—100
	D. G. Khan	0·08	1·66	—1·58	— 95
	Muzaffargarh	0	1·81	—1·81	—100
	Multan ...	0	1·35	—1·35	—100

No rain was received during the month at Sirsa and Fatahabad (Hissar), Ferozepore, Muktsar, Jalalabad, Govindgarh (Ferozepore), Gugera, Montgomery, Pakpattan, (Montgomery), Delhi, Sonepat (Delhi) : Van, Pambe, Sharakpur, Niaz Beg, Lahore, Mianmir, Manihala, Dafthu, Nijabat (Lahore) ; Jodhpur (Patiala); Buchar, Khara (Amritsar); Pacca Dalla, Firoz (Gujranwala); Bhakkar, Leih (Mianwali); Shorkot, Jhang, Laklani, Sandhyanwala (Jhang) ; or at any station in Lyallpur, Dera Ghazi Khan (except Fort Munro), Muzaffargarh, or Multan.

There were a few local heavy falls during the month mainly on the hills and the following shows the amounts exceeding 3 ins. in 24 hours which were registered during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kangra ...	Palampur ...	11th August,	6·02
Do. ...	Dharmsala ...	„ „ ...	3 30
Do. ...	Palampur ...	12th „ ...	9·00
Do. ...	Dharmsala ...	„ „ ...	6·26
Hoshiarpur ...	Garhshankar ...	13th „ ...	3·25
Do. ...	Sadr Station ...	„ „ ...	3·03
Gujranwala ...	Wazirabad ...	14th „ ...	4·39
Ambala ...	Kasauli ...	27th „ ...	3·05
Rawalpindi ...	Murree ...	29th „ ...	3·75

In the North-west Frontier Province the rainfall was somewhat heavier than over the plains of the Punjab but the total fall was only about half the normal. Rain occurred between the 1st and the 5th, the 12th and the 15th and the 27th and 31st, and the following falls exceeding 3 inches in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kohat ...	Banda Daud Shah...	14th	3·16
„	„ ...	15th	3·80
Hazara ...	Dungagali ...	27th	4·20

There was no rain in Baluchistan. Kashmir received frequent showers, the showery periods generally centering around the 2nd, the 12th, the 23rd and the 29th. The total rainfall was generally in defect of the average.

Rajputana received showers between the 3rd and the 6th, the 14th and the 20th and the 26th and the 28th. There were some moderately heavy falls during the last period, but the total of the month was largely below the average. The following gives comparative data of the larger states :—

State.	Rainfall. Average actual, August 1905.	Average normal, August.	Departure from normal, August, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Jaipur ...	0·73	6·85	—6·12	—89
Alwar ...	1·01	5·48	—4·47	—82
Bharatpur ...	0·87	7·27	—6·40	—88
Dholpur ...	2·24	8·28	—6·04	—73
Karauli ...	1·35	9·09	—7·74	—85
Kotah ...	2·84	9·90	—7·06	—71
Ajmer-Merwara ...	0·27	5·63	—5·36	—95
Udaipur ...	0·39	8·46	—8·07	—95
Sirohi ...	1·49	10·78	—9·29	—86

Parts of Central India had as little rain as Rajputana, but the States of Bhopal, Gwalior and Rewah received fair rain between the 3rd and the 7th, the 12th and 19th and the 23rd and 28th. The total fall was, however, less than usual, as is shown by the following comparative data of the larger States :—

State.	Rainfall. Average actual, August, 1905.	Average normal, August.	Departure from normal, August, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Bhopal Agency ...	7·68	12·82	—5·14	—40
Gwalior ...	3·80	9·44	—5·64	—60
Rewah ...	12·75	13·51	—0·76	— 6
Bundelkhand ...	4·26	12·88	—8·62	—68

Falls of over 3 inches in 24 hours were recorded at the following places during the month :—

State.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Rewah ..	Bardi ...	3rd August ...	3·30
Bhopal Agency,	Sironj ...	14th „ ...	3·07
Do. ...	Bhopal ...	15th „ ...	3·80
Do. ...	Biaora ...	„ „ ...	3·65
Do. ...	Khujner ...	„ „ ...	3·03
Bundelkhand...	Ghoora or Malara	21st „ ...	3·47
Rewah ...	Sutna ...	23rd „ ...	5·13

In the Central Provinces the average actual fall diminished from 10·62 inches in the east and 10·73 inches in the central divisions to 4·99 inches in Berar. The total fall was everywhere somewhat short of the average. The principal periods of rain were between the 4th and the 8th and the 14th and the end of the month. Amounts exceeding 4·50 inches in 24 hours were recorded at the following places during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Raipur ...	Dhamtari ...	4th August ...	5·40
Bhandara ...	Tirora ...	5th „ ...	8·50
Chhindwara ...	Sausar ...	„ „ ...	5·97
Betul ...	Shahpur ...	„ „ ...	5·24
Nagpur ...	Ramtek ...	„ „ ...	4·76
Mandla ...	Mandla ...	„ „ ...	4·69
Feudatory States	Raj-Nandgaon	16th „ ...	5·10
Amraoti ...	Morsi ...	17th „ ...	5·26
Balaghat ...	Katangi ...	21st „ ...	4·70
Raipur ...	Arang ...	24th „ ...	4·67

Fairly steady daily rain occurred in the Konkan division of the Bombay Presidency, but the total for the month was only about half the average and the only heavy falls, exceeding 4 inches in 24 hours, during the month were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Ratnagiri ...	Dapoli ...	4th August ...	5·27
North Kanara ...	Kumta ...	13th „ ...	14·81
Do. ...	Honavar ...	„ „ ...	8·61
Do. ...	Bhatkal ...	„ „ ...	8·41
Do. ...	Ankola ...	„ „ ...	5·65

In the Karnatak, the Deccan and Khandesh there were three periods of rain, *viz.*, between the 3rd and the 8th, the 12th and the 19th, and the 23rd and the 29th. The total for the month was short of the average everywhere, and there were few heavy falls except on the Ghats.

In Gujarat local rain occurred between the 1st and the 8th, the 11th and the 14th, and the 18th and 20th, but the rainfall was unimportant except in the Surat district, and the total rain of the division was only one-sixth of the normal. In Kathiawar the showers, which occurred at about the same time as in Gujarat, were even lighter and in Sind no rain whatever fell.

Hyderabad received local rain between the 2nd and the 7th and the 15th and the 26th, and the total fall of the month exceeded the normal in both divisions. The following falls exceeding 2·50 inches in 24 hours were recorded during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Ibrahimpatam ...	Shamshabad ...	21st August ...	2·65
Do. ...	Sandanali ...	„ „ ...	2·56
Yelgandal ...	Karimnagar ...	22nd „ ...	3·80
Bidar ...	Bidar ...	„ „ ...	3·44
Ibrahimpatam ...	Sandanali ...	25th „ ...	2·78
Hyderabad ...	Superintending Engineer's Office.	„ „ ...	2·60
Nizamabad ...	Nizamabad ...	26th „ ...	5·50
Yelgandal ...	Karimnagar ...	„ „ ...	4·81

In Mysore there occurred moderately general rain between the 17th and the 23rd and the 29th and 31st and showers at other times, and the total actual fall of the month was approximately normal.

The Malabar Coast division of Madras received daily rain and the total for the month was approximately normal. South Madras received moderate, general rain towards the close of the month, but only light local rain at other times. The total for the month was, however, almost normal. In Central and South-Central Madras the weather during the first half of the month was generally fine to showery, but about the 14th fair general rain set in and continued till the close of the month. The total rainfall was in large excess in the Central and normal in the South-Central divisions. Falls exceeding 4 inches in 24 hours were recorded at the following places on the following dates, during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Bellary ...	Siruguppa ...	17th August ...	7·72
Kurnool ...	Giddalur ...	„ „ ...	5·52
Cuddapah ...	Razampeta ...	„ „ ...	4·82
Do. ...	Kamalapuram	„ „ ...	4·42
Kurnool ...	Nandikotkur ...	19th „ ...	5·41
Do. ...	Kadnur ...	„ „ ...	5·40
Do. ...	Koilkuntla ...	21st „ ...	4·34

Over the East Coast divisions rain fell between the 1st and the 8th; the 14th and the 18th; the 21st and the 22nd and the 28th and the 31st. In all three divisions the total fall of the month slightly exceeded the normal, and amounts exceeding 4 inches in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Vizagapatam ...	Nowrangapur...	1st August ...	5·20
Do. ...	Jeypore ...	„ „ ...	4·55
Do. ...	Palkonda ...	„ „ ...	4·40
Do. ...	Parvatipuram...	„ „ ...	4·12
Guntur ...	Tenali ...	14th „ ...	4·70
Kistna ...	Avanigadda ...	17th „ ..	5·41
Nellore ...	Sulurpeta ...	„ „ ...	4·65
Ganjam ...	Chicacole ...	„ „ ...	4·11
Guntur ...	Narasaraopet ...	25th „ ...	4·10
North Arcot ...	Arni ...	29th „ ...	7·25
Do. ...	Chittoor ...	„ „ ...	4·95

The following data show that the rainfall of the month, except in part of Madras South, and Madras South-Central, exceeded the average over the Madras Presidency. The following gives comparative data of the different collectorates :—

Collectorate.	Rainfall. Average actual, August, 1905.	Average normal, August.	Departure from normal, August 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Ganjam	8·68	8·23	+0·45	+ 5
Vizagapatam ...	8·75	6·26	+2·49	+ 40
Godavari	6·68	6·29	+0·39	+ 6
Kistna	7·03	6·42	+0·61	+ 10
Guntur	8·18	5·00	+3·18	+ 64
Nellore	3·85	3·34	+0·51	+ 16
Madras	1·93	4·67	—2·74	— 59
Chingleput... ...	5·50	5·82	—0·32	— 5
North Arcot ...	7·86	5·08	+2·78	+ 55
South Arcot ...	7·13	5·62	+1·51	+ 27
Tanjore	4·70	4·31	+0·39	+ 9
Trichinopoly ...	4·00	4·11	—0·11	— 3
Madura	2·16	2·28	—0·12	— 5
Tinnevelly	0·27	0·85	—0·58	— 68
Malabar	12·11	16·23	—4·12	— 25
South Canara ...	27·91	27·60	+0·31	+ 1
Salem	4·63	4·51	+0·12	+ 2
Coimbatore ...	1·45	2·12	0·67	— 31
Cuddapah	8·45	4·34	+4·11	+ 95
Anantapur	7·45	3·50	+3·95	+113
Bellary	7·25	3·54	+3·71	+106
Kurnool	11·20	4·95	+6·25	+126

Snowfall.

I.—KASHMIR AND PUNJAB HIMALAYAS.

Kashmir :—The weather was fine in August.

Bashahr Division, Simla :—There was no snow during the month. The depth of snow on the various passes was as follows :—

Rupin Pass	16,000 ft.	... ½ foot.
Bruin „	16,000 ft.	... ½ „
Harang „	12,000 ft.	... nil
Shatul „	15,000 ft.	... ½ foot
Buldar „	16,000 ft.	... ½ „
Runang „	14,000 ft.	.. nil

The passes were all open.

II.—UNITED PROVINCES HIMALAYAS.

Almora :—The following snowfall reports were received :—

Malla Johar :—Slight falls of snow on high peaks accompanied with rain on the 3rd, 12th, 18th and 23rd of August. The depth of snow is estimated to be 2 to 4 inches.

Malla Danpur :—Two inches of snow fell from the 1st to the 31st August on the high peaks.

Darma (Nirwe Pass) :—Seven feet and six inches of snow fell during August.

The accumulated snow on the higher peaks was as follows :—

	ft.	ins.
Unt Dhura Range	... 9	0
Ralam Dhura „	... 6	0
Millam Dhura „	... 3	6
Pindari Peak	... 0	2
Kapini „	... 0	2
Nirwe Pass	... 21	0

The snowfall was greater than in the past year.

The information as to snowfall during the month of August, 1905, is very limited but apparently the amount received was somewhat heavier than usual.

Crop Report.

Madras :— Ploughing, sowing and transplanting were in progress during the month and at the close the standing crops were generally fair but some in parts of Ganjam, Salem, Coimbatore, Trichinopoly, Madura, and Tinnevelly required more rain. Pasture improved during the month but was insufficient in most parts of the Presidency. The condition of cattle was generally good and the general improvement in prospects continued at the end of the month.

Bombay :—The standing autumn crops were suffering at the close of the month from want of sufficient rain in parts of Gujarat, Ratnagiri, the Deccan, the Karnatak Kanara, Baroda, Rewa Kantha and Mahi Kantha. Agricultural stock was sufficient and cattle were in good condition except in parts of Satara.

Bengal :—The prospects were generally favourable. Rain had slightly improved the state of the standing crops in Orissa though more rain was still wanted in that division. Damage by floods was reported from some districts of Bihar and from the 24 Parganas, Bogra and Mymensingh.

United Provinces:—At the close of the month more rain was urgently required, more especially in the Agra and Meerut divisions, and Bundelkhand. Hot west winds prevailed during a considerable part of the month in the Upper Doab and in the Agra Division and in Bundelkhand and proved very injurious to the surviving crops. Prospects were generally less favourable at the close than in the earlier portion of the month.

Punjab:—The condition of the irrigated autumn crops was good to average at the end of the month except in Delhi. The crops on unirrigated areas were everywhere withering for want of rain. Cattle were generally in good condition and fodder was sufficient, except in Delhi, Amritsar, Shahpur, and in parts of Mianwali.

North-west Frontier Province:—More rain was badly wanted everywhere. At the end of the month the condition of the crops on irrigated lands, except sugarcane which required rain, was good in Peshawar and Bannu and average in Dera Ismail Khan. The crops on unirrigated land continued to wither during the month for want of sufficient rain.

Burma:—The state of the standing crops was, on the whole, good but much damage had been done in some places by flood waters.

Central Provinces:—At the close of the month more rain was required in Damoh, Chhindwara, Chanda and Raipur. In the latter district the tanks had not filled. The standing crops continued generally to be very promising.

Assam:—The plucking and manufacture of tea continued during the month and prospects were good in Nowgong and fair elsewhere. The cutting of jute was in progress and the prospects of jute and sugar-cane were generally fair.

Mysore:—The crops were thriving and the prospects fair but more rain was needed in parts of Hassan and Kadur.

Hyderabad:—More rain was generally required especially in three districts. The autumn crops were withering at the close of the month in two taluks. Elsewhere the autumn and early rice crops were in good condition and weeding was progressing.

Rajputana:—At the close of the month agricultural operations were fair in South Merwar, Bhanswara, Partabgarh, Sirohi, Kotah and Jhalawar and elsewhere irrigated crops were being weeded and watered. Unirrigated crops were withering in Sirohi, the southern parts of Merwar, Partabgarh, Kotah and Jhalawar, they were lost in other States except in Dholpur and parts of Merwar and Ulwar. Pasturage and fodder were generally insufficient except in South Rajputana and cattle were losing condition.

Central India:—At the close of the month agricultural operations had been suspended in parts of Gwalior but were in progress throughout the rest of the Agency. The probable outturn of crops at this time was *nil* in parts of Gwalior and poor in the outlying parganas of Indore and average to good elsewhere in the Agency.

Kashmir Jammoo:—The condition of the standing crops was fair except in Jummoo, Samba, Mirpur, Ranbirsinghpura and Jasmargarh where it was poor. Rain was badly wanted in Kanahi tracts where the wheat crop was withering.

W. L. DALLAS.

Table I—Abstract of Observations taken at 8 A.M. at 232 Stations in India, Burma, etc., in August, 1905.

Table

Abstract of observations taken at 8 A.M. at 232 stations

Number of Station	Station.	Elevation of bar-cistern above sea-level, in feet.	PRESSURE, 8 A.M., IN INCHES.								TEMPERATURE OF AIR.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma Coast and Bay Islands.	...	...	+·023	...	...	...	...	...	...	...	84·7	+0·1	75·9	+0·5	80·3	+0·3	8·9	...	...	...	...	15·1
1	Car Nicobar ...	25	29·844	...	29·797	29·928	6th	29·778	18th	·150	80·2	86·7	...	76·7	...	81·8	...	10·0	90·1	9th	74·2	29th	15·9
	Slipper Island ...	...	29·844	...	...	29·946	6th	29·752	31st	·194	...	...	...	...	...	...	...	...	...	...	...	...	...
	Port Blair ...	61	29·810	+·025	29·802	29·907	6th	29·731	31st	·173	80·4	85·4	+0·1	77·8	+0·6	81·6	+0·4	7·6	88·6	14th	75·1	23rd	13·5
	Mergui ...	96	29·812	+·026	29·839	29·905	5th	29·708	31st	·197	78·4	85·6	+1·4	74·7	+2·1	80·1	+1·8	10·9	89·4	14th, 16th & 26th.	72·4	1st & 28th.	17·0
	Tavoy ...	19	29·884	+·027	29·835	29·999	5th	29·767	31st	·232	77·4	83·4	+0·6	74·6	+0·8	79·0	+0·7	8·8	88·5	15th	73·1	2nd, 13th & 29th.	15·4
	Moulmein ...	94	29·761	+·023	29·793	29·867	5th	29·627	31st	·240	77·0	82·6	−0·4	74·4	+0·3	78·5	−0·1	8·2	87·0	19th	71·8	12th	15·2
2	Rangoon ...	57	29·785	+·020	29·780	29·910	5th	29·656	31st	·254	79·1	83·9	−1·2	76·3	+0·6	80·1	−0·3	7·6	87·6	30th	74·4	1st & 12th.	13·2
	Bassein ...	27?	29·804	+·030	29·769	29·939	5th	29·680	31st	·259	79·2	84·8	+0·3	76·4	+0·7	80·6	+0·5	8·4	89·2	22nd, 30th & 31st.	74·4	12th	14·8
	Diamond Island ...	41	29·785	+·013	29·761	29·886	5th & 6th.	29·679	31st	·207	80·7	84·1	−0·2	76·8	+1·2	80·5	+0·5	7·3	86·9	30th	74·2	3rd, 22nd & 27th.	12·7
5	Akyab ...	20	29·750	+·018	29·713	29·848	5th	29·670	24th	·178	79·1	83·9	−0·5	77·1	−0·2	80·5	−0·4	6·8	87·4	23rd	75·7	11th	11·7
3	Toungoo ...	183	29·640	+·025	29·766	29·754	5th	29·508	31st	·246	78·3	87·3	+0·6	73·7	−1·3	80·5	−0·4	13·6	91·3	17th, 18th & 22nd.	69·6	5th	21·7
	II.—Burma Inland	...	...	+·011	...	—	...	...	...	...	...	89·2	−1·1	76·8	+0·5	83·0	−0·3	12·3	...	...	...	...	20·5
3	Thayetmyo ...	121	29·658	+·006	29·721	29·773	5th	29·534	31st	·239	81·1	89·1	+0·2	76·9	+0·8	83·0	+0·5	12·2	93·0	31st	75·5	1st & 16th.	17·5
4	Minbu ...	*165*	29·583	+·001?	29·693?	29·677	5th	29·485	31st	·192	80·3	90·3	−0·3	77·5	+0·5	83·9	+0·1	12·8	97·2	31st	76·1	7 days	21·1
	Yamethin ...	657	29·116	+·008	29·727	29·216	27th	28·996	31st	·220	78·2	88·0	−1·8	74·5	+0·2	81·3	−0·8	13·5	93·3	22nd	72·2	5th	21·1
	Monywa ...	*280*	29·489	...	29·708	29·587	5th	29·401	31st	·186	81·7	92·2	...	78·6	...	85·4	...	13·6	97·3	9th & 31st.	75·8	4th & 6th.	21·5
	Mandalay ...	250	29·506	+·011	29·705	29·605	5th	29·414	31st	·191	81·9	92·5	−0·8	79·1	+1·5	85·8	+0·4	13·4	97·5	18th	75·8	19th	21·7
	Myitkyina ...	458	29·251	...	29·668	29·331	16th & 26th.	29·170	31st	·161	78·7	86·1	...	76·2	...	81·2	...	9·9	93·7	18th	73·1	4th & 12th.	20·6
	Bhamo ...	*381*	29·362	+·017	29·700	29·456	5th	29·300	31st	·156	77·6	85·3	−2·8	74·9	−0·5	80·1	−1·7	10·4	92·9	18th	73·1	4 days	19·8
(a)	Maymyo ...	3,545	26·341	...	26·287	26·462	5th	26·262	31st	·200	70·1	75·7	...	67·7	...	71·7	...	8·0	78·9	28th	65·6	5th & 6th.	13·3
	Lashio ...	*2,751*	26·985	−·004	26·931	27·068	5th	26·919	31st	·149	72·4	81·4	−1·7	69·5	+0·4	75·5	−0·7	11·9	88·5	22nd & 31st.	68·0	5 days	20·5
	III.—Assam.	...	...	−·002	...	...	...	...	...	...	...	86·6	−2·0	77·0	−0·1	81·9	−1·0	9·6	...	...	...	...	17·2
7	Silchar ...	104	29·621	+·003	29·679	29·704	5th	29·511	10th	·193	79·7	87·7	−1·8	76·6	−0·2	82·2	−1·0	11·1	91·5	4th & 22nd.	75·3	5 days	16·2
9	Sibsagar ...	333	29·369	−·014	29·658	29·457	26th	29·281	9th	·176	79·8	86·4	−2·8	77·7	0	82·1	−1·4	8·7	90·2	4 days	75·0	27th	15·2
	Dhubri ...	115	29·569	+·006	29·639	29·676	17th	29·473	9th	·203	80·0	84·7	−1·3	78·3	0	81·5	−0·7	6·4	89·2	4th	75·3	15th	13·9
	Gauhati ...	195	29·503	...	29·653	29·591	26th	29·389	10th	·202	80·3	88·3	...	77·4	...	82·9	...	10·9	92·5	20th	75·0	4th	17·5
	Tezpur ...	252	29·439?	...	29·649?	29·521	26th	29·333	9th	·188	79·1	88·0	...	77·5	...	82·8	...	10·5	97·2	20th	75·9	4 days	21·3
	Dibrugarh ...	353	29·352	...	29·666	29·432	26th	29·269	10th	·163	77·4	84·7	...	74·5	...	79·6	...	10·2	91·2	1st	72·0	6th, 27th & 28th.	19·2

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any
2.—The data from which divisional means of the figure columns Nos. 40,
NOTE.—The barometric readings are not reduced to sea-level in the case

I.

in India, Burma, &c., in August, 1905.

WIND DIRECTION. Number of winds from										WIND VELOCITY.				HYGROMETRY 8 A.M.				CLOUD.		RAINFALL.								
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August 1905.	Heaviest rainfall during month.	Station
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
...	...	...	...	...	...	...	...	...	...	...	...	...	...	92	0	·913	+·022	8·1	—0·6	...	...	...	24·29	28·79	—3·09	...	...	...	...	I.—Burma Coast & Islands.
...	...	...	...	1	4	15	...	...	S34°W	4·6	...	...	4·6	88	...	·910	...	9·5	...	20	...	...	11·56	...	...	...	...	...	1·70	*Car. Nicobar.
...	...	...	...	...	17	14	...	...	S20°W	23·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Slipper Island.
...	...	...	...	...	2	15	13	1	S64°W	9·9	9·6	+3	...	89	0	·925	+·005	7·9	—0·5	17	...	...	13·01	14·06	—1·05	63·39	65·48	—2·09	2·04	Port Blair.
19	...	1	2	3	2	2	2	...	S40°E	2·3	1·6	+44	2·0	92	0	·883	+·089	4·4	—3·2	24	25·00	—1·00	21·95	29·97	—5·02	95 84	111·02	—15·18	3·50	Mergui.
31	...	...	...	...	...	...	...	...	Calm	1·4	...	...	...	93	0	·860	—·005	6·9	—1·5	27	27·40	—0·40	31·16	47·29	—16·13	184·13	160·05	+24·08	2·93	Tavoy.
15	...	...	...	...	6	7	2	1	S37°W	3·8	3·2	+19	4·2	95	+1	·881	+·011	9·0	+1·0	28	27·10	+0·90	33·02	40·63	—7·61	142·29	142·37	—0·08	6·91	Moulmein.
14	...	...	...	2	11	...	3	1	S11°W	4·6	4·7	—2	3·9	93	—1	·919	+·008	8·9	—0·3	26	23·90	+2·10	15·92	19·85	—3·93	75·68	69·57	+6·11	2·12	Rangoon.
...	...	...	..	5	10	9	4	3	S27°W	4·3	3·4	+26	...	94	0	·943	+·028	8·0	—0·6	22	25·40	—3·40	16·63	23·17	—6·54	84·70	82·35	+2·35	2·30	Bassein.
2	...	...	1	...	3	16	6	3	S56°W	9·2	6·7	+37	9·2	89	+3?	·944	+·054	8·1	—0·5	23	22·10	+0·90	20·19	23·45	—3·26	86·28	82 85	+3·43	2·26	Diamond Island.
...	...	6	1	9	8	5	...	2	S28°E	5·8	3·2	+81	5·6	96	+2	·960	+·011	8·8	—0·2	28	26·60	+1·40	56·90	42 00	+14·90	187·14	151·29	+35·85	8·53	Akyab.
4	...	...	2	21	4	...	...	...	S41°E	9·9	3·9	+154	9·8	92	0	·902	+·001	9·9	+0·6	26	24·30	+1·70	19·52	18·68	+0·84	58·72	57·00	+1·72	2·17	Toungoo.
...	...	...	..	..	...	...	...	...	...	...	..	...	...	86	+1	·891	+·020	8·2	+0·9	...	..	...	6·37	7·18	—3·02	...	...	...	...	II.—Burma Inland.
...	1	...	...	4	24	2	...	...	S3°E	6·0	5·9	+2	...	85	0	·944	+·071	7·1	—1·6	13	13·20	—0·20	4·86	6·43	—1·57	24·09	23·77	+0·32	0·68	Thayetmyo.
...	...	...	...	27	3	1	...	...	S39°E	8·1	...	...	9·6	85	0	·895	+·023	6·3	+0·1	6	8·60	—2·60	1·97	5·10	—3·13	18·25	19·99	—1·74	0·61	Minbu.
2	...	...	...	17	12	...	...	...	S27°E	1·3	...	...	1·4	88	+1	·853	+·008	9·6	+4·6	8	11·50	—3·50	2·03	6·40	—4·37	12·93	21·54	—8·61	0·40	Yemethin.
1	...	...	...	7	22	1	...	...	S8°E	9·0	...	...	9·4	82	...	·897	...	8·5	...	3	7·70	—4·70	0·85	4·62	—3·77	14·40	16·03	—1 63	0·41	Monywa.
...	...	...	...	2	16	13	...	...	S16°W	7·0	...	...	7·1	78	—1	·850	—·008	9·5	+1 9	8	7·00	+1·00	4·84	3·99	+0·85	17·45	18·38	—0·93	1·33	Mandalay.
16	...	...	8	7	...	...	...	...	S69°E	4·1	...	...	4·2	91	...	·899	...	8·5	...	24	...	...	19·63	..	...	68·01	...	...	2·56	Myitkyina.
21	1	3	...	1	1	1	2	1	N25°W	1·3	...	...	1·5	95	+3	·902	+·004	7·8	—0·4	20	19·60	+0·40	10·42	16·55	—6·13	38 35	55·74	—17·39	1·42	Bhamo.
1	..	1	..	1	7	17	4	...	S37°W	4·2	...	...	...	89	...	·661	...	8·2	...	13	16·20	—3·20	9·48	9·66	—0·18	30·13	35·27	—5·14	2·86	Maymyo.
19	1	...	...	...	3	8	...	...	S37°W	3·8	...	...	...	91	0	·738	—·004	9·2	+0·2	19	...	...	11·81	12·84	—1·03	34·39	44·38	—9·99	1·81	Lashio.
...	...	...	...	...	...	...	...	..	...	...	...	...	...	94	+2	944	+ 016	9·3	+0·4	...	...	...	22·00	15 51	+6·49	...	...	...	...	III.—Assam
31	...	...	...	...	...	...	...	...	Calm	0	3·0	—100	...	92	+1	·943	+·006	8·8	—0·5	27	21·50	+5·50	27·10	20·26	+6·84	78·75	77·92	+0·83	3·67	Silchar.
11	1	7	2	2	1	7	...	...	S67°E	2·5	2·7	—7	2·3	96	+2	·972	+·008	9·9	+0·8	22	17·70	+1·30	18·85	16·54	+2·31	53·66	59·87	—6·21	2·25	Sibsagar.
15	...	4	7	1	3	1	...	...	S63°E	1·8	3·2	—44	2·1	95	+4	·975	+ 034	9·5	+1·0	21	14·50	+6·50	20·23	13·29	+6·94	90·02	67·38	+22 64	2·16	Dhubri.
18	4	...	1	...	3	3	2	...	S72°W	1·1	...	...	1·2	91	...	·942	...	8·8	...	21	13·30	+7·70	17·60	10·56	+6·94	40·69	42·37	—1·68	2·20	Gauhati.
29	...	1	...	...	...	1	...	...	Calm	2·0	...	...	2·1	94	...	·937	...	9·6	...	22	15 50	+6·50	26·25	13·14	+13·11	55·80	48·46	+7·34	3·06	Tezpur.
23	1	4	1	1	...	...	1	...	N48°E	1·4	...	...	1·3	96	..	·892	...	9·0	...	25	18·40	+6·60	22·07	19·25	+2·82	58·42	73·88	—15·46	1·97	Dibrugarh.

station, the data for that station are not utilized in calculating the provincial departures from normal.
42 and 44 are derived are incomplete.
of hills which exceed 3,200 feet.

* Wind variable 11.

Table

Abstract of observations taken at 8 A.M., at 232 stations

Station.	PRESSURE, 8 A.M. IN INCHES.									TEMPERATURE OF AIR.												
	Elevation of bar cistern above sea-level in feet.	Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
V.—Bengal and Orissa.	...	...	+·013	...	...	...	...		...	...	87·9	+0·1	78·7	+0·6	83·3	+0·3	9·2	...	...	...	...	16·4
Chittagong ...	87	29·639	+·012	29·674	29·726	16th	29·514	9th	·212	79·6	85·2	—0·3	76·3	+0·2	80·8	—0·1	8·9	89·0	23rd& 25th.	73·6	12th	15·4
Noakhali ...	43	29·661	...	29·651	29·753	17th	29·577	11th	·176	80·9	85·3	...	77·4	...	81·4	...	7·9	89·7	19th	74·9	21st	14·8
Comilla ...	36	29·668	...	29·652	29·756	17th	29·575	9th	·181	79·9	86·1	...	77·1	...	81·6	...	9·0	91·8	19th	75·3	20th& 22th.	16·5
Sirajganj ...	49	29·635	...	29·634	29·738	17th	29·543	10th	·195	80·9	86·4	...	77·9	...	82·2	...	8·5	92·3	24th	75·7	4 days	16·6
Narayanganj ...	26	29·674	+·027	29·648	29·767	17th	29·585	9th	·182	82·2	87·7	+0·2	79·5	+0·5	83·6	+0·4	8·2	91·1	19th	76·8	11th	14·3
Barisal ...	12	29·683	+·031	29·641	29·770	17th	29·610	31st	·160	81·6	86·3	—0·5	*75·9	?	†80·9	?	10·4	90·3	19th	73·1	11th	17·2
Mymensingh ...	63	29·630	+·008	29·643	29·724	17th	29·530	10th	·194	80·4	85·6	—1·3	77·8	—0·3	81·7	—0·8	7·8	89·2	26th	75·1	20th	14·1
Faridpur ...	4[illegible]	29·639	...	29·635	29·736	17th	29·554	10th	·182	82·2	87·4	...	79·0	...	83·2	...	8·4	90·3	15th	75·9	15th& 20th	14·4
Jessore ...	33	29·635	+·010	29·615	29·732	17th	29·556	10th	·176	82·6	87·9	—0·7	79·3	+0·6	83·6	—0·1	8·6	91·5	19th	76·7	10th	14·8
Calcutta (Alipore)	21	29·643	+·019	29·610	29·741	17th	29·579	31st	·162	82·9	88·6	+1·5	79·6	+1·3	84·1	+1·4	9·0	91·4	25th	74·9	13th	16·5
Saugor Island ...	25	29·632	+·011	29·601	29·734	17th	29·550	3rd	·184	83·7	89·2	+2·0	81·0	+1·2	85·2	+1·7	8·3	97·9	23rd	77·1	13th	20·8
Krishnagar ...	47	29·607	...	29·602	29·706	17th	29·519	10th	·187	82·3	89·7	...	79·6	...	84·7	...	10·1	93·6	23rd	77·0	4 days	16·6
Midnapore ...	149	29·503	...	29·598	29·613	17th	29·444	2nd	·169	82·7	89·8	...	78·9	...	84·4	...	10·9	92·3	14th	76·3	29th	16·0
Bankura ...	298	29·327	...	29·590	29·412	17th	29·259	10th	·153	82·0	89·6	...	79·1	...	84·4	...	10·5	93·1	20th& 21st.	75·7	11th& 12th	17·4
Raniganj ...	334	29·321	...	29·575	29·406	17th	29·249	10th	·157	80·9	89·5	...	78·5	...	84·0	...	11·0	94·0	20th	74·9	11th	19·1
Burdwan ...	99	29·556	+·009	29·603	29·646	17th	29·479	10th	·167	82·2	89·6	+0·4	79·7	+0·6	84·7	+0·5	9·9	92·4	23rd	74·8	12th	17·6
Naya Dumka ...	489	29·151	...	29·597	29·227	17th	29·104	24th	·123	81·1	88·1	...	77·8	...	83·0	...	10·3	92·5	20th, 23rd& 24th.	72·9	25th	19·6
Berhampore ...	67	29·583	—·003	29·599	29·681	17th	29·496	10th	·185	82·3	89·1	+0·5	79·7	+1·0	84·4	+0·8	9·4	92·8	24th	76·8	12th& 20th.	16·0
Rampur Boalia...	70	29·591	...	29·610	29·684	17th	29·501	10th	·183	82·2	88·1	...	79·5	...	83·8	...	8·6	91·1	21st& 24th.	76·1	30th	15·0
Malda ...	72	29·564	...	29·588	29·655	17th	29·469	10th	·186	81·8	88·0	...	79·2	...	83·6	...	8·8	91·6	23rd	75·1	10th	16·5
Bogra ...	61	29·597	+·006	29·610	29·706	17th	29·500	10th	·206	81·1	87·3	—1·0	78·5	+0·1	82·9	—0·5	8·8	92·2	19th	75·7	20th	16·5
Dinajpur ...	123	29·531	+·004	29·609	29·626	17th	29·408	10th	·218	80·7	87·2	—1·6	78·0	—0·6	82·6	—1·1	9·2	92·3	20th	75·5	30th	16·8
Rangpur ...	123	29·560	...	29·638	29·645	17th	29·445	10th	·200	81·0	86·1	...	*78·6	...	*82·5	...	7·5	90·7	21st	75·8	2nd	14·9
Jalpaiguri ...	284	29·394	+·006	29·637	29·495	17th	29·281	10th	·214	78·9	85·6	—2·5	76·8	+0·1	81·2	—1·2	8·8	89·9	22nd	75·1	29th	14·8
Cooch Behar ...	156	29·519	...	29·630	29·607	17th	29·409	10th	·198	79·6	86·0	...	77·8	...	81·9	...	8·2	91·9	23rd	75·6	29th	16·3
Purnea ...	125	29·523	—·002	29·603	29·622	17th	29·410	10th	·212	81·1	86·2	—3·0	78·6	+0·2	82·4	—1·4	7·6	93·2	23rd	75·7	11th	17·5
Balasore ...	50	29·612	+·028	29·604	29·684	17th	29·535	25th	·149	82·6	90·1	+2·2	79·0	+1·0	84·5	+1·6	11·1	93·4	13th	76·7	21st	16·7
False Point ...	21	29·653	+·019	29·616	29·720	13th	29·541	24th	·179	83·4	89·0	+2·0	79·6	+1·4	84·3	+1·7	9·4	93·0	22nd	76·6	8th & 13th	16·4
Cuttack ...	80	29·592	+·023	29·615	29·657	19th	29·492	24th	·165	83·1	92·0	+2·9	79·4	+1·1	85·7	+2·0	12·6	96·4	14th	77·2	2nd, 4th & 21st.	19·2
Puri ...	24	29·660	...	29·623	29·727	20th	29·533	24th	·194	83·8	89·1	...	81·1	...	85·2	...	8·0	91·7	23rd	77·6	2nd& 3rd.	14·1

* Mean of 29 days.

† Mean of 18 days.

NOTE 1.—When a query is inserted against any reading or in the returns of any

2.—The data from which divisional means of the figure columns Nos. 40,

I.—continued.

in India, Burma, &c., in August, 1905.

Wind direction. Number of winds from Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August 1905.	Heaviest rainfall during month	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
.	...	...	...	...	...	...	...	...	...	...	...	...	...	90	0	·974	+·012	7·7	−0·1	...	...	...	18·88	13·67	+5·21	...	...	...	...	IV-Bengal & Orissa.
...	...	...	1	19	10	...	...	1	S31°E	8·1	6·1	+33	7·4	88	−1	·899	−·013	6·9	−1·3	22	17·94	+4·06	33·91	16·86	+17·05	94·91	68·87	+26·04	10·67	Chitagong.
1	...	1	3	11	14	1	...	...	S27°E	6·4	...	...	6·9	91	...	·991	...	6·7	...	28	22·58	+5·42	33·12	23·93	+9·19	81·87	79·38	+2·49	2·62	Noakhali
...	...	...	...	19	10	2	...	..	S26°E	7·1	...	...	6·0	92	.	·941	...	6·8	...	20	17·14	+2·86	18·18	15·80	+2·38	57·57	61·77	−4·20	2·13	Comilla.
22	...	...	2	4	3	..	...	...	S40°E	2·0	...	...	2·0	99	...	·98	...	9·0	...	20	13·87	+6·13	22·68	10·86	+11·82	57·10	41·68	+15·42	3·05	Sirajganj
1	...	...	...	11	9	9	1	...	S1°E	7·0	6·0	+17	6·0	91	+1	1·008	+·036	9·1	+ ·4	19	17·83	+1·17	15·66	12·01	+3·65	53·84	46·40	+7·44	2·56	Narayanganj.
7	...	...	...	7	16	1	.	...	S24°E	3·8	...	...	3·3	92	+3	·988	+·023	6·7	−1·9	22	18·74	+3·26	18·23	12·29	+5·94	52·87	51·52	+1·35	2·25	Barisal.
16	...	...	3	8	4	...	...	...	S42°E	3·2	...	...	2·8	93	+2	·966	+·011	8·8	+0·8	28	18·90	+9·10	26·66	14·34	+12·32	83·00	59·97	+23·03	4·75	Mymensingh.
4	...	...	...	10	14	3	...	...	S12°E	5·2	...	...	4·4	89	...	·989	...	7·5	...	19	16·22	+2·78	12·30	12·08	+0·22	47·81	45·60	+2·21	2·41	Faridpur
21	...	...	...	2	7	1	...	...	S6°E	1·6	4·1	61	1·6	90	−1	1·004	+·006	8·5	+0·1	18	17·03	+0·97	12·60	10·55	+2·05	52·02	43·02	+8·95	2·92	Jessore.
1	1	...	1	8	8	12	...	...	S5°W	5·3	5·3	0	0	89	0	·996	+·032	8·3	−0·2	15	18·88	−3·88	6·31	12·38	−6·07	42·76	41·68	+1·08	1·21	Calcutta (Alipore)
...	1	...	...	3	11	15	1	...	S23°W	18·3	12·4	+48	...	87	−2	1·009	+·019	8·5	0·6	14	17·00	−3·00	9·64	15·68	−6·04	34·13	46·74	−12·61	3·48	Saugor Island.
8	...	...	...	8	12	2	1	...	S9°E	2·5	...	...	2·7	91	..	1·004	...	6·8	...	19	14·26	+4·74	13·27	10·25	+3·02	56·93	37·04	+19·89	2·35	Krishnagar.
3	1	2	1	3	19	2	...	...	S9°E	3·1	...	...	2·8	87	...	·961	...	5·2	..	15	16·00	−1·00	11·32	12·51	−1·19	39·85	41·27	−1·42	2·49	Midnapore.
17	...	...	2	8	2	...	2	...	S37°E	3·1	...	...	2·7	86	...	·937	...	6·3	...	14	16·66	−2·66	9·01	11·66	−2·65	29·84	38·74	−8·90	2·64	Bankura.
24	...	...	1	2	2	2	...	.	S11°E	1·3	...	...	1·0	92	...	·984	...	6·6	...	12	16·00	−4·00	8·35	13·01	−4·66	33·89	40·86	−6·97	2·29	Raniganj
15	...	...	1	2	5	7	1	...	S20°W	2·3	3·6	−36	2·3	89	+2	·986	+·043	8·3	−0·4	17	16·48	+0·52	14·80	11·25	+3·55	60·03	40·00	+20·03	3·80	Burdwan
18	...	...	2	4	6	...	1	...	S24°E	1·6	...	...	1·8	90	...	·959	...	6·6	...	20	18·23	+1·77	17·53	13·41	+4·12	40·33	41·11	−0·78	3·10	Naya Dumka.
13	...	...	3	2	12	1	...	...	S16°E	1·9	4·2	−55	1·7	91	−1	1·010	+·023	9·3	+0·4	14	16·39	−2·39	10·51	11·71	−1·20	40·59	37·17	+3·42	2·73	Berhampore.
15	...	...	...	2	9	5	...	...	S8°E	5·2	...	...	5·3	89	...	·988	...	8·3	...	19	14·68	+4·32	16·27	10·53	+5·74	48·11	38·23	+9·88	2·63	Rampur Boalia.
1	...	2	3	12	9	3	1	...	S29°E	6·3	...	.	5·8	91	...	·992	...	7·8	...	21	14·48	+6·52	21·54	10·27	+11·27	47·31	35·08	+12·23	5·30	Malda.
29	...	...	2	...	...	...	...	...	E	1·3	2·5	−48	1·1	91	+2	·964	−·004	9·3	+2·1	23	15·90	+7·10	23·78	11·62	+12·16	53·49	45·20	+8·29	2·78	Bogra.
...	...	4	7	9	6	3	1	1	S48°E	3·1	4·0	−23	3·0	92	+2	·965	+·002	9·4	+1·4	22	15·71	+6·29	23·65	14·01	+9·64	53·02	50·01	+3·01	4·77	Dinajpur
6	..	2	4	9	5	3	2	...	S34°E	2·8	...	...	2·6	92	...	·981	...	8·6	...	25	13·35	+11·65	27·13	13·02	+14·11	66·19	59·35	+6·84	4·08	Rangpur.
16	3	7	2	2	...	...	...	1	N49°E	1·1	...	...	1·4	95	+3	·945	−·001	7·7	−0·6	29	18·38	+10·62	43·06	24·87	+18·19	107·18	93·15	+14·03	4·82	Jalpaiguri.
17	..	2	6	4	1	...	...	1	S79°E	1·4	..	...	1·5	94	...	·955	...	9·6	...	27	16·72	+10·28	67·06	20·42	+46·64	155·44	93·41	+62·03	6·75	Cooch Behar.
11	..	4	9	4	...	1	2	...	S85°E	1·8	2·3	−22	1·6	94	+4	1·000	+·020	8·3	+0·7	22	16·57	+5·63	29·71	14·40	+15·31	51·63	43·75	+7·88	3·55	Purnea.
3	2	...	1	1	3	20	1	...	S39°W	5·9	...	...	4·4	85	−4	·949	−·025	6·8	−1·5	11	16·03	−5·03	3·51	11·34	−7·83	25·28	40·31	−15·03	1·11	Balasore.
1	...	...	...	1	3	17	8	1	S53°W	11·2	9·5	+18	11·6	85	−3	·968	+·009	8·0	−0·3	11	16·16	−5·16	4·06	13·68	−9·62	17·79	39·10	−21·31	1·03	False Point.
7	1	...	...	...	3	14	6	...	S53°W	2·8	2·6	+8	...	80 (a)	−3	·907 (a)	+·011	6·4	−1·2	14	16·19	−2·19	6·66	13·20	−6·54	23·01	39·72	−16·71	1·91	Cuttack.
9	...	1	...	...	...	21	...	...	S45°W	13·3	...	...	13·1	86	...	1·003	...	5·2	...	5	12·85	−7·85	5·83	12·13	−6·30	16·64	32·97	−16·33	3·30	Puri.

station, the data for that station are not utilized in calculating the provincial departures from normal.

49 and 44 are derived or incomplete.

(a) Mean of 17 days.

Tabl

Abstract of observations taken at 8 A. M., at 232 station

Number of District.	Station.	Elevation of bar cistern above sea-level in feet.	PRESSURE 8 A M. IN INCHES.								TEMPERATURE OF AIR.												
			Mean 8 A. M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A. M temperature	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	V—Gangetic Plain & Chota Nagpur.	...	...	—·001	...	...	...	...	...	...	...	88·5	+0·1	78·2	+0·4	83·4	+0·2	10·3	...		...	...	19·
15	Hazaribagh ...	2,007	27·644	+·003	29·588	27·712	13th	27·573	24th	·139	78·1	84·9	+1·2	74·5	+1·3	79·8	+1·3	10·4	90·2	20th	71·3	11th	18·
	Ranchi ...	2,128	27·533	+·014	29·597	27·603	19th	27·456	24th	·147	77·1	84·3	+1·0	74·6	+1·4	79·2	+1·2	10·3	88·7	20th	71·4	1st	17·
	Daltonganj ...	*739*	28·889	...	29·583	28·974	20th	28·831	24th	·143	80·4	89·6	...	77·5	...	83·6	...	12·1	93·6	21st	74·0	21st	19·
	Purulia ...	*816*	28·824	...	29·583	28·893	17th	28·754	10th	·139	81·4	89·6	...	77·0	...	83·3	..	12·6	95·0	2·th	74·4	11th	20·
	Chaibassa ...	*760*	28·879	+·019	29·588	28·945	19th	28·805	24th	·140	80·7	90·2	+1·3	78·1	+1·1	84·2	+1·4	12·1	94·4	20th	76·0	10th	18
16	Gaya ...	375	29·249	0	29·576	29·327	13th	29·174	24th	·153	82·6	89·3	—0·7	78·1	—0·3	83·7	—0·5	11·2	94·9	20th	74·8	11th & 12th.	2·
	Dehri ...	351	29·257	...	29·562	29·324	13th	29·184	10th	·140	82·0	88·3	...	78·9	...	83·6	...	9·4	93·8	21st & 23rd.	75·0	11th	18·
	Patna ...	183	29·436	—·014	29·572	29·511	17th	29·346	10th	·165	81·9	87·4	—1·7	79·0	—0·5	83·2	—1·1	8·4	92·5	23rd	74·7	24th	17·
	Arrah ...	190	29·433	..	29·575	29·502	17th	29·356	10th	·146	81·6	87·7	...	78·5	...	83·3	...	8·8	92·9	20th	75·2	11th & 12th	17·
	Buxar ...	239	29·373	...	29·568	29·443	13th	29·291	24th	·152	80·9	87·1		77·9	...	82·5	...	9·2	92·0	20th	73·6	12th	18·
17	Bhagalpur ...	160	29·477	...	29·589	29·567	17th	29·378	10th	·189	82·6	88··	...	79·2	...	83·6	...	8·8	93·2	20th & 23rd.	75·6	11th	17·
	Darbhanga ...	166	29·460	—·013	29·578	29·551	17th	29·338	10th	·213	80·9	86·2	—2·3	78·4	—0·9	82·4	—1·6	7·8	90·6	3rd & 23rd.	75·3	30th	15·
	Muzaffarpur ...	178	29·455	..	29·589	29·549	17th	29·347	10th	·202	80·6	86·5	...	78·0	...	82·3	...	8·5	92·2	23rd	75·0	17th	17·
	Motihari ...	224	29·405	...	29·589	29·497	17th	29·294	10th	·203	80·0	87·5	...	78·2	...	82·9	...	9·3	92·9	22nd & 23rd.	74·8	12th	18·
	Chapra ...	181	29·429*	...	29·564*	29·494	13th	29·351	10th	·143	81·2	88·2	...	79·0	...	83·6	...	9·2	92·4	4 days	74·6	12th	17·
18	Benares ...	267	29·346	0	29·568	29·404	19th	29·260	10th	·144	81·5	88·4	—1·1	78·0	—0·8	83·2	—1·0	10·4	94·6	21st	74·7	12th	19·
	Allahabad ...	309	29·30·	0	29·565	29·365	19th	29·205	10th	·160	81·9	89·2	—0·6	78·7	+0·1	84·0	—0·3	10·5	95·6	21st	75·6	25th	20·
23	Gorakhpur ..	257	29·356	—·005	29·570	29·442	13th	29·244	2nd	·198	80·5	86·0	—3·8	78·1	—0·7	82·2	—2·3	7·9	91·2	22nd & 24th.	75·0	11th, 28th & 29th.	16·
19	Lucknow ...	368	29·224	—·018	29·550	29·321	26th	29·076	10th	·245	81·8	89·5	—0·8	78·6	0	84·1	—0·4	10·9	95·3	21st & 22nd.	75·3	2nd, 27th & 28th	20·
20	Bahraich ...	401	29·206	—·001	29·568	29·306	26th	29·060	10th	·246	80·5	88·1	—1·8	77·7	—0·3	82·9	—1·1	10·4	93·1	17th & 24th.	71·3	31st	21·
21	Cawnpore ...	416	29·182	—·009	29·554	29·272	26th	29·049	10th	·223	83·2	93·4	+3·5	79·8	+1·5	86·6	+2·5	13·6	101·4	22nd	70·7	28th	30·
	Mainpuri ...	516	29·090	+·008	29·558	29·188	26th	28·960	10th	·228	85·3	97·4	+6·6	81·8	+3·4	89·6	+5·0	15·6	105·8	22nd	78·3	3rd	27·
	VI—Upper Sub-Himalayas.	...	...	—·018	...	...	...	...	...	...	...	96·4	+3·6	80·4	+2·8	88·4	+3·3	16·0	...	...	...	...	26·
24	Bareilly ...	568	29·029	—·007	29·560	29·140	26th	28·872	10th	·268	81·2	89·7	—0·2	78·0	0	83·9	—0·1	11·7	93·9	1st, 21st & 22nd.	75·1	4 days	18·
	Debra Dun ...	2,233	27·411	—·013	29·581	27·539	26th	27·253	10th	·286	76·1	84·8	+0·8	73·4	+0·3	79·1	+0·6	11·4	89·0	21st & 31st.	69·5	22nd	19·
	Roorkee ...	899	28·694	—·017	29·556	28·826	26th	28·530	10th	·296	80·6	91·3	+0·6	77·2	+0·2	84·3	+0·4	14·1	97·0	21st	73·1	25th	23·
22	Meerut ...	738	28·852	—·013	29·548	28·974	26th	28·699	10th	·275	83·8	95·4	+4·5	80·3	+2·0	87·9	+3·3	15·1	99·7	21st & 22nd.	75·3	14th	24·
26	Delhi ..	718	28·868	—·016	29·539	28·985	26th	28·724	10th	·261	87·4	99·7	+7·9	83·9	+4·6	91·8	+6·3	15·8	103·2	8th, 9th & 22nd.	78·8	19th	24·
28	Lahore ...	702	8·837	—·036	29·495	28·958	26th	28·670	10th	·288	88·4	103·5	+5·3	84·5	+6·7	94·0	+6·0	19·0	108·4	21st	75·2	13th	33·
27	Sirsa ...	662	28·912	—·010	29·527	28·997	13th	28·772	10th	·225	89·1	104·5	+6·1	86·1	+5·9	95·3	+6·0	18·4	108·3	21st	82·6	19th	25·
	Patiala ..	*818*	28·759	...	29·536	28·888	26th	28·577	11th	·311	84·4	95·6	...	79·8		87·7	...	15·8	100·3	16th	73·0	17th	27·
29	Ludhiana ...	812	28·748	—·029	29·518	28·858	26th	28·586	10th	·272	84·7	98·4	+3·4	82·0	+3·0	90·2	+3·2	16·4	103·0	21st	73·1	3rd	29·
	Sialkot ...	830	28·731	—·022	29·520	28·872	26th	28·548	11th	·324	85·4	99·7	+5·0	82·0	+4·3	90·9	+4·7	17·7	106·7	22nd	75·1	15th	31·
	Ambala ...	892	28·695	?	29·546	28·823	26th	28·533	10th	·290	83·3	95·8	+3·0	79·7	+1·6	87·8	+2·3	16·1	101·5	22nd	74·7	1st & 2nd.	26·
	Rawalpindi ...	1,674	27·911	—·020	29·534	28·041	14th	27·734	11th	·307	84·1	98·7	+4·8	77·8	+2·6	88·3	+3·7	20·9	105·0	9th & 23rd.	70·1	14th & 15th	34·

N.B.—Elevations in italics indicate barometrical determinations.

Mean of 28 days.

NOTE 1.—When a query is inserted against any reading or in the returns of any

2.—The data from which divisional means of the figure columns Nos. 40,

I.—continued.

in India, Burma, &c., in August, 1905.

WIND DIRECTION. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	WIND VELOCITY. Mean daily velocity in miles per hour instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	HYGROMETRY, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	CLOUD. Mean cloud amount at 8 A.M.	Departure from normal.	RAINFALL. Number of rainy days.	Normal number of rainy days	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905.	Normal rainfall for period. 1st May to 31st August.	Departure from normal of period, 1st May to August, 1905	Heaviest rainfall during month	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
...	...	...	...	...	...	...	...	...	...	...	...	...	...	89	0	·948	+·012	7·6	+0·3	...	...	...	14·87	12·09	+2 77	...	...		...	V.—Gange Plain&Cho Nagpur.
2	1	...	2	1	5	8	8	4	S60°W	6·8	7·5	—9	6·0	82	- 7	·794	—·009	8·5	- 0·3	15	17·77	2·77	7·19	12·60	—5·41	26·93	38·45	— 11·52	1·25	Hazaribag
1	1	...	1	2	4	11	10	1	S53°W	5·0	...	..	6·0	88	- 1	·821	+·023	8·2	+0·2	17	17·84	—0·84	10·40	11·27	—0·87	31·00	39·52	— 8·52	1·84	Ranchi.
24	..	1	...	.	2	3	1	...	S34°W	2·7	...	...	2·1	88	...	·919	...	5·9	...	15	15·74	+3·26	10·83	12·11	—1·28	24·91	31·76	—6·85	2·01	Daltongan
4	2	1	2	4	8	6	3	1	S10°W	2·4	..	...	3·0	87	...	·936	...	6·9		16	16·62	- 0·62	8·63	12·30	—3·67	37·79	37·52	+0·27	1·36	Purulia.
22	...	...	...	...	1	7	1	..	S45°W	3·2	...	...	2·8	87	0	·925	+ 022	6·5	—1·2	13	16·94	—3·94	4·72	11·77	—7·05	31·09	36·96	— 5·87	1·96	Chaibassa
9	...	1	5	3	2	3	7	1	S22°W	3·0	2·6	+15	2·3	86	0	·964	+ 033	6·6	—1·4	15	14·26	+0·74	10·02	13·18	—3·16	23·06	35·26	— 12·20	2·16	Gaya.
1	1	...	6	4	6	9	3	1	S4°W	5·1	...	...	4·5	78	...	·965	...	8·7	..	15	14·44	+0·56	10·42	12·92	—2·50	21·04	31·91	—10·87	2·27	Dehri.
4	1	1	11	4	5	3	2	...	S51°E	5·4	3·2	+69	6·1	91	+4	·998	+ 029	9·2	+0·3	15	13·52	+1·48	29·22	12·58	+16·64	45·73	35·71	+10·02	4·86	Patna.
27	...	3	...	...	...	1	..	...	N45°E	1·4	...	...	1·4	89	...	·965		9·7	...	17	12·87	+4·13	11·88	10·50	+1·38	23·37	32·27	—8·90	1·83	Arrah.
3	1	2	10	2	3	5	5	...	S34°E	5·1	...	...	4·8	91	...	·954	...	8·4	...	19	13·35	+5·65	10·17	11·29	—1·12	24·21	29·33	—5·12	2·25	Buxar.
12	...	2	4	6	2	4	1	...	S37°E	2·5	...	...	2·3	89	...	·996	...	5·5	..	12	13·32	—1·32	12·95	11·26	+1·69	40·40	34·55	+5·85	2·97	Bhagalpur
1	.	1	19	6	...	1	2	1	S79°E	3·3	4·4	—25	2·9	94	+5	·998	+ 023	8·3	+ 1·3	23	14 07	+8·93	27·49	13·66	+13·83	53·10	36·68	+16·42	5·55	Darbhang
12	...	1	8	7	...	...	1	2	S75°E	2·5	...	...	...	95	..	·988	...	6·2	...	22	13·03	+ 8·97	31·23	10·64	+20·59	48·52	32·19	+16·33	5·06	Muzaffarp
4	...	8	13	2	1	...	2	1	N77°E	5·7	...	...	5·0	93	...	·944	...	7·7	...	19	13·97	+6 03	27·73	12·23	+15·50	57·35	36·27	+21·08	5·81	Motihari.
13	...	1	11	2	1	1	1	1	S80°E	2·4	...	...	2·1	92	...	·984	...	8·1	...	15	12·61	+2·39	17·76	9·73	+8·03	31·63	28·77	+2·86	3·50	Chapra.
8	1	...	4	3	2	6	3	4	S41°W	2·1	4·2	—50	2·4	88	—1	·962	—·001	9·1	+1·1	20	13·40	+6·60	16·63	12·05	+4·58	30·88	30 37	+0·51	2·16	Benares.
4	1	2	3	2	2	3	12	2	S79°W	1·1	5·6	—80	0·9	88	+1	·946	—·008	8·9	+0·2	14	11·80	+2·20	10·01	12·03	—2·02	22·42	30·89	—8·47	2·38	Allahabad
12	1	10	3	1	3	1	...	..	N70°E	1·2	2·3	—48	...	92	+4	·960	+ 005	8·0	+2·1	19	14·10	+4·90	27·06	13·24	+13·82	42·58	37·42	+5·16	3·69	Gorakhpu
15	1	3	5	4	...	2	1	...	S82°E	1·4	3·0	—53	1·5	89	+1	970	+ 018	7·5	+0·6	13	14·20	—1·20	12·99	11·83	+1·16	23·91	30·08	—6·17	2·77	Lucknow.
11	...	2	8	6	2	...	2	...	S68°E	1·4	...	...	1·3	95	+7	·984	+ 029	8·8	+2·8	18	12·70	+5 30	20·47	16·80	+3·67	33·01	37·14	—4·13	3·35	Bahraich.
15	...	3	3	...	...	5	4	1	S77°W	3·6	...	...	...	81	- 6	·922	- 032	6·5	—1·0	8	12·30	- 4·30	7·70	11·96	—4·26	16·14	27·32	—11·18	3·45	Cawnpore.
4	1	2	7	4	3	4	5	1	S26°E	3·1	...		3·1	79	- 6	·959	+ 026	6·3	— 0·5	5	10·90	—5·90	1·56	10·13	—8·57	4·09	24·04	—19·95	0·71	Mainpuri.
...	...	...	...	...	...		...	...	...	...	...	...	...	75	—7	867	—·026	4·1	—1 8		...	...	4·14	10·72	—6·71	...	...	...	...	VI-UpperSu Himalayas
29	...	...	1	1	...	...	...	...	S66°E	0·2	3·6	—92	0 2	91	+3	·961	+ 034	7·7	+0·8	10	12·18	—2·18	5·36	14·43	—9·07	14·69	36·62	—21·93	1·30	Bareilly.
21	..	1	3	...	3	1	1	1	S29°E	1·2	1·1	+9	...	91	+1	·821	+ 021	7·9	—0·4	17	21·30	—4·30	15·65	30·68	— 15·03	34·95	71·21	—36·26	2·93	Dehra Dun
3	...	...	2	21	3	1	...	1	S41°E	3·4	2 5	+36	...	88	+2	·910	+ 032 ?	5·2	—1·5	8	12·10	—4·10	5·19	13·09	—7 90	11·18	31·83	—20·65	1·04	Roorkee.
12	1	1	8	1	...	3	4	1	S81°E	0·8	2·1	—62	0·8	75	--6	·877	+ 034	4 7	—2·2	5	9·40	—4·40	2·85	9·30	—6·45	11·92	22·74	—10·82	1·70	Meerut.
1	2	...	1	6	2	2	10	7	S86°W	5·6	4·1	+37	4·9	61	—17	·791	—·070	4 9	—1·8	...	9·30	—9·30	...	8·52	—8·52	6·32	21·13	—14·81	...	Delhi.
1	1	1	4	10	5	6	5	...	S17°E	3·1	2·9	+7	...	63	—12	850	—·040	0·4	—3·4	..	5·20	—5·20	...	5·30	- 5·30	3·93	14·17	—10·24	...	Lahore.
2	...	...	.	3	1	17	8	...	S50°W	3·4	4·6	—26	2·9	58	—13	·786	·069	0·2	—4·5	...	4·80	—4·80	..	3·87	- 3·87	2·93	10·51	—7·58	...	Sirsa.
1	1	1	5	13	4	2	4	...	S38°E	4·4	...	...	4·5	81	...	955	...	4·2	...	6	...	...	5·53	...	...	12·25	...	...	2·12	Patiala.
16	...	1	...	9	...	2	2	1	S25°E	1·2	1 4	—14	1·1	73	—6	·871	—·021	1·9	—4·4	5	7·30	- 2·30	3·28	6·35	—3·07	8·37	19·25	—10·88	1·51	Ludhiana.
2	4	4	13	6	1	...	1	...	N85°E	3·3	2·3	+43	2·8	70	—9	·868	—·024	1·8	—2·4	7	8·40	—1·40	3·42	9·69	—6·27	11·83	21·81	—9·98	1·65	Sialkot.
15	...	2	1	12	...	...	...	1	S58°E	2·7	...	...	2·-	84	—4	·965	+ 024	4·3	—1·2	7	7·90	—0·90	4·32	8·03	—3·41	9·80	22·70	—12·90	1·92	Ambala.
6	2	5	7	8	3	...	...	...	S79°E	3·4	1·6	+113	3·1	64	—16	·749	—·090	5·4	+1·2	7	8·00	—1·00	3·75	8·70	—4·95	10·42	20·71	—10·29	1·34	Rawalpindi

station the data for that station are not utilized in calculating the provincial departures from normal.

42 and 44, are derived are incomplete.

† Mean of 30 days.

Table

Abstract of observations taken at 8 A.M., *at* 232 *stations*

Station.	PRESSURE, 8 A.M. IN INCHES.									TEMPERATURE OF AIR.												
	Elevation of bar cistern above sea-level in feet.	Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
I.—Indus alley & North-west Rajputana.	...	...	—·005	...	...	...	...	..	...	...	...	101·1	+3·3	81·4	+1·7	91·3	+2·5	19·8	...	...	...	29·6
eshawar ...	1,110	28·458	—·021	29·529	28·565	31st	28·255	11th	·310	87·4	103 3	+4·1	80·4	+2·6	91·9	+3·4	22·9	109·5	9th	67·4	29th	42·1
D. I. Khan ...	590	28·941	—·037	29·472	29·032	18th	28·784	11th	·248	87·9	103·4	+2·3	83·5	+2·5	93·5	+2·4	9·91	08·7	22nd	76·6	30th	32·1
Khushab ...	612	28·940	—·003?	29·511	29·058	14th	28·769	10th	·289	88·9	104·5	+4·3	84·5	+3·7	94·5	+4·0	20·0	109·8	22nd	73·4	7·0th	36·4
Montgomery ...	558	28·989	—·012?	29·504	29·074	14th	28·840	10th	·234	90·2	105·4	+3·4	85·6	+4·0	95·5	+3·7	19·8	111·3	21st	83·5	11th, 17th & 31st.	27·8
Multan ...	420	29·106	—·026	29·485	29·183	18th	28·964	11th	·219	86·7	104·0	+3·3	84·2	+2·1	94·1	+2·7	19·8	110·4	21st	82·1	29th	28·3
Jacobabad ...	186	29·330	—·036	29·475	29·458	16th	29·125	11th	·333	85·3	107·0	+3·2	80·9	—0·5	93·9	+1·4	26·1	110·8	20th	78·72	9th & 30th.	32·1
Hyderabad ...	96	29·506	+·013	29·555	29·621	20th	29·328	11th	·293	83·7	97·6	+2·1	78·9	+0· 2	88·3	+1·2	18·7	101·6	20th	76·51	8th & 19th.	25·1
Kurrachee ...	30	29·631	+·023	29·612	29·728	20th	29·473	12 h	·255	81·0	88·7	+0·5	78·4	—0·3	83·6	+0·1	10·3	91·4	1st & 4th.	76·7	27th	14·7
Bikaner ...	*771*	28·834	+·012	29·564	28·905	14th & 15th	28·684	11th	·221	85·5	103·0	+5·9	82·8	+2·2	92·9	+4·1	20·2	108·5	20th	81·0	5 days	27·5
Pachpadra ...	*380*	29·274	+·031	29·609	29·356	15th	29·102	11th	·248	83·8	98·3	+3·5	78·2	+0·9	88·2	+2·2	20·1	105·3	20th	75·5	29th	29·8
Jodhpur ...	782	28·881	...	29·639	28·951	14th	28·721	11th	·230	81·7	97·7	...	78·2	...	88·0	...	19·5	105·2	20th	75·3	29th	29·9
II-East Rajputana, Central India & Gujarat.	...	...	+·029	...	...	...	...	..	...	...	92·9	+4·5	78·4	+2·1	85·7	+3·3	14 6	...	...	...	...	22·5
Jaipur ...	1,431	28·235	+·020	29·613	28·296	14th	28·134	10th	·162	84·2	101·3	+9·7	80·0	+3·9	90·7	+6·8	21·3	104·2	6th	76·1	12th	28·1
Bharatpore ...	585	28·986	...	29·523	29·060	5th	28·903	11th	·157	87·2	100·8	...	82·8	...	92·9	...	18·0	105·4	22nd	78·1	28th	27·3
Kotah ...	819	28·816	...	29·625	28·877	14th	28·722	11th	·155	86·1	99·1	...	82·3	...	90·7	...	16·8	104·0	18th	78·1	28th	25·9
Jhambhar ...	1,254	28·403	+·031	29·608	28·462	15th	28·295	11th	·166	84·3	100·8	+9·5	80·4	+3·2	90·6	+6·4	20·4	106·5	21st	75·4	11th	31·1
Ajmer ...	1,611	28·075	+·030	29·634	28·139	14th	27·953	11th	·186	81·8	97·6	+9·4	79·2	+3·9	88·4	+6·7	18·4	102·9	19th	75·6	11th	27·3
Udaipur ...	1,925	27·787	...	29·654	27·855	15th	27·667	11th	·188	79·2	87·9	...	74·3	...	81·1	...	13·6	93·5	18th, 27th & 28th.	72·3	3rd	21·2
Bhuj ...	395	29·306	+·036	29·653	29·368	20th	29·166	11th	·202	80·5	91·2	+2·5	77·4	+1·2	84·3	+1·9	13·8	95·3	18th, 19th & 27th.	75·0	27th	20·3
Jamnagar ...	61	29·663	...	29·669	29·730	20th	29·536	11th	·194	82·6	91·4	..	77·4	...	84·4	...	14·0	96·1	10th	74·2	27th	21·9
Rajkot ...	429	29·316	+·042	29·696	29·373	20th	29·196	12th	·177	80·5	91·4	+2·5	74·9	+0·4	83·2	+1·5	16·5	95·9	10th	71·8	22nd, 29th & 30th.	24·1
Veraval ...	*18*	29·757	+·033	29·717	29·800	9th	29·710	25th	·090	79·9	82·7	0	78·3	+0·6	80·5	+0·3	4·4	84·6	22nd	77·3	5 days	7·3
Dwarka ...	37	29·701	...	29·684	29·771	20th	29·568	12th	·203	81·6	85·8	...	79·3	...	82·6	...	n·5	87·4	3rd, 16th & 27th.	77·7	23rd & 27th.	9·7
Bhavnagar Para	55	29·705	?	29·704	29·748	15th & 20th.	29·609	12th	·139	82·5	94·7	+1·9	78·1	+1·0	86·4	+1·5	16·6	99·6	10th	75·5	20th	24·1
Lowgong ...	757	28·872	+·002	29·585	28·919	14th	28·799	10th	·120	81·4	91·4	+3·5	78·9	+2·2	85·2	+2·9	12·5	97·5	15th	72·5	15th	25·0
Indore ...	1.823	27·919	+·042	29·703	27·969	16th	27·857	11th	·112	74·9	83·9	+1·0	72·0	+0·7	78·0	+0·9	11·9	90·6	20th	69·6	31st	21·0
Seemuch ...	1,630	28·084	+·034	29·674	28·144	15th	27·995	11th	·149	77·3	88·8	+3·8	73·7	+1·2	81·3	+2·5	15·1	96·0	27th	71·7	4 days	24·3
Surat ...	39	29·734	+·035	29·718	29·779	15th	29·649	12th	·130	81·7	87·4	+0·4	78·1	+1·6	82·8	+1·0	9·3	90·6	17th	75·0	7th	15·6
Ahmedabad* ...	163	29·568	+·025?	29·680	29·617	15th	29·465	11th	·152	81·6	†93·3	††+3·2	†78·0	††+0·9	†85·7	†+2·1	15·3	96·7	31st	76·1	1st, 2nd & 12th.	20·6
Deesa ...	466	29·242	+·031	29·662	29·305	15th	29·103	11th	·202	81·3	93·2	+4·3	76·7	+1·1	85·0	+2·7	16·5	98·1	19th	74·0	29th & 30th.	24·1
Agra ...	555	29·047	?	29·555	29·146	26th	28·906	10th	·240	88·0	99·3	+8·2	84·1	+5·3	91·7	+6·8	15·2	105·0	22nd	80·4	25th & 28th.	24·6
Jhansi ...	858	28·777	+·006	29·585	28·826	14th	28·704	24th	·122	83·6	96·5	+7·6	80·8	+3·7	88·7	+5·7	15·7	102·3	16th & 17th.	76·6	22nd	25·7

—Elevations in italics indicate barometrical determinations.

* Mean of 30 days.

† „ „ 29 „

NOTE 1.—When a query is inserted against any reading or in the returns of any

2.—The data from which divisional means of the figure columns Nos. 40,

I.—continued.

in India, Burma, &c., in August, 1905.

Wind direction. Number of winds from: Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud-amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August 1905	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
...	...	...	...	...	...	...	...	...	...	...	...	...	...	65	—7	·797	—·066	2·2	—2·3	...	...	...	0·06	2·57	—2·51	...	...	...	...	**VII.-Indus Valley & N.-W.Rajputana.**
16	5	3	1	...	...	...	2	4	N11°W	1·9	4·0	—53	2·1	60	—11	·786	—·037	1·2	—2·1	1	2·30	—1·30	0·15	2·36	—2·21	·11	5·07	—2·96	0·15	Peshawar
9	1	11	...	7	2	...	...	...	N66°E	2·0	2·1	—5	2·1	70	—4	·917	—·002	0·9	—1·3	0	2·40	—2·40	0·09	1·63	—1·54	2·77	5·00	—2·23	0·09	D.I.Khan
...	1	15	11	2	2	...	...	...	N71°E	9·0	..	..	8·6	61	8	·830	—·029	1·1	—1·7	1	2·80	—1·80	0·34	2·73	—2·39	4·25	9·75	—5·50	0·34	Khushab.
...	1	...	...	3	6	20	1	...	S32°W	10·3	...	...	9·6	49	—14	·685	—·146	0	—2·6	0	3·20	—3·20	0	2·99	—2·99	3·32	6·88	—3·56	0	Montgomery.
...	1	...	...	5	11	14	...	...	S15°W	2·8	3·2	—13	·5	63	—5	·797	—·071	0·2	—1·9	0	2·30	—2·30	0	2·02	—2·02	1·55	5·35	—3·80	0	Multan.
1	...	...	9	11	10	...	..	...	S44°E	4·9	4·0	+23	5·1	69	—2	·835	—·050	0·5	—1·6	0	1·90	—1·90	0	1·13	—1·13	0·46	2·60	—2·14	0	Jacobabad.
...	...	...	...	1	2	23	5	...	S46°W	17·6	13·8	+28	15·7	57	—3	·783	+·009	0·9	—4·2	0	2·40	—2·40	0	2·40	2·40	0·34	5·66	—5·32	0	Hyderabad.
...	...	...	...	...	...	1	26	4	N86°W	18·4	17·2	+7	18·2	81	—2	·853	—·049	8·4	+0·6	0	1·90	—1·90	0	1·77	—1·77	0·13	6·14	—6·01	0	Kurrachee.
...	...	1	...	...	7	15	7	1	S47°W	14·2	6·2	+129	...	60	—9	·737	—·093	1·1	—·4	0	4·90	—4·90	0	3·12	—3·12	0·61	9·09	—8·45	0	Bikaner
...	...	...	...	9	18	4	...	...	S38°W	17·7	9·7	+82	16·7	69	—10	·802	—·053	3·0	—1·5	0	4·90	—4·90	0·03	3·56	3·53	0·72	10·31	—9·59	0·03	Pachpadra.
...	...	...	...	...	1	19	10	1	S61°W	11·4	...	...	10·3	68	..	·739	...	6·5	...	0	5·90	—5·90	0·02	4·56	—4·54	1·69	10·51	—8·82	0·01	Jodhpur.
...	...	...	...	...	...	...	..	...	...	...	...	...	...	75	—7	·819	—·027	5·4	—1·8	0	...	...	1·53	7·32	—5·55	...	...	...	...	**VIII.-East Rajputana Central India & Gujarat.**
...	...	...	...	..	..	...	20	11	N74°W	7·8	5·5	+42	...	63	—16	·733	—·080	3·8	—3·1	1	11·60	—10·60	0·86	8·89	—8·03	1·65	20·70	—19·05	0·83	Jaipur.
8	2	...	2	1	...	2	16	...	S89°W	5·5		...	5·0	75	...	·974	...	2·3	...	3	...	...	0·96	...	...	6·75	...	...	0·47	Bharatpore.
...	1	...	...	...	...	10	13	7	S88°W	7·5	...	...	6·0	58	...	·721	...	2·6	...	3	10·60	—7·60	0·88	8·92	—8·04	3·28	23·45	—20·17	0·44	Kotah.
...	1	...	...	...	...	...	20	10	N73°W	12·2	8·1	+51	...	65	—12	·771	—·024	2·8	—3·5	1	9·40	—8·40	0·37	6·77	—6·40	2·32	16·34	—14·02	0·32	Sambhar.
...	...	...	...	...	...	2	18	11	N76°W	14·6	5·5	+165	12·7	69	—13	·752	—·047	5·2	—1·1	1	8·90	—7·90	0·30	7·25	—6·95	2·33	17·76	—15·43	0·30	Ajmer.
5	...	...	...	...	...	13	12	1	S69°W	7·1	...	...	6·2	73	...	·733	...	5·1	...	1	8·70	—7·70	0·51	...	...	12·80	...	...	0·37	Udaipur.
...	...	...	...	...	...	9	18	4	S83°W	20·2	14·9	+36	17·0	80	—2	·831	—·006	4·0	—3·3	1	3·70	—2·70	0·82	2·44	—1·62	5·58	12·03	—6·45	0·82	Bhuj.
...	...	...	...	...	1	17	12	1	S65°W	21·5	...	...	21·0	74	...	·824	...	5·1	...	1	...	...	0·58	...		6·69	...	...	0·50	Jamnagar.
1	..	...	...	...	...	7	23	...	S80°W	13·0	11·6	+12	12·9	78	—6	·812	—·026	2·4	—5·1	2	6·60	—4·60	1·82	4·52	—2·70	16·62	23·17	—6·55	1·05	Rajkot.
...	...	...	...	1	...	13	16	1	S70°W	12·1	13·9	—13	12·1	89	+1	·911	+·031	5·1	—3·1	1	8·10	—7·10	0·30	2·30	—2·00	6·56	14·79	—8·23	0·10	Veraval.
...	...	...	...	...	4	20	7	...	S49°W	18·9	...	...	...	84	...	·906	...	7·2	...	0	..	...	0·14	...	...	2·29	..	...	0·04	Dwarka.
...	...	...	...	..	16	6	9		S78°W	13·8	...	...	12·0	72	—9	·793	—·087	7·6	—0·5	0	8·80	—8·80	0·13	4·42	—4·29	10·52	14·27	—3·75	0·08	Bahvnagar Para.
5	...	...	2	...	...	3	20	1	S86°W	2·5	3·4	—26	2·5	80	—7	·854	—·028	8·2	+0·2	8	14·10	—6·10	5·50	13·51	—8·01	11·72	36·19	—24·47	1·84	Nowgong
...	...	...	...	1	...	6	17	7	W	8·8	6·1	+44	7·1	87	—2	·753	—·013	9·6	+0·7	8	10·60	—2·60	5·80	7·56	—1·76	26·34	23·50	+2·84	1·74	Indore.
...	...	...	...	...	...	15	15	1	S70°W	15·2	11·9	+28	12·8	80	—5	·755	—·021	7·1	+0·3	4	10·50	—6·50	5·17	9·22	—4·05	9·55	23·58	—14·03	1·72	Neemuch
...	1	...	...	2	4	5	12	7	S81°W	8·6	13·6		8·1	86	+1	·924	+·035	7·2	—0·4	5	12·30	—7·30	1·72	7·29	—5·57	18·67	34·72	—16·05	0·45	Surat.
	...	...	...	...	2	18	6	4	S61°W	†5·4	...	...	4·6	78	—5	·835	—·024	8·5	+0·2	2	10·90	—8·90	0·61	7·66	—7·05	38·74	27·02	+11·72	0·34	Ahmedabad.
...	...	...	...	.	6	18	5	2	S48°W	13·9	12·0	+16	...	76	—8	·865	—·035	6·4	—1·7	2	10·09	—8·09	0·34	6·67	—6·33	18·30	19·35	—1·05	0·11	Deesa.
...	...	1	...	8	...	16	...	6	S37°W	6·8	4·4	+55	8·0	62	—20	·812	—·101	4·1	—2·5	1	10·00	—9·00	0·51	8·14	—7·63	5·44	22·20	—16·76	0·25	Agra.
6	1	...	4	...	...	12	7	4	S75°W	6·8	3·9	+74	8·3	76	—6	·888	+·018	3·6	—3·1	7	12·70	—5·70	3·28	11·61	—8·33	10·44	30·20	—19·76	1·40	Jhansi.

station, the data for that station are not utilized in calculating the provincial departures from normal.

Table

Abstract of observations taken at 8 A.M., at 232 stations

Station.	Elevation of bar cistern above sea-level in feet.	Pressure 8 A.M. in inches.							Temperature of air.											
		Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IX.—Deccan.	...	...	+·021	...	...	..	...	...	...	...	86·3	+0·9	73·2	+0·9	79·8	+0·9	13·1	...	...	...	...	22·4
Belgaum ...	2,539	27·309	+·020	29·799	27·368	6th	27·239	18th	·129	76·3	76·9	+0·8	66·9	+0·7	71·9	+0·8	10·0	81·3	21st	65·3	29th	16·0
Sholapur ...	1,590	28·220	+·020	29·767	28·274	6th	28·165	25th	·109	76·3	89·2	+0·4	72·3	+1·7	80·8	+1·1	16·9	95·2	11th & 29th.	68·6	9th	26·6
Poona ...	1,840	27·976	+·027	29·778	28·018	6th	27·923	12th	·095	73·9	82·0	+0·1	69·9	+0·4	76·0	+0·3	12·1	87·5	20th	64·4	23rd	23·1
Bijapur ...	*1,948*	27·876	+·018	29·778	27·938	6th	27·812	18th	·126	74·5	87·1	+1·0	70·2	+0·3	78·7	+0·7	16·9	90·4	6	67·7	9th	22·7
Malegaon ...	1,430	28·333	+·021	29·720	28·375	20th	8·269	25th	·106	77·0	87·5	+0·9	73·8	+20*	280·6*	+1·5	13·7	92·4	14th	71·6	27th	20·8
Ahmednagar ...	2,154	27·662	+·026	29·767	27·703	6th	27·599	25th	·104	74·8	85·7	+0·9	69·6	+0·6	77·7	+0·8	16·1	90·9	16th	63·5	31st	27·4
Akola ...	930	28·817	+·028	29·700	28·872	5th	28·731	25th	·141	78·4	87·9	+0·7	74·3	+1·0	81·1	+0·9	13·6	93·4	11th	71·8	6th	21·6
Amraoti ...	1,215	28·517	+·028	29·690	28·578	6th	28·435	24th	·143	77·1	87·9	+1·8	74·3	+1·7	81·1	+1·8	13·6	95·2	14th	71·5	24th	23·7
Khandwa ...	1,044	28·68	+·023	29·689	28·727	6th	28·612	25th	·115	77·9	86·3	+0·8	75·0	+0·9	80·7	+0·9	11·3	89·2	4	72·1	18th	17·1
Hoshangabad ...	1,006	28·709	+·031	29·680	28·768	20th	28·635	2nd	·133	77·9	86·8	+1·8	75·0	+1·2	80·9	+1·5	11·8	98·8	4 days 29th	71·2	18th	27·6
Nagpur ...	1,025	28·682	+·026	29·666	28·748	6th	28·582	5th	·166	78·4	88·0	+1·0	75·3	+0·7	81·7	+0·9	12·7	93·6	2nd	72·1	5th & 6th.	21·5
Chanda ...	*634*	29·115	+·043	29·699	29·188	6th	29·026	25th	·162	79·9	89·1	+1·5	76·2	+1·2	82·7	+1·4	12·5	98·2	13th	72·5	24th	25·7
Seoni ...	2,033	27·676	+·024	29·655	27·739	20th	27·595	24th	·144	75·9	84·2	+1·1	72·8	+1·2	78·5	+1·2	11·4	89·8	2nd & 3rd.	70·5	22nd	19·3
Jubbulpore ...	1,327	28·352	+·030	29·641	28·409	20th	28·273	24th	·136	76·7	86·1	+1·4	73·6	—0·3	79·9	+0·6	12·5	92·0	3rd	71·1	29th	20·9
Saugor ...	1,807	27·872	+·015	29·633	27·926	20th	27·812	11th & 24th	·114	76·3	86·2	+2·6	73·4	+0·6	79·8	+1·6	12·8	91·9	22nd	70·1	22nd & 29th	21·8
Sutna ...	1,040	28·586	+·004	29·588	28·647	20th	28·506	10th	·141	79·4	88·0	+2·1	77·6	+1·7	82·8	+1·9	10·4	95·0	2nd	75·1	8th	19·9
Raipur ...	970	28·710	+·021	29·631	28·773	20th	28·613	24th	·160	78·8	86·0	+0·1	75·8	+0·9	80·9	+0·5	10·2	91·6	2nd	71·4	5th	20·2
Pendra ...	2,1237	27·641	...	29·613	27·711	20th	27·545	24th	·166	76·2	84·6	...	73·5	...	79·1	...	11·1	89·3	21st	71·1	8th & 22nd	18·2
Sambalpur ...	486	29·180	+·010	29·615	29·244	20th	29·080	24th	·164	80·6	88·2	+1·0	77·6	+0·4	82·9	+0·7	10·6	92·6	16th & 20th.	73·6	4th	19·0
Aurangabad ...	1,905	27·877	...	29·731	27·914	5th	27·823	25th	·091	74·8	86·0	...	70·4	...	78·2	...	15·6	89·8	10th	65·2	24th	24·6
Indur ...	1,230	28·481	...	29·694	28·528	10th	28·437	27th	·091	78·4	88·8	...	72·4	...	80·6	...	16·4	97·2	12th	71·2	9days	26·0
Bidar ...	*2,165*	27·660	...	29·774	27·718	7th	27·606	25th	·112	74·6	83·8	...	71·0	...	77·4	...	12·8	91·5	11th & 13th.	68·3	8th	23·2
Gulbarga ...	1,503	28·289	?	29·750	28·363	7th	28·237	24th	·126	75·4	87·4	—0·9	72·0	+0·9	79·7	0	15·4	93·0	1st & 11th	69·6	9th	23·4
Raichur ...	1,326	28·486	+·016	29·770	28·558	6th	28·417	18th	·141	76·5	87·4	—1·1	73·7	+1·2	80·6	+0·1	13·7	93·1	12th	71·1	25th & 26th	22·0
Hyderabad (Dn.)	1,690	28·095	+·016	29·741	28·155	6th	28·005	25th	·150	75·4	86·1	0	72·4	+1·3	79·4	+0·7	13·7	92·4	13th	70·2	25th	22·2
Hanumkonda ...	871	28·874	...	29·692	28·944	6th	28·766	25th	·178	79·5	89·0	...	75·5	..	82·3	...	13·5	96·4	13th	67·3	11th	29·1
X.—West Coast.	...	...	+·014	...	...	...	...	...	...	...	83·7	+0·7	75·7	+0·6	79·7	+0·6	8·0	...	...	...	...	13·2
Bombay ...	37	29·777	+·020	29·754	29·823	5th & 9th	29·717	25th	·106	80·7	85·6	+1·6	78·1	+1·1	81·9	+1·4	7·5	87·0	5 days	75·5	24th	11·5
Ratnagiri ...	110	29·733	+·024	29·782	29·788	6th	29·678	25th	·110	79·7	84·7	+1·0	77·0	+1·8	80·9	+1·4	7·7	86·3	11th & 23rd	73·9	5th & 6th.	12·4
Mormugão ...	*60*	29·809	+·013	29·804	29·873	6th	29·734	18th	·139	79·7	83·8	+0·4	76·2	+0·4	80·0	+0·4	7·6	86·0	11th	73·4	25th	12·6
Goa ...	199	29·652	?	29·790	29·731	8th	29·579	18th	·152	79·6	82·9	+1·0	77·0	+1·2	80·0	+1·1	5·9	85·0	28th	75·0	5th, 6th & 7th.	10·0
Karwar ...	44	29·841	+·022	29·819	29·907	6th	29·757	18th	·150	78·3	82·5	0	75·2	+0·6	78·9	+0·3	7·3	85·2	12th	71·5	26th	13·7
Cochin ...	10	29·916	+·009	29·854	29·975	6th	29·870	18th	·105	78·4	85·5	+1·8	74·6	+0·3	80·1	+1·1	10·9	90·3	9th	72·7	5days	17·6
Calicut ...	27	29·888	+·008	29·845	29·963	6th	29·831	18th	·132	77·3	83·5	+0·7	74·7	+0·6	79·1	+0·7	8·8	86·8	30th	72·7	19th	14·1
Mangalore ...	65	29·838	+·005	29·836	29·904	7th	29·762	18th	·142	77·1	81·5	—1·3	74·0	0	77·8	—0·7	7·5	85·7	1st & 11th	71·4	3rd	14·3
Trivandrum ...	198	29·715	+·009	29·845	29·780	5th	29·661	18th	·119	77·2	83·2	+0·9	74·6	—0·8	78·9	+0·1	8·6	85·5	7th & 9th	72·5	13th	13·0

B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the return of any

* Mean of 28 days. 2.—The date from which

I.—continued.

in India, Burma, &c., in August, 1905.

WIND DIRECTION. Number of winds from Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	WIND VELOCITY. Mean daily velocity in miles per hour instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	HYGROMETRY, 8 A.M. Mean hourly reading at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	CLOUD. Mean cloud amount at 8 A.M.	Departure from normal.	RAINFALL. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905.	Normal rainfall for period 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1905	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
...	...	...	...	...	...	...		...	...	...	...	...	...	83	—1	·763	+·010	7·6	—0·2	...	...	...	7·69	8·92	—1·22	...	...	...	...	IX.-Deccan.
3	2	...	...	...	...	...	12	14	N61°W	15·5	20·7	—25	...	92	0	·682	+·014	9·1	+0·4	12	17·40	—5·40	3·81	0·67	—4·86	23·45	33·06	—11·61	0·82	Belgaum.
..	..	...	...	...	..	8	11	12	N83°W	11·6†	11·0	+5	12·8*	76	+1	·688	+·018	7·9	+0·2	6	8·00	—2·00	2·19	6·09	—3·90	7·84	15·64	—7·80	0·71	Sholapur.
...	..	...	...	.	...	1	23	7	N82°W	13·1	14·0	—6	...	83	0	·695	+·002	7·1	—1·3	7	8·60	—1·60	1·74	3·31	—1·57	20·47	16·42	+4·05	0·21	Poona.
...	...	...	...	...	...	5	11	1	S80°W	10·0	...	...	9·8	81	—1	·695	0	8·5	+1·0	8	5·60	+2·40	4·14	2·47	+1·67	6·61	9·83	—3·22	1·92	Bijapur†
3	1	...	...	...	.	4	19	4	N88°W	9·7	10·0	—3	11·2	75	—2	·729	0	6·3	—1·0	5	5·80	—0·80	3·53	3·75	—0·22	13·22	13·72	—3·50	1·23	Malegaon.
3	...	...	...	...	..	4	15	9	N82°W	8·3	...	...	10·1	76	—7	·557	+·025	5·1	—2·1	4	5·20	—1·20	3·08	2·29	+0·79	8·79	11·15	—2·36	1·34	Ahmednagar.
...	1	...	...	...	...	2	12	16	N66°W	10·1	7·9	+28	8·9	81	—2	·778	+·010	9·4	+1·6	11	8·90	+2·10	3·23	6·28	—3·05	13·08	22·48	—9·40	0·77	Akola.
...	...	.	...		1	7	22	1	S79°W	6·1	6·1		5·5	88	—1	·847	+·035	7·5	—0·4	8	10·00	—2·00	4·12	5·44	—2·32	15·52	23·77	—8·25	0·78	Amraoti.
5	1		...	...	...	..	13	12	N67°W	9·3	7·6	+22	8·8	80	—5	·765	—·003	5·5	—2·2	7	10·70	—3·70	2·19	7·05	—4·86	21·38	22·10	—0·72	0·65	Khandwa.
...	...	...	..	..	...	2	19	9	1	S58°W	4·0	3·4	+18	4·1	90	—1	·843	+·013	8·9	—0·6	15	15·00	0	12·25	14·68	—2·43	33·82	38·83	—5·01	2·20	Hoshangabad.
3	2	...	...	...	...	1	15	10	N70°W	8·4	8·0	+5	6·6	82	—3	·809	—·016	8·4	—0·3	12	12·60	—0·60	10·13	11·06	—0·93	31·48	34·96	—3·48	2·30	Nagpur.
6	1		...	...	1	9	13	1	S74°W	7·4	5·4	+37	6·6	86	+4	·882	+·083	7·0	—1·4	15	13·60	+1·40	12·54	13·90	—1·36	22·18	40·40	—18·22	2·93	Chanda.
	3	2	2	...	1	5	10	8	N71°W	6·5	4·8	+35	5·5	83	—7	·741	—·045	7·7	—0·8	13	16·40	—3·40	13·14	12·49	+0·65	30·86	40·21	—9·35	2·92	Seoni.
...	1	...	...	..	1	9	17	3	S81°W	4·8	4·6	+4	4·2	91	+1	·831	+·003	8·5	+0·2	15	16·30	—1·30	11·39	16·48	—5·09	32·46	46·68	—14·22	1·48	Jubbulpore.
	...	...	...	...	...	3	23	5	N87°W	10·5	4·3	+144	9·3	83	—7	·753	—·046	7·5	—0·1	10	15·40	—5·40	9·84	12·97	—3·13	16·67	37·53	—20·86	3·32	Saugor.
8	1	...	1	...	..	7	12	2	S82°W	4·2	7·9	—47	3·9	88	+1	·874	+·003	9·6	+2·2	11	14·40	—3·40	12·00	12·47	—0·47	20·57	34·45	—13·88	5·13	Sutna.
5	...	...	...	...	2	20	4	...	S48°W	6·3	7·3	—14	7·6	89	0	·877	+·035	7·0	—1·7	16	14·20	+1·80	8·39	13·02	—4·63	27·17	38·73	—11·56	2·38	Raipur.
8	4		...	3	5	2	2	7	N86°W	4·1	...	...	3·5	86	...	·776	...	7·7	...	17	...	...	10·48	...	...	25·99	...	...	2·01	Pendra.
	...	...	...	3	2	19	7	...	S46°W	5·3	3·0	+77	5·2	84	—2	·888	+·002	8·6	+0·5	19	17·10	+1·90	16·41	17·63	—1·22	39·35	53·42	—14·07	2·34	Sambalpur.
...	...	...	...	...	1	15	15	...	S66°W	15·4	..	...	15·0	80	...	·686	...	8·6	...	2	9·50	—7·50	1·29	5·25	—3·96	7·84	19·06	—11·22	0·62	Aurangabad.
2	...	...	...	...	...	1	1	27	N49°W	5·2	...	...	4·3	69	...	·669	...	7·1		12	14·50	—2·50	14·21	10·61	+3·60	20·12	26·76	—6·64	5·50	Indur.
...	2	...	...	...	3	9	11	6	S82°W	6·0		...	5·0	88	...	·762	...	4·4	...	13	12·50	+0·50	9·89	8·39	+1·50	16·35	23·93	—7·58	3·44	Bidar.
1	4	...	...	.	...	...	16	10	N64°W	10·0	...	...	8·8	85	+5	·746	+·042	8·1	+0·5	13	8·10	+4·90	9·88	4·75	+5·13	18·12	16·93	+1·19	2·20	Gulburga
...	...	...	...	...	.	28	3	...	S49°W	15·0	...	...	14·3	80	+2	·730	+·017	8·2	+0·6	10	8·70	+1·30	5·85	6·52	—0·67	18·08	15·89	+2·19	1·66	Raichur.
10	...	.	...	...	...	...	21	...	W	7·9	...	...	7·7	82	0	·719	+·003	8·0	+0·4	15	...	...	9·46	7·61	+1·85	17·76	19·70	—1·94	2·68	Hyderabad (Dn.).
3	..	...	.	...	3	3	14	8	N89°W	9·5	...	...	8·4	75	...	·765	...	0·8	...	8	12·00	—4·00	4·79	...	...	16·19		...	1·62	Hanumkonda.
...	...	...	...	...	...	..	...	...	...	...	...	...	...	87	—2	·854	—·002	8·1	+0·3	...	...	...	11·40	17·08	—5·67	...	...	...	...	X.-West Coast.
...	...	...	1	2	...	4	22	2	S83°W	11·8	15·8	—25	...	85	—1	·896	+·015	8·8	—0·1	16	19·50	—3·50	4·35	14·07	—9·72	26·18	60·46	—34·28	0·69	Bombay.
5	...	1	3	3	1	3	12	3	S77°W	10·0	10·3	—3	9·9	88	0	·882	+·007	3·5	+0·5	15	23·70	—8·70	7·48	22·29	—14·81	40·54	89·62	—49·08	0·78	Ratnagiri.
6	6	1	1	4	5	5	3	...	S24°W	10·3		...	..	91	+1	·918	+·020	8·4	+1·4	23	...	...	12·94	18·59	—5·65	56·98	76·67	—19·69	1·95	Mormugao.
6	4	1	2	...	...	2	8	8	N54°W	8·3	...	...	...	82	—7	·847	—·033	9·3	+0·8	23	...	...	8·51	19·14	—10·63	47·21	82·87	—35·66	1·34	Goa.
9	1	...	1	..	...	10	9	1	S71°W	5·4	...	...	...	85	—3	·816	—·018	7·3	0	28	24·00	+4·00	22·12	23·91	—1·79	73·27‡	100·95	—27·68	2·60	Karwar
1	4	4	9	2	...	2	6	3	N32°E	7·3	...	...	...	85	—1	·839	—·002	6·4	—0·7	12	18·60	—6·60	5·85	13·47	—7·62	59·38	76·06	—16·68	1·05	Cochin.
14	4	1	1	1	2	...	...	8	N23°W	6·0	...	...	6·0	90	—1	·839	+·005	8·1	+0·8	17	18·80	—1·80	8·76	15·80	—7·04	80·85	88·24	—7·39	1·27	Calicut.
13	1	...	7	2	1	1	2	4	N77°E	4·2	2·9	+45	...	92	...	·864	+·009	8·5	0	27	24·40	+2·60	30·26	22·26	+8·00	117·78	101·17	+15·61	3·46	Mangalore.
1	9	1	..	...	...	...	3	17	N33°W	8·5	...	...	...	84	—2	·789	—·018	7·6	+0·2	9	9·30	—0·30	2·36	4·15	—1·79	47·97	32·51	+15·46	1·53	Trivandrum.

station, the data for that station are not utilized in calculating the provincial departures from normal. † Wind observation of 17 days.

42 and 44 are derived are incomplete ‡ Mean of 30 days.

Table

Abstract of observations taken at 8 A.M. at 232 stations

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	PRESSURE, 8 A.M., IN INCHES.								TEMPERATURE OF AIR.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XI.—South India.	...	...	+·012		...	...	...	...	...	...	91·4	+1·2	74·9	+0·5	83·1	+0·8	16·5	...	...	...	...	25·1
57	Pamban ..	37	29·815	+·002	29·779	29·893	6th	29·755	18th	·138	83·5	91·0	+2·0	78·7	+0·1	84·9	+1·1	12·3	93·8	21st	76·7	5th, 19th & 22nd.	17·1
	Tinnevelly ...	168	29·696	+·010	29·792	29·772	6th	29·630	18th	·142	86·1	98·3	+1·6	79·2	+0·1	88·8	+0·9	19·1	101·4	5th, 9th & 28th.	75·9	19th	25·5
	Madura ...	447	29·409	+·018	29·789	29·485	6th	29·348	18th	·137	83·3	98·8	+2·2	77·2	+·4	88·0	+1·8	21·6	103·0	12th	73·5	21st	29·5
	Periyakulam ...	944	28·924	...	29·809	29·008	6th	28·871	19th	·137	79·6	95·5	...	71·2	...	81·7	...	24·3	98·9	10th	66·8	4th	32·1
34	Salem ...	940	28·935	+·001	29·818	29·005	6th	28·876	25th	·129	79·5	94·3	+2·1	74·4	+1·9	84·4	+2·0	19·9	99·7	10th	71·4	2nd	28·3
	Coimbatore ...	1,348	28·517	+·008	29·824	28·587	6th	28·470	18th 19th and 25th	·117	75·2	89·6	+0·3	70·8	+0·2	79·9	+0·3	18·2	91·4	8th & 11th.	68·3	29th	23·1
35	Mercara ...	3,781	26·182	+·001	26·115	26·249	6th	26·113	18th	·136	64·7	70·3	+0·6	62·3	+0·3	66·3	+0·5	8·0	73·5	29th	60·1	3rd	13·4
36	Chitaldroog ...	2,405	27·462	+·013	29·812	27·525	6th	27·391	18th	·134	72·6	84·0	+1·9	68·8	+0·8	76·4	+1·4	15·2	90·6	6th	67·4	5th & 9th.	23·2
	Bangalore ...	3,021	26·892	+·009	29·843	26·953	6th	26·828	18th	·125	69·7	83·3	+1·5	66·0	+0·4	74·7	+1·0	17·3	88·3	9th	63·3	9th	25·0
	Hassan ...	3,091	26·840	+·014	29·851	26·900	6th	26·774	18th	·126	70·8	81·3	+3·1	64·9	+0·4	73·2	+1·8	16·4	85·2	21st	61·9	9th	23·3
	Mysore ...	2,518	27·391	+·007	29·853	27·456	6th	27·318	18th	·138	72·3	84·2	+0·2	66·8	+0·3	75·5	+0·3	17·4	87·5	21st	63·5	9th	24·0
56	Negapatam ...	31	29·808	+·002	29·768	29·893	6th	29·750	25th	·143	82·0	96·0	+2·3	78·1	+0·8	87·1	+1·6	17·9	100·4	11th	73·0	2nd	27·4
	Cuddalore ...	37	29·800	+·016	29·766	29·882	6th	29·739	25th	·143	82·2	93·4	−0·3	77·6	+1·3	85·5	+0·5	15·8	100·7	11th	72·2	31st	28·5
	Trichinopoly ...	255	29·693	+·006	29·780	29·674	6th	29·539	18th	·135	82·3	98·5	+1·9	77·3	+0·6	87·9	+1·3	21·2	102·6	8th	73·9	16th & 29th.	28·7
	Madras ...	22	29·795	+·005	29·748	29·878	6th	29·731	25th	·147	83·1	95·1	+1·3	77·9	+0·6	86·5	+1·0	17·2	101·0	22nd	73·5	2nd	27·5
	Vellore ...	707	29·117	...	29·765	29·198	6th	29·041	25th	·157	81·2	88·9*	...	76·2	...	82·6*	...	12·7	94·9	9th, 11th & 13th.	72·7	14th & 20th.	22·2
55	Nellore ...	52	29·754	+·028	29·740	29·849	6th	29·680	25th	·169	83·6	96·4	+0·8	78·2	−0·5	87·3	+0·2	18·2	103·8	10th	73·6	17th	30·2
	Masulipatam ...	15	29·757	+·023	29·707	29·838	6th	29·656	25th	·182	82·8	92·1	+0·8	78·2	+0·6	85·2	+0·7	13·9	98·7	11th	74·1	24th & 25th.	24·6
54	Cuddapah ...	433	29·393	+·012	29·765	29·462	6th	29·304	25th	·158	80·8	94·0	+0·3	75·6	−1·2	84·8	−0·5	18·4	101·7	12th	72·2	19th	29·6
	Kurnool ...	923	28·881	+·003	29·754	28·958	6th	28·802	25th	·156	77·5	89·5	−0·3	74·0	+0·3	81·8	0	15·5	95·2	17th	71·6	19th, 21st & 25th.	23·6
	Bellary ...	1,475	28·349	+·008	29·775	28·423	6th	28·281	25th	·142	77·4	90·7	−0·1	74·0	+0·4	82·4	+0·2	16·7	96·0	12th	70·2	25th	25·8
52	Cocanada ...	26	29·722	+·029	29·684	29·797	6th	29·599	25th	·198	82·5	91·1	+1·4	78·7	+0·2	84·9	+0·8	12·4	99·1	14th	75·0	2nd & 30th.	24·1
	Waltair (Vizag).	*226*	29·494	+·024	29·661	29·579	6th	29·359	24th	·220	81·8	88·0	?	78·4	?	83·2	?	9·6	92·9	12th	74·9	1st2nd & 5th	18·0
	Gopalpur ...	72	29·616	+·036?	29·629	29·684	6th	29·486	24th	·198	84·2	88·7	+1·3	79·8	+1·0	84·3	+1·2	8·9	91·7	26th	74·5	14th	17·2

N.B.—Elevation in italics indicates barometrical determination.

NOTE 1.—When aquery is inserted against any reading or in the returns of any
NOTE 2.—The data from which divisional means of the figure columns Nos. 40

.—continued.

n India, Burma, &c., in August, 1905.

WIND DIRECTION. Number of winds from									WIND VELOCITY.				HYGROMETRY 8 A.M.				CLOUD.		RAINFALL								Station.
N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August 1905.	Heaviest rainfall during month.	
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
...	...	...	...	...	...	...	...	...	...	...	...	...	76	0	·771	+0 16	6·4	—0·5	...	...	...	4·64	4·25	+0·38	...	...	--	...	XI —South India
...	...	1	5	4	3	6	2	S31°W	7·9	...	...	8·3	82	...	·934	...	2·8	...	0	0·60	—0·60	0	0·81	—0·81	1·03	1·65	—0·62	0	Pamban.
1	...	...	...	...	3	16	11	N76°W	10·0	...	...	9·6	52	—7	·656	—·044	4·7	—0·8	0	1·00	—1·00	0·05	0·48	—0·43	3·66	2·68	+0·98	0·03	Tinnevelly.
1	1	1	...	...	...	6	22	N49°W	5·5	3·7	+49	6·3	66	0	·757	+·029	4·0	—1·3	5	6·20	—1·20	4·37	3·69	+0·68	8·96	9·65	—0·69	1·73	Madura.
3	1	...	2	1	1	3	1	N63°W	3·6	...	...	3·9	64	...	·642	...	3·5	...	4	3·80	+0·20	0·68	1·88	—1·20	...	6·35	...	0·15	Periyakulam.
1	...	...	...	9	11	7	1	S46°W	4·8	4·2	+14	4·2	77	—2	·789	+·018	6·4	0	11	9·50	+1·50	5·87	7·47	—1·60	15·72	18·93	—3·21	1·31	Salem.
...	...	...	...	1	23	7	...	S54°W	9·9	7·4	+34	9·1	82	—2	·727	—·016	4·7	—1·1	3	3·00	0	0·55	1·12	—0·57	5·52	6·28	—0·76	0·17	Coimbatore.
1	...	...	...	...	1	14	15	N67°W	3·4	8·9	—62	3·2	94	—1	·586	+·009	9·6	+1·0	27	26·70	+0·30	21·21	26·36	—5·15	81·67	99·84	—18·17	3·07	Mercara.
1	...	...	...	...	8	14	8	N88°W	10·7	...	...	9·3	82	0	·659	+·012	8·0	—0·9	6	7·80	—1·80	1·59	2·68	—1·09	9·17	13·01	—3·84	0·41	Chitaldroog.
...	...	...	...	...	14	15	2	S72°W	10·2	7·6	+34	9·1	86	+1	·628	+·012	9·4	+1·2	9	10·40	—1·40	10·49	5·36	+5·13	18·77	16·69	+2·08	3·88	Bangalore.
...	...	...	...	...	10	16	5	S82°W	3·3	...	...	3·6	86	+3	·651	+·037	9·0	+0·3	7	9·60	—2·60	2·64	3·37	—0·73	14·04	17·40	—3 36	1·09	Hassan.
...	...	...	...	...	19	12	...	S62°W	10·6	...	...	11·4	81	0	·643	+·001	8·8	+0·9	6	6·40	—0·40	3·71	2·93	+0·78	13·60	12·43	+1·17	1·56	Mysore.
...	...	...	...	1	8	17	3	S79°W	7·8	5·7	+37	6·9	73	+2	·802	+·006	5·3	—0·4	7	5·70	+1·30	4·17	3·66	+0·51	6·58	8·65	—2·07	1·30	Negapatam
...	...	...	...	5	13	8	...	S51°W	4·7	...	...	5·8	75	—5?	·822	—·058?	5·9	—0·8	6	8·00	—2·00	6·19	5·33	+0·86	11·98	11·14	+0·84	2·30	Cuddalore.
1	...	...	...	4	6	11	2	S70°W	6·0	8·2	—27	...	67	0	·731	+·005	4·8	—2·1	6	5·40	+0·60	2·98	4·35	—1·37	6·02	10·10	—4·08	1·75	Trichinopoly.
...	...	...	...	7	9	14	...	S57°W	7·1	7·3	—3	...	75	0	·849	+·023	5·8	—1·5	6	12·60	—6 60	1·93	5·34	—3·41	5·27	12·47	—7·20	0 60	Madras.
...	5	3	10	3	3	1	2	S52°E	3·0	...	...	3·0	69	...	·726	...	6·0	...	10	7·90	+2·10	10·43	5·31	+5·12	20·52	14·53	+5·99	2·15	Vellore.
...	...	...	...	3	5	18	1	S76°W	5·5	...	...	...	72	0	·823	+·007	7·3	—0·4	5	5·40	—0·40	2·29	4·03	—1·74	5·74	8·46	—2·72	1·37	Nellore.
...	...	...	...	2	3	13	11	N82°W	9·4	7·8	+21	8·3	83	0	·930	+·039	7·2	—0·6	12	9·80	+2·20	9·47	6·89	+2·58	17·33	18·64	—1·31	3·85	Masulipatam.
...	...	...	1	...	...	14	16	N66°W	...	...	...	...	74	+1	·771	—·002	7·2	—0·6	15	8·00	+7·00	8·96	6·15	+2·81	15·09	15·02	+0·07	2·31	Cuddapah.
...	...	...	...	...	14	8	9	S82°W	11·0	...	...	...	85	+10	·803	+·088	8·5	+1·0	14	9 20	+4·80	12·04	5·94	+6·10	21 06	15·20	+5·86	3·02	Kurnool.
...	...	...	...	...	3	19	7	N83°W	10·3	10·7	—4	9·1	72	+4?	·677	+·029	7·5	—0·4	9	4·10	+4·90	5·19	2·32	+2·87	10·08	7·76	+2·32	1·89	Bellary.
...	...	...	...	...	15	10	...	S63°W	6·1	...	...	5·1	85	+4	·943	+·093	6·6	—1·0	11	9·70	+1·30	6·54	5·40	+1·14	11·25	17·03	—5·78	1·22	Cocanada.
...	...	...	...	1	20	10	...	S58°W	12·1	...	...	...	90	+11?	·866	+·005	8·5	+0·7	12	8·40	+3·60	5·45	5·32	+0·13	17·48	16·15	+1·33	1·26	Waltair (Vizag).
2	...	...	...	8	14	...	5	S47°W	14·9	9·1	+64	14·6	77	—8	·901	—·024	4·7	—2·8	4	10·60	—6·60	1·04	7·96	—6·92	12·49	23·95	—11·46	0·30	Gopalpur.

tation, the data for that station are not utilized in calculating the provincial departures from normal.
2 and 44 are derived are incomplete.
ill or plateau stations the elevations of which exceed 3,200 feet.

Table

Abstract of Observations taken at 8 A. M. at 232 stations.

Number of District.	Stations.	Elevation of bar-cistern above sea-level, in feet.	PRESSURE, 8 A.M., IN INCHES.								TEMPERATURE OF AIR.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 15° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean Daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XII.—Hill stations	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48	Pishin ...	...	...	...	...	...	...	...	...	...	...	96·2	...	61·6	...	78·9	...	34·6	105·4	10th	56·1	16th	49·3
	Quetta ...	5,502	24·491	+·012	24·451	24·574	20th	24·382	12th	·192	74·5	93·0	+2·5	60·0	—1·1	76·5	+0·7	33·0	99·1	10th	51·9	31st	47·2
	Kalat ...	...	...	...	...	...	...	...	...	...	78·7	94·1	+3·7	49·5*	+1·3	71·9*	+2·5	44·6	99·2	6th & 22nd.	27·0	31st	72·2
	Chaman, ...	4,311	25·511	+·024	25·473	25·604	20th	25·411	11th	·193	79·6	97·4	—0·6	69·2	—1·1	83·3	—0·9	28·2	107·2	10th	61·1	31st	46·1
30	Leh ...	11,503	19·668	+·004	19·636	19·739	20th	19·547	12th	·192	55·9	75·9	—1·5	47·6	—2·2	61·8	—1·9	28·3	81·7	10th	41·5	31st	40·2
	Srinagar, ...	5,204	24·715	+·008	24·686	24·815	15th	24·534	11th	·281	69·9	88·6	+4·7	62·1	—0·8	75·4	+2·0	26·5	96·3	11th	56·2	19th	40·1
	Gulmarg, ...	*8,569*	21·803	...	21·771	21·890	6th	21·676	11th	·214	62·2	71·1	...	49·0	...	60·1	...	22·1	77·6	11th	44·3	18th	33·3
	Sonemarg, ...	*8,764*	21·796	...	21·764	21·860	19th	21·669	11th	·191	53·0	73·6	...	45·9	...	59·8	...	27·7	79·4	11th	39·1	16th	40·3
	Skardu ...	*7,505*	22·712	...	22·682	22·834	16th	22·545	11th	·289	68·4	83·1	...	58·7	...	70·9	...	24·4	96·4	10th & 11th.	46·7	15th	49·7
	Dras ...	*10,059*	20·748	...	20·716	20·815	20th	20·631	12th	·184	61·4	80·7	...	48·3	...	64·5	...	32·4	89·5	25th	41·6	16th	47·9
	Gilgit ...	4,890	24·912	..	24·885	25·067	16th	24·707	11th	·360	80·3	96·7	+2·5	70·5	—1·6	83·6	+0·5	26·2	108·2	10th	62·1	16th	46·1
32	Chitral ...	*5,486*	...	...	...	...	...	...	...	...	78·0	98·0	...	66·4	...	82·3	..	31·6	107·5	10th	59·8	15th	47·7
	Killa Drosh ...	4,700?	...	...	...	...	...	...	...	...	79·0	97·2	...	74·3	...	85·8	...	22·9	107·1	10th	63·0	31st	44·1
	Para Chinar ...	6,000	24·310	...	24·277	24·402	19th	24·176	11th	·226	76·2	88·1	...	66·6	...	77·4	...	21·5	95·3	9th	57·8	31st	37·5
	Cherat ...	*4,256*	25·528	+·006	25·496	25·617	19th	25·376	11th	·241	77·6	91·9	+5·0	73·2	+3·0	82·6	+4·0	18·7	100·4	11th	65·1	31st	35·3
29	Murree ...	6,333	23·746	+·003	23·714	23·826	26th	23·618	11th	·208	67·9	75·6	+1·2	58·0	—3·0	66·8	—0·9	17·6	81·0	28rd	49·4	29th	31·8
	Kailang ...	*10,087*	20·888	...	20·843	20·927	7th	20·797	28th	·130	57·5	74·7	+1·0	49·1	—1·2	61·9	—0·1	25·6	80·8	11th	43·1	16th	37·7
	Poo ...	...	...	...	...	...	...	...	...	...	...	78·9	...	59·1	...	6·90	...	19·8	83·8	9th, 11th & 12th	55·3	17th	29·5
	Simla ...	7,224	23·018	+·009	22·980	23·098	26th	22·894	11th	·204	62·1	67·9	+0·8	59·5	0	63·7	+0·4	8·4	70·4	8th	55·9	24th	14·5
	Sarain ...	...	23·061	...	...	23·157	26th	22·940	10th & 11th	·217	66·5	72·2	...	58·3*	...	65·2*	...	13·9	75·8	8th	52·5	18th	23·3
	Kalabagh ...	...	20·087	...	...	20·172	26th	19·994	10th	·178	49·9	55·0	...	45·9	...	50·5	...	9·1	58·3	21st	43·2	31st	15.1
	Chakrata ...	7,022	23·172	—·006	23·132	23·266	26th	23·062	11th	·204	63·1	68·8	+0·8	60·3	+0·9	64·5	+0·4	8·5	71·5	3rd	57·8	14th	13·7
25	Ranikhet ...	6,069	23·973	—·006	23·932	24·074	26th	23·840	10th	·234	65·9	73·5	+1·1	63·0	+0·8	68·3	+0·4	10·5	77·0	8th	60·5	13th & 28th	16·5
	Muktesar ...	7,600	22·731	...	22·687	22·828	26th	22·602	10th	·226	60·9	69·1	...	58·4	...	63·8	...	10·7	74·3	9th	55·8	14th	18·5
13	Yatung ...	10,480	...	...	...	...	...	...	...	...	...	60·5	...	50·7	...	55·6	...	9·8	68·1	22nd	47·2	17th & 22nd.	20·9
	Darjeeling ...	7,376	22·946	—·005	22·901	23·023	26th	22·853	10th	·170	60·8	65·0	—0·5	57·9	+0·7	61·5	+0·1	7·1	70·2	23rd	55·6	17th	14·6
8	Shillong ...	4,920	25·123	...	25·075	25·202	5th & 26th.	25·015	31st	·187	67·0	73·8	...	64·1	...	69·0	...	9·7	77·6	6th, 20th & 21st	59·0	18th	18·6
	Cherra Poonjee ...	4,309	25·586	...	25·536	25·673	26th	25·476	10th	·197	66·5	70·9	...	64·8	...	67·9	...	6·1	75·2	20th	62·5	18th	12·7
50	Mount Abu ...	3,945	25·889	+·023	25·839	25·957	20th	25·756	11th	·202	65·5	72·8	+0·8	63·9	—0·3	68·4	+0·3	8·9	79·2	19th	62·4	9 days	16·8
42	Pachmarhi ...	3,528	...	...	...	...	...	...	...	...	68·9	75·6	+0·9	67·2	+0·1	71·4	+0·5	8·3	81·6	20th	64·2	1st and 23rd.	17·4
34	Wellington ...	6,200	24·211	+·013	24·144	24·269	6th	24·159	18th	·110	64·6	71·8	+0·4	56·0	—1·1	64·0	—0·4	15·8	75·2	11th	48·2	4th	27·0
	Ootacamund ...	*7,322*	23·007	...	22·943	23·059	6th	22·951	18th	·108	56·7	64·0	...	51·9	...	58·0	...	12·1	68·5	9th & 10th	46·2	6th	22·3
57	Kodaikanal ...	7,688	22·800	...	22·735	22·858	6th	22·744	25th	·114	57·6	64·4	...	52·7	...	57·0	...	11·7	70·0	10th	50·1	4th	19·9

* Mean of 30 days.

N. B.—Elevations in italics indicate barometrical determinations.

Note.—The barometric readings are not reduced to sea-level in the cases

I.—continued.

in India, Burma, &c., in August, 1905.

WIND DIRECTION. Number of winds from. Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W	Resultant direction.	WIND VELOCITY. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	HYGROMETRY 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	CLOUD. Mean cloud amount at 8 A.M.	Departure from normal.	RAINFALL. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August 1906.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	2	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	XII.—Hill Stations.
...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	0·20	—0·20	0	0·15	—0·15	0·12	0·45	—0·33	0	Pishin.
31	...	...	...	...	...	...	...	...	Calm	1·1	4·5	—76	1·2	18	—10	·490	+·011	0·1	—1·0	...	0·70	—0·70	0	0·62	—0·62	0	2·19	—2·19	0	Quetta.
...	20	...	5	...	3	...	3	...	N7°E	...	...	...	...	27	...	·270	...	...	...	...	0·50	—0·50	0	0·31	—0·31	0	1·65	—1·65	0	Kalat.
...	...	...	2	...	10	13	6	...	S34°W	7·0	...	...	7·7	39	+6	·388	+·019	0	—0·6	...	0	0	0	0	0	0	0·28	—0·28	0	Chaman.
...	1	12	9	...	5	4	...	...	N83°E	1·7	...	...	...	57	—2	·261	—·021	3·8	—0·4	...	1·70	—1·70	0	0·54	—0·54	1·04	1·33	—0·29	0	Leh.
10	3	2	2	10	2	1	...	1	S63°E	3·7	...	...	3·4	79	—7	·578	—·047	3·9	—0·7	3	4·70	—1·70	1·02	1·91	—0·92	5·90	9·30	—3·40	0·66	Srinagar.
15	1	7	1	1	...	2	1	3	N18°E	3·0	...	...	3·6	67	...	·385	...	4·3	...	12	...	...	3·56	...	...	19·81	...	...	0·64	Gulmarg.
18	8	1	3	...	...	...	...	1	N18°E	3·6	...	...	3·3	89	...	·361	...	3·9	...	8	...	...	2·10	...	...	24·31	...	...	0·71	Sonemarg
20	...	3	2	...	...	3	2	1	N45°W	4·9	...	...	4·9	18	...	·329	...	3·2	...	1	1·10	—0·10	0·44	0·96	—0·52	2·24	2·72	—0·48	0·26	Skardu.
27	...	...	...	...	...	...	2	2	S68°W	8·1	...	...	9·7	57	...	·313	...	2·7	...	0	1·40	—1·40	0·02	0·58	—0·56	8·21	4·59	+3·6	0·02	Dras.
25	...	...	1	1	1	1	2	...	S27°W	2·7	...	...	2·4	35	—15	·350	—·144	2·1	—2·1	1	1·80	—0·80	0·15	0·34	—0·19	2·86	2·10	+0·76	0·11	Gilgit.
28	2	...	...	...	1	...	...	...	N	7·7	...	...	6·8	59	...	·561	...	1·3	...	1	...	...	0·70	...	...	3·77	...	...	0·70	Chitral.
18	...	...	10	...	3	...	...	...	S73°E	...	...	...	...	53	...	·524	...	2·3	...	...	...	...	0	...	...	2·29	...	...	0	Killa Drosh.
27	...	...	2	...	2	...	...	...	S45°E	4·4	...	...	4·0	54	...	·483	...	9·7	...	4	6·40	—2·40	2·42	2·57	—0·15	7·96	9·83	—1·87	0·75	Para Chinar.
20	3	...	...	3	5	...	...	...	S27°E	4·3	...	...	3·1	70	—3	·659	+·071	1·7	—2·2	2	...	...	0·38	3·21	—2·83	4·92	10·03	—5·11	0·23	Cherat.
26	3	...	...	1	...	...	...	1	N	4·3	4·8	—10	4·6	75	—7	·516	+·002	3·2	—1·6	14	15·60	—1·60	14·11	13·62	+0·49	27·68	31·96	—4.28	3·75	Murree.
...	...	...	...	...	2	19	8	2	S59°W	1·2†	...	...	...	61	...	·291	...	5·6	...	0	...	...	0·15	1·43	—1·28	4·30	6·65	—2·35	0·07	Kailang.
26	...	...	1	...	1	1	1	1	S47°W	...	...	...	...	...	...	...	...	4·2	...	0	...	...	0	0·45	—0·45	3·02	2·57	+0·45	0	Poo.
8	16	1	...	...	2	...	2	2	N10°W	4·1	1·6	+156	3·9	89	—2	·497	—·009	7·6	—0·4	19	18·90	+0·10	11·60	17·67	—6·07	30·31	45·42	—15·11	2·30	Simla,
23	1	1	...	...	1	3	...	2	W	3·0	...	...	2·9	71	...	460	...	5·1	...	13	...	...	5·92	...	...	17·85	...	...	1·55	Sarain.
3	8	...	...	1	...	...	...	19	N32°W	16·2	...	...	14·1	91	...	329	...	7·3	...	23	...	...	10·22	...	...	26·49 *a*	...	...	2·05	Kalabagh.
19	2	...	...	...	9	1	...	...	S5°W	6·4	4·3	+49	7·7	93	0	·544	+·013	6·6	+0·7	14	20·10	—6·10	15·30	19·18	—3·88	33·18	50·45	—17·27	2·68	Chakrata.
14	...	...	...	...	1	7	8	1	S69°W	3·4	1·9	+78	3·9	90	0	·573	+·002	7·2	—1·2	17	18·50	—1·50	10·15	14·33	—4·18	27·67	36·94	—9.27	1·42	Ranikhet.
7	...	...	3	3	...	41	3	1	S70°W	9·3	...	...	8·6	96	...	·513	...	9·2	...	17	...	...	9·28	...	...	21·15	...	...	2·26	Muktesar.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25	24·43	+0·57	8·91	9·68	—0·77	30·50	31·20	—0·70	0·91	Yatung.
13	...	12	...	2	...	1	1	2	N41°E	2·2	3·4	—35	2·0	97	+1	·522	+·008	9·8	+0·8	29	24·13	+1·87	40·25	26·83	+13·42	106·24	92·88	+13·3	4·18	Darjeeling
29	...	...	...	...	...	1	1	...	S66°W	1·2	...	...	1·4	92	...	·610	...	8·5	...	24	18·50	+5·50	25·21	12·70	+12·51	64·85	51·91	+12·94	3·10	Shillong.
7	1	1	...	...	7	10	4	...	S40°W	7·0	...	...	6·2	98	...	·643	...	9·4	...	28	25·70	+2·30	133·55	74·79	+58·76	358·49	322·98	+35·51	15·06	Chera Poonjee.
1	...	...	...	...	1	29	...	...	S44°W	15·0	10·8	+39	15·2	93	—3	·590	—·019	8·6	—0·1	4	17·20	—13·20	1·46	20·21	—18·75	28·85	50·64	—21·79	0·64	Mount Abu
...	1	1	...	...	1	4	17	7	N83°W	11·5	7·5	+53	11·8	91	—1	·610	—·041	9·1	0	18	21·80	—3·80	11·74	20·68	—8·94	46·82	57·21	—10·39	2·50	Pachmarhi.
12	5	3	3	...	...	6	2	...	N18°W	3·2	3·8	—16	...	68	—3	·415	—·017	6·1	—0·3	14	8·90	+5·10	8·08	4·13	+3·95	20·25	14·88	+5·37	2·43	Wellington.
4	2	2	...	...	1	1	16	5	N75°W	6·0	...	...	6·0	77	...	·355	...	8·0	...	12	11·30	+0·70	4·51	4·70	—0·19	26·20	22·75	+3·45	1·23	Ootacamund.
...	4	...	...	...	2	...	7	18	N50°W	13·4	...	...	...	72	...	·345	...	4·7	...	13	...	...	8·54	...	...	...	...	...	1·53	Kodaikanal

of hill or plateau stations, the elevations of which exceed 3,200 feet. * Mean of 24 days. (*a*) Since 1st June 1905.

Table

Abstract of observations taken at 8 A M. at 232 stations

Station	Elevation of bar-cistern above sea-level, in feet.	PRESSURE, 8 A.M., IN INCHES.								TEMPERATURE OF AIR.												
		Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
XIII.—Extra India.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trincomalee ...	12	29·846	+·014	29·784	29·928	6th	29·782	24th	·146	80·0	92·6	+0·5	77·4	+0·4	85·0	+0·5	15·2	95·0	10th	74·5	19th	20·5
Colombo ...	40	29·881	—·004	29·847	29·960	5th	29·815	18th	·145	81·3	87·4	+1·8	78·8	+1·3	83·1	+1·6	8·6	89·0	8th & 10th.	76·5	22nd	12·5
Meshed ...	3,104	...	...	...	...	...	...	...	...	77 0	85·8	...	63·3	+2·2	74·6	...	22·5	91·6	7th & 8th.	58·8	15th & 30th.	32·8
Teheran ...	*4,002*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ispahan (*b*) ...	*5,817*	24·189	...	...	24·300	24th	24·100	8th & 9th.	·200	73·7	97·2	+1·7	66·5	+5·0	81·9	+3·4	30·7	100·8	16th	62·3	26th	38·5
Bushire * ...	14	29·564	+·020	29·537	29·665	20th	29·428	12th	·237	89·6	97·0	0	82·7	—1·3	89·9	—0·7	14·3	102·5	10th	77·4	13th	25·1
Bahrein ...	30	29·577	...	29·529	29·675	21st	29·487	6th	·188	91 3	98·9	...	87·3	...	93·1	...	11·6	103·2	5th	80·1	31st	23·1
Jask ...	13	29·603	—·005	29·573	29·700	20th	29·469	12th	·231	88·5	95·3	+0·8	85 3	+1·3	90·3	+1·1	10·0	103·2	13th	81·2	20th & 27th.	22·0
Muscat * ...	20	29·609	+·016	29·577	29·757	20th	29·444	12th	·313	85·3	92·4	+4·5	82·6	—1·7	87·5	+1·4	9·8	102·8	13th	75·6	19th	27·2
Baghdad † ...	220	29·477	—·035	29·666	29·565	26th	29·375	7th	·190	86 9	112·2	+3·9	78·7	+0 1	95·5	+2·0	33·5	119·9	6th	72·6	20th	47·3
Bussrah ...	...	29·567	...	29·526	29·693	20th	29·500	1st	·193	...	102·7	...	81·3	...	92·1	...	21·4	106·4	7th, 8th & 27th.	76·7	30th & 31st.	29·7
Aden ...	94	29·652	+·002	29·676	29·732	7th	29·534	1st	198	88·7	93·3	+1·8	82·9	+3·3	88·1	+2·6	10·4	95·3	2nd, 8th & 26th.	79·0	21st	16·3
Perim ...	201	29·546	+·006	29·677	29·586	8th & 29th.	29·501	18th	·085	89·9	97·0	+0·9	86·0	+2·6	91·5	+1·8	11·0	100·3	10th	81·6	28th	18·7
Kabul ...	...	24·139	...	24·108	24·301	26th	24·004	23rd	·297	80·1	95·4	+3·0	59 6	+0·1	77·5	+1·6	35·8	99·9	3rd	53 9	16th & 25th.	46·0
Kashgar ...	4,255	25·458‡	...	...	25·620	16th	25·320	28th	·300	73·5	92·8	+4·7	65·6	+0·3	79·3	+2·5	27·2	101·1	10th	57·9	26th	43·2
Amini Divi ...	13	...	...	...	...	—	...	...	...	82·1	86 5	+1·2	77·7	+0·3	82·1	+0·8	8·8	90·6	10th	73·6	19th	17·0
Minicoy ...	7	29·937	...	29·869	29·996	6th	29·863	17th	·133	81·7	86·7	+1·3	...	...	...	...	-	89·5	6th. 9th & 11th	...	...	...
Zanzibar ...	72	30·059	—·028	30·059	30·097	5th	29·990	18th	·107	74·7	82·0	+1·2	72·9	+0·2	77·5	+0·7	9·1	84·8	25th	70·5	29th	14·3
Do. Dunga ...	*154*	30·013	...	30·098	30·052	7th	29·972	26th	·080	72·8	82·4	...	67·3	...	74·9	...	15·1	85 6	4th	65·3	16th	20·3
Penang (*a*) ...	20	29·912	...	29·857	29·960	8th	29·857	31st	·103	81·2	89·2	...	74·0	...	81·6	...	15·2	91 0	5th & 18th.	71·0	25th	20·0
Singapore (*a*) ...	10	29·954	...	29·885	30·025	5th	29·911	20th	·114	83·6	88·6	...	73·6	...	81·1	...	15·0	92·0	2nd	70·5	21st	21·5

(*a*) 9 hours' observations. (*b*) Aneroid uncorrected. *N.B.*—Elevations in intalics indicate barometrical determinations.
Observations of 30 days † Observations of 28 days. ‡ Aneroid corrected. NOTE.—The barometric readings are not reduced to sea-level in the cases of

.—concluded.

n India, Burma, &c., in August, 1905.

WIND DIRECTION.									WIND VELOCITY.				HYGROMETRY 8 A.M.				CLOUD.		RAINFALL								Station.
umber of winds from																											
N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August 1905.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August 1905.	Heaviest rainfall during month.	
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	XIII—Extra India.
...	...	...	...	...	31	...	...	S45°W	9·5	...	...	...	83	+5	·857	—·012	2·6	—0·3	7	...	...	5·43	4·64	+0·79	7·03	10·58	—3·55	1·83	Trincomalee.
...	...	...	...	...	14	17	...	S70°W	10·5	8·7	+21	...	84	+7	·893	+·052	6·0	—0·1	1	...	...	0·62	3·90	—3·28	19·81	28·08	—8·27	0·25	Colombo.
...	...	...	...	...	...	...	...	...	...	...	...	...	59	...	·552	...	0	...	1	...	...	0·33	0·01	+0·32	...	0·99	...	0·24	Meshed.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05	..	...	0·83	...	...	Teheran.
...	1	...	...	...	...	1	...	N19°W	2·8	...	...	3·6	57	...	·486	...	1·0	...	0	..	...	0·09	0	+0·09	...	0·17	...	0·09	Ispahan.
1	3	5	7	3	1	2	7	S82°E	7·4	7·8	—5	8·1	75	+8	1·031	+·042	0·4	...	0	...	...	0	0	0	0·24	0	+0·24	0	Bushire.
11	4	3	3	...	2	...	8	N4°E	6·6	...	...	5·7	86	...	1·268	...	0	...	0	...	...	0	...	...	0	...	...	0	Bahrein.
...	...	24	3	...	...	...	...	S86°E	12·9	...	...	10·7	80	+4	1·090	+·069	6·0	+3·9	0	...	...	0	0	0	0	0·13	—0·13	0	Jask.
3	...	...	9	...	...	...	1	S66°E	3·3	...	...	3·4	77	—5	·958	—·044	3·5	+1·3	9	...	...	0	0	0	0	0·40	—0·40	0	Muscat.
3	...	...	...	...	...	4	10	N48°W	5·3	3·2	+21	7·0	39	...	·493	...	0·2	...	0	...	...	0	0·09	—0·09	...	0·33	...	0	Baghdad.
...	...	...	4	...	5	1	21	N62°W	...	...	...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	Busrah.
1	...	11	10	3	1	4	...	1	N81°E	10·0	10·8	—7	8·1	70	—2	·950	+·112	2·3	—1·4	1	...	...	0·14	0·14	0	0·64	0·37	+0·27	0·14	Aden.
5	3	9	...	...	...	10	4	N11°W	15·3	...	...	16·3	65	—1	·916	+·027	2·1	—1·6	0	...	...	0·01	0·43	—0·42	0·01	0·83	—0·82	0·01	Perim.
...	...	1	8	14	5	3	...	S1°E	...	...	...	...	48	...	·497	...	0	—0·2	0	...	...	0	0·18	—0·18	0·47	1·13	—0·66	0	Kabul.
3	2	...	...	1	...	...	...	5	N31°W	2·2	...	...	2·0	57	...	·461	...	1·7	...	0	...	...	0	1·10	—1·10	...	2·58	...	0	Kashgar.
1	2	...	..	...	...	...	21	7	N75°W	...	...	...	...	85	...	·933	...	7·3	...	11	...	...	11·84	5·04	+6·80	...	32·19	...	2·40	Amini Divi.
...	2	...	...	...	...	1	15	13	N66°W	7·7	...	...	8·2	82	...	·882	...	6·3	...	13	...	...	14·86	6·49	+8·37	39·91	28·15	+11·76	4·48	Minicoy.
...	...	...	...	3	13	15	...	...	S19°W	3·2	...	...	3·0	88	...	·761	...	5·5	...	7	...	...	2·61	1·90	+0·71	...	16·33	...	0·51	Zanzibar.
7	...	...	...	...	...	3	1	...	S56°W	5·3	...	...	5·1	92	...	·741	...	7·1	...	15	...	...	4·50	...	...	...	...	...	0·74	Do. Dunga.
5	1	9	7	2	3	...	...	3	...	11·2	...	...	...	...	...	...	1·6	...	10	...	...	4·76	...	...	22·37	...	...	0·86	Penang.
...	...	...	12	7	7	3	2	...	4·8	...	...	...	—	...	...	...	5·1	...	15	—	...	4·58	—	—	26·66	...	...	1·06	Singapore.

Hill or plateau stations, the elevations of which exceed 3,200 feet.

Table II.—Abstract of Observations recorded at 10 A.M. and 4 P.M., at 65 Stations in India, Burma, etc., in August, 1905.

Table

Abstract of Observations recorded at 10 A.M. *and* 4 P.M.,

	Station.	Elevation of bar-cistern above sea-level in feet.	PRESSURE.						TEMPERATURE OF AIR.										TEMPERATURE, WET-BULB.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of 3 previous columns.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Islands.	Port Blair ...	61	29·823	29·748	·075	29·788	+·032	29·779	85·3	‡ 78·1	7·2	88·4	75·1	13·3	82·8	82·6	‡ 80·6	+0·4	75·2	78·6	78·3	77·4
	Rangoon ...	57	·790	·697	·093	·747	+·016	·742	84·0	76·2	7·8	87·4	74·2	13·2	81·5	80·1	78·4	—0·3	73·9	78·4	76·9	76·4
	Diamond Island...	41	·806	·722	·084	·766	+·020	742	84·4	77·0	7·4	87·0	74·2	12·8	82·9	83·0	80·9	+0·7	74·1	79·2	79·0	77·4
	Cocos Island ...	119	·729	·649	·080	·691	...	·742	87·1	77·8	9·3	90·6	72·5	18·1	82·9	84·1	81·3	...	75·3	79·4	79·9	78·2
	Akyab ...	20	·769	·681	·085	·732	+·034	·694	84·1	77·0	7·1	87·3	75·7	11·6	80·6	81·9	80·8	—0·3	...	79·1	79·6	...
Orissa.	Chittagong ...	87	·656	·559	·097	·613	+·018	·648	85·1	76·3	8·8	88·8	73·4	15·4	81·7	82·0	80·3	—0·1	73·9	78·5	78·6	77·0
	Calcutta (Alipore),	21	·655	·560	·095	·610	+·019	·576	88·6	79·7	8·9	91·5	74·9	16·6	85·5	84·8	83·9	+1·5	77·8	80·9	80·6	79·8
	Saugor Island ...	25	·647	·555	·092	·606	+·018	·575	89·2	81·0	8·2	93·1	76·9	16·2	85·5	87·0	84·2	+1·7	78·5	81·6	82·0	80·7
	False Point ...	21	·665	·574	·091	·625	+·015	·587	89·0	79·7	9·3	92·9	76·6	16·3	86·0	86·3	83·4	+1·8	77·5	80·8	81·2	79·8
Nagpur.	Hazaribagh ...	2,007	27·656	† 27·572	·084	27·616	+·003	·546	85·1	74·5	10·6	90·2	71·3	18·9	80·9	80·9	78·5	+1·3	73·0	¶ 74·8	74·8	74·2
	Allahabad ...	309	29·319	29·223	·096	29·274	+·008	·534	89·1	78·1	11·0	95·8	75·6	20·2	84·3	86·9	82·6	—0·6	76·8	79·4	80·6	79·8
layas	Dehra Dun ...	2,233	27·430	27·350	·080	27·388	—·016	·549	84·9	73·4	11·5	89·1	69·3	19·8	79·6	81·5	77·9	+0·6	72·0	75·7	76·6	74·8
	Roorkee ...	899	28·713	28·617	·096	28·663	—·015	·513	91·5	77·4	14·1	97·1	73·1	24·0	85·2	89·8	83·0	+0·5	75·6	79·3	80·6	78·5
	Meerut ...	758	·865	·762	·103	·812	—·020	·497	95·6	80·4	15·2	99·9	75·3	24·6	88·4	93·9	86·6	+3·4	76·3	78·7	80·0	78·3
	Lahore ...	702	·854	·760	·094	·799	—·035	·443	103·6	84·6	19·0	108·3	75·4	32·9	93·8	101·8	93·2	+6·1	76·3	80·4	81·8	79·5
	Ludhiana ...	812	·763	·664	·099	·706	—·033	·463	98·7	81·9	16·8	103·6	74·1	29·5	90·6	96·3	89·1	+3·3	76·1	80·0	80·7	78·9
putana.	Peshawar ...	1,110	·469	·353	·116	·403	—·023	·455	102·9	80·7	22·2	109·5	70·9	38·6	93·4	100·2	90·9	+3·3	72·5	78·8	79·1	76·8
	Jacobabad ...	186	29·327	29·224	·103	29·280	—·043	·419	107·0	80·8	26·2	110·7	77·7	33·0	95·3	104·5	92·9	+1·3	75·5	81·6	83·0	80·0
	Kurrachee ...	30	·641	·572	·069	·610	+·028	·591	88·6	78·3	10·3	91·3	76·8	14·5	84·3	85·5	82·3	—0·1	75·1	77·8	78·6	77·2
Gujarat.	Jaipur ...	1,431	28·242	28·128	·114	28·185	+·006	·530	101·2	80·0	21·2	104·0	76·1	27·9	90·0	99·3	89·0	+6·7	72·8	76·1	77·7	75·5
	Udaipur ...	1,925	27·803	27·725	·078	27·762	...	·609	88·1	74·3	13·8	93·7	72·5	21·2	82·4	86·1	80·6	...	70·9	74·0	75·9	73·6
	Deesa ...	466	29·251	29·151	·100	29·199	+·029	·610	93·3	76·6	16·7	97·9	73·8	24·1	85·8	91·6	84·3	+2·6	73·9	76·0	76·8	75·5
	Jamnagar ...	61	·668	·591	·077	·630	...	·636	91·5	77·3	14·2	96·3	74·4	21·9	86·5	88·5	83·3	...	73·8	76·9	77·2	76·0
Deccan.	Belgaum ...	2,539	27·317	† 27·239	·078	27·278	+·017	† ·745	† 77·3	66·9	10·4	81·2	65·3	15·9	73·3	74·0	† 70·6	+0·9	66·7	70·1	† 70·3	69·0
	Sholapur ...	1,590	28·223	28·106	·117	28·173	+·021	·696	89·2	72·3	16·9	95·3	68·4	26·9	80·9	85·7	78·7	+1·0	69·4	72·2	73·1	71·6
	Akola ...	930	·822	·717	·105	·773	+·027	·644	87·8	74·3	13·5	93·5	71·6	21·9	82·2	86·0	79·7	+0·8	71·7	75·4	76·1	74·4
	Buldana ...	2,132	27·652	27·558	·094	27·603	+·010	·665	82·4	70·2	12·2	87·1	67·7	19·4	76·7	79·7	74·6	+0·5	67·6	71·5	72·4	70·5
	Khandwa ...	1,044	28·696	28·596	·100	28·649	+·027	·644	86·3	75·0	11·3	89·5	72·1	17·4	80·9	85·1	79·7	+0·9	71·8	74·3	75·2	73·8
	Nagpur ...	1,025	·696	·593	·103	·648	+·031	·621	88·0	75·3	12·7	93·6	72·1	21·5	81·6	84·5	80·3	+0·9	72·9	75·7	76·2	74·9
	Nagpur (Sanitary Commr.'s Office).	1,013	·702	·596	·106	·652	...	·616	87·6	75·4	12·2	93·5	72·2	21·3	82·2	84·5	80·1	...	73·1	76·3	77·0	75·5
	Hyderabad (Deccan).	1,690	·102	27·994	·108	·054	+·023	·678	86·3	72·5	13·8	92·6	70·2	22·4	79·4	83·4	78·0	+0·9	§ 70·0	73·0	74·7	72·6
Coast.	Bombay ...	37	29·789	29·716	·073	29·751	+·022	·728	85·6	77·9	7·7	87·6	75·3	12·3	82·1	83·0	80·7	+1·3	75·7	78·0	78·1	77·3
	Karwar ...	44	·850	·776	·074	·816	+·021	·794	82·5	75·2	7·3	85·0	71·5	13·5	80·9	81·3	77·7	+0·2	73·0	76·6	77·1	75·6

‡ Mean of 26 days. † Mean of 30 days. § Mean of 28 days.

Stations in India, Burma, etc., for August, 1905.

VAPOUR TENSION.			HUMIDITY.					CLOUD.				WIND DIRECTION. Total number of 10 hours and 16 hours winds from											WIND STEADINESS.		WIND VELOCITY.		RAINFALL.		STATION.	Meteorological Province.
Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours	Mean 16 hours.	Mean of 2 previous columns.	Departure fr. m normal.	Calm.	N.	N.E.	E.	S.E	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																							%	%						
1 ·907	·897	—·009	‡ 87	82	82	86	—2	6·9	7·3	7·1	—0·8	...	...	1	...	...	5	30	25	1	S62°W	S51°W	84	81	269*	259	13 01	2·04	Port Blair ...	Burma Coast and Bay Islands.
2 ·888	·890	—·014	89	86	86	90	—3	8·6	8·7	8·7	—0·3	2	...	...	...	22	26	4	6	2	S7°E	S39°W	69	66	37*	106	15·92	2·12	Rangoon ...	
1 ·941	·906	+·020	87	84	83	86	—2	8·1	8·5	8·3	+0·1	3	...	...	...	2	6	34	14	3	S53°W	S44°W	79	77	231*	214	20·19	2·26	Diamond Island...	
4 ·968	·934	+·020	89	85	82	86	—2	7·8	8·0	7·9	—0·4	...	...	...	...	...	...	...	...	...	...	S42°W	...	93	...	...	10·53	2·50	Cocos Island ...	
8 ·988	...	...	...	93	90	...	...	8·4	8·0	8·2	—0·2	...	...	4	1	8	23	21	...	5	S13°W	S5°E	61	64	134*	82	56·90	8·53	Akyab ...	
9 ·938	·903	—·016	89	86	86	88	+1	7·1	7·4	7·3	—0·7	1	...	...	2	21	19	16	1	2	S4°E	S24°E	71	59	178*	151	33·91	10·67	Chittagong ...	Bengal and Orissa.
6 ·992	·974	+·007	92	81	83	86	—2	8·3	9·3	8·8	+0·1	2	1	..	2	8	23	23	...	3	S14°W	S2°E	70	56	124*	113	6·31	1·21	Calcutta (Alipore),	
7 ·027	1·008	+·019	89	84	80	85	—2	8·6	8·1	8·4	—0·2	1	1	...	...	8	27	22	3	...	S15°W	S12°W	79	59	438	322	9·81	3·48	Saugor Island ...	
9 ·992	·980	+·031	90	79	80	84	—2	7·8	8·3	8·1	0	...	...	...	1	5	17	30	8	1	S32°W	S48°W	77	54	278*	235	4·06	1·03	False Point ...	
0 ·790	·805	—·005	¶ 93	75	75	83	—3	8·5	9·3	8·9	—0·7	...	7	1	5	5	11	8	13	12	S78°W	S9°W	29	9	148*	185	7·19	1·25	Hazaribagh ...	Gangetic Plain and Chota Nagpur.
4 ·993	·967	+·021	91	83	78	87	+3	8·7	8·4	8·6	+0·5	5	5	8	6	1	5	7	14	11	N62°W	N6°E	27	5	87*	158	10·01	2·38	Allahabad ...	
2 ·859	·851	+·029	93	83	80	90	—1	8·3	7·5	7·9	+0·3	9	2	2	9	7	8	10	7	2	S1°W	S23°W	27	13	25§	24	15·65	2·93	Dehra Dun ...	
4 ·927	·933	+·039	92	76	66	83	+2	5·7	4·1	4·8	—1·4	18	...	...	3	29	...	1	4	7	S46°E	S27°E	34	21	71	58	5·19	1·04	Roorkee ...	Upper Sub-Himalayas.
57 ·842	·878	—·032	83	64	53	72	—9	4·0	3·7	3·9	—2·5	27	...	1	6	5	1	2	14	6	S84°W	S48°E	16	11	19*	46	2·85	1·70	Meerut ...	
56 ·816	·848	—·036	67	54	41	55	—16	0·7	1·1	0·9	—3·1	2	6	3	5	10	16	2	14	4	S16°W	S78°E	23	24	74	67	0	0	Lahore ...	
92 ·852	·881	—·016	76	62	50	66	—9	1·3	1·7	1·5	—4·3	13	...	...	...	9	...	1	20	19	N77°W	S60°E	45	11	24*	43	3·28	1·51	Ludhiana ...	
12 ·737	·774	—·022	67	52	38	53	—8	0·9	3·2	2·1	—0·8	11	16	19	4	1	...	3	3	5	N17°E	N39°E	52	47	49*	86	0·15	0·15	Peshawar ...	Indus Valley and N.-W. Rajputana.
94 ·845	·876	+·021	78	54	38	58	—1	0	0·2	0·1	—2·1	22	...	1	6	13	20	...	...	...	S29°E	S43°E	53	56	122*	101	0	0	Jacobabad ...	
65 ·886	·873	—·013	86	74	72	80	—1	7·9	6·1	7·0	+0·3	...	...	...	...	...	...	19	43	..	S77°W	S69°W	94	86	136*	394	0	0	Kurrachee ...	
26 ·680	·719	—·097	69	57	36	54	—24	2·7	4·8	3·8	—3·8	...	..	1	1	1	...	9	30	19	N81°W	N69°W	77	42	182	113	0·86	0·83	Jaipur ...	
42 ·775	·756	...	94	67	62	73	...	5·8	4·2	5·0	...	1	1	...	...	1	...	35	22	2	S61°W	...	85	...	151*	...	0·51	0·37	Udaipur ...	East Rajputana. Central India & Gujarat.
65 ·723	·776	—·036	87	62	49	68	—8	7·4	5·5	6·5	—1·5	...	...	...	...	1	2	47	10	2	S52°W	S54°W	90	76	331	288	0·34	0·11	Deesa	
96 ·785	·801	...	84	63	58	71	...	5·5	3·8	4·7	...	...	...	...	...	...	...	18	31	13	S86°W	...	95	...	504*	...	0·58	0·50	Jamnagar ...	
† 696	·697	·683	+·024	99	85	† 83	91	+1	8·9	I 9·1	9·0	+0·3	1	2	...	...	...	...	...	26	29	N64°W	S72°W	89	87	371‡	516	3·81	0·82	Belgaum ...	Deccan.
680	·660	·680	+·019	86	65	55	73	+2	8·7	9·0	8·9	+0·6	...	2	...	...	...	...	13	22	25	N76°W	S89°W	81	81	§ 274*	307	2·19	0·71	Sholapur ...	
793	·773	·786	+·016	88	72	63	78	—2	9·5	9·4	9·5	+1·3	...	3	...	...	...	...	2	18	39	N58°W	N66°W	89	84	210*	206	3·23	0·77	Akola ...	
712	·710	·696	—·002	88	77	70	79	—2	8·4	8·1	8·3	+0·3	5	2	...	...	...	...	3	28	24	N70°W	N66°W	81	75	220*	206	3·49	0·84	Buldana ...	
768	·751	·767	—·013	85	73	63	78	—4	5·1	5·0	5·1	—2·6	7	4	...	...	...	...	...	15	36	N54°W	N78°W	81	84	* 452	209	2·19	0·65	Khandwa ...	
818	·810	·818	+·006	89	74	70	82	—1	7·8	8·3	8·1	—0·6	1	9	1	1	1	1	1	22	25	N57°W	N78°W	74	64	159*	173	10·13	2·30	Nagpur ...	
836	·841	·836	...	89	76	72	83	...	7·4	7·5	7·5	...	12	...	1	...	4	...	32	...	13	S61°W	...	52	...	34*	...	9·85	2·10	Nagpur (Sanitary Commr.'s Office).	
739	·750	·744	+·013	§ 89	74	67	80	0	7·6	8·1	7·9	+0·5	10	...	...	...	...	...	...	51	1	N89°W	N85°W	84	85	167*	202	9·46	2·68	Hyderabad (Deccan).	
906	·897	·894	+·009	90	83	80	85	—2	8·9	8·4	8·7	+0·3	...	1	..	1	1	1	10	40	8	S88°W	S81°W	82	79	283	370	4·35	0·69	Bombay ...	West Coast.
860	·876	·848	+·011	89	82	82	87	—1	6·1	7·0	6·6	—0·6	5	1	...	...	...	...	24	24	8	S77°W	N84°W	77	74	129	103	22·12	2·60	Karwar ...	

¶ Mean of 29 days.

* Corrected

Table

Abstract of Observations recorded at 10 A. M. *and* 4 P. M.,

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	Temperature of air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Temperature, Wet-Bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
South India.	Periyakulam ...	944	28·921	28·803	118	28·877	...	29·745	95·7	71·2	24·5	98·9	66·8	32·1	86·9	88·8	81·7	...	68·0	72·9	73·2	71·4
	Salem ...	940	·931	·801	·130	·880	—·002	·744	94·2	74·4	19·8	99·6	71·2	28·4	84·7	92·0	82·1	+1·9	71·9	76·0	77·8	75·2
	Chitaldroog ...	2,405	27·464	27·367	·097	27·425	+·016	·743	84·2	68·8	15·4	90·4	67·5	22·9	76·9	80·1	74·7	+1·5	67·0	69·9	71·1	69·3
	Bangalore ...	3,021	26·892	26·791	·101	26·851	+·007	·748	83·4	66·0	17·4	88·3	63·4	24·9	75·2	80·3	72·8	+1·0	64·9	68·7	70·2	67·9
	Hassan ...	3,091	·847	·764	·083	·815	+·026	·797	81·4	64·9	16·5	85·2	61·9	23·3	75·0	75·9	71·3	+1·8	64·1	69·3	69·4	67·6
	Mysore ...	2,518	27·395	27·299	·096	27·356	+·010	·782	84·3	66·8	17·5	87·7	63·4	24·3	78·1	79·4	73·6	+0·2	65·9	69·5	71·3	68·9
	Madras ...	22	29·794	29·676	·124	29·744	—·002	·694	95·4	77·9	17·5	101·2	72·7	28·5	87·9	88·9	84·6	+0·1	...	77·5	78·5	77·4
	Bellary ...	1,475	28·353	28·236	·117	28·304	—·001	·711	90·7	73·9	16·8	95·0	70·2	25·8	82·4	85·2	80·7	+0·1	69·8	72·7	73·9	72·1
	Waltair ...	*226*	29·500	29·403	097	29·457	+·029	·621	88·1	78·3	9·8	92·7	74·9	17·8	84·7	84·6	82·1	—0·7	74·8	7 ·0	78·4	77·1
Baluchistan	Quetta ...	5,502	24·499	24·426	·073	24·461	+·016	24·420	92·7	60·0	32·7	98·9	52·0	46·9	84·5	90·3	75·9	+0·6	52·8	60·9	61·3	58·3
	Leh ...	11,503	19·659	19·546	·113	19·610	—·013	19·578	75·6	47·6	28·0	81·7	41·5	40·2	65·9	73·2	59·0	—2·0	42·1	52·7	58·3	51·0
Northern India.	Srinagar ...	5,204	24·715	24·624	·091	24·667	—·001	24·638	88·2	62·0	26·2	96·3	56·2	40·1	76·0	86·6	72·5	+1·7	59·3	70·4	77·7	69·1
	Sarain ...	...	23·068	23·016	·052	23·039	...		72·2	58·3†	13·9	75·8	52·5	23·3	69·1	67·1	64·9	...	...	61·6	61·6	..
	Kalabagh ...	...	20·111	20·072	·039	20·089	...	...	54·9	46·1†	8·8	58·3	43·2	15·1	51·5	52·7	50·1†	..	...	49·9	50·5	...
Hill Stations.	Simla (Ridge),	7,224	23·033	22·994	·039	23·012	+.008	22·974	67·8	59·4	8·4	70·4	55·9	14·5	63·6	66·0	63·2	+0·4	57·2‡	60·9	63·1	60·4
	Chakrata ...	7,022	·188	23·146	042	·163	+·002	23·123	68·8	60·3	8·5	71·5	57·8	13·7	65·6	65·7	64·1	+0·4	59·6	63·6	64·5	62·6
	Ranikhet ...	6,069	·992	·927	·065	·958	—·006	916	73·5	62·9	10·6	76·8	60·4	16·4	68·1	70·6	67·7	+0·9	61·8	65·4	66·9	64·7
	Muktesar ..	7,600	22·750	22·692	·058	22·719	.	22·677	69·2	58·4	10·8	74·3	55·8	18·5	62·9	65·8	63·3	...	57·9	61·4	63·4	60·9
	Katmandu ...	4,388	25·487	25·411	·076	25·447	+·010¶	25·401	82·5	68·7	13·8	87·4	66·9	20·5	76·9	80·1	75·1	+0·6¶	68·2	70·9	71·5	70·2
	Darjeeling ...	7,376	22·949	22·919	·030	22·932	—·002	22·887	65·1	58·0	7·1	70·2	55·8	14·4	63·1	63·7	61·1	+0·2	57·9	62·1	62·8	60·9
Central India.	Mount Abu ...	3,945	25·908	25·852	·056	25·878	+·025	25·828	73·0	63·7	9·3	79·2	62·2	17·0	68·6	71·5	67·8	+0·2	62·7	65·8	67·5	65·3
	Pachmarhi ...	3,528			Not recorded.				75·7	67·4	8·3	81·6	64·2	17·4	70·5	73·8	71·1	+0·7	66·4	67·9	69·7	68·0
	Chikalda ..	3,642	26·204	26·134	·070	26·167	+·018	26·111	73·2	66·0	7·2	79·8	63·6	16·2	69·1	71·7	69·1	+0·7	65·4	68·1	69·8	67·8
South India	Kodaikanal ...	7,688	22·812	22·749	·063	22·778	...	22·712	64·4	52·7	11·7	70·0	50·1	19·9	61·1	59·3	57·0	...	48·7	55·6	56·7	53·7
	Ootacamund ...	*7,322*	23·015	·956	·059	·985	.	·921	64·0	51·9	12·1	68·6	46·2	22·4	60·5	59·8	57·5	...	49·3	55·0	55·3	53·2
	Dodabetta ...	8,539?	22·023	21·965	·058	21·993	...	21·930	57·2	47·6	9·6	62·0	43·7	18·3	54·6	53·7	51·9	...	...	52·8	52·5	...
Extra India.	Aden ...	94	29·665	29·548	·117	29·603	+·019	29·626	93·3	82·9	10·4	95·5	79·3	16·2	90·7	92·5	88·4	+2·5	77·5	82·4	80·8	80·2
	Perim ...	201	·553	·439	·114	·492	+·018	·620	97·0	86·1	10·9	100·3	80·8	19·5	93·3	94·6	91·9	+1·8	76·9	81·1	81·8	79·9
	Minicoy ...	7	·946	·898	·048	929	...	·862	86·6	...	...	89·5	...	...	83·1	82·6	...			77·9	77·5	...
	Zanzibar ...	7	30·079	·979	·100	30·036	— 018	30·035	82·0	72·9	9·1	84·8	70·5	14·3	...	80·3	77·8	+0·7	70·3	...	74·0	...
	Port Victoria. (Seychelles).	15	·000	·926	·074	29·966	—·007¶	29·905	8·17	76·9	4·8	83·1	74·4	8·7	80·1	80·5	77·8	+1·2¶	71·5	74·2	74·4	73·4
	Mauritius (Pamplemouses).	181	...	...	...	30·018	— 003	30·150	...	...	...	78·5	52·3	26·2	...	...	67·7	—0·3	...	...	.	62·8

N.B—Elevations in italics indicate barometric determination. † Mean of 30 days. ‡ Mean of 29 days.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

.—concluded.

65 *Stations in India, Burma, etc., for August, 1905.*

Vapour tension.				Humidity.					Cloud.				Wind Direction. Total number of 10 hours and 16 hours winds from										Wind steadiness.		Wind velocity.		Rainfall.		Station.	Meteorological Province.
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																								%	%						
·622	·608	·609	..	84	49	46	57	...	3·8	6·7	5·3	...	2	10	6	1	6	16	11	5	5	S33°W	...	19	...	93*	...	0·68	0·15	Periyakulam ...	South India.
·790	·770	·770	+·016	88	66	51	70	—4	5·7	7·2	6·5	—0·1	9	1	...	..	...	13	15	22	2	S58°W	S57°W	64	75	106*	96	5·87	1·31	Salem ...	
·647	·650	·651	+·015	91	70	64	77	0	7·9	7·8	7·9	—0·6	..	1	...	...	...	...	11	29	21	N81°W	S81°W	84	85	223*	257	1·59	0·41	Chitaldroog ..	
·627	·621	·621	+·008	94	72	61	78	—1	8·3	8·3	8·3	...	...	1	1	...	...	1	17	34	7	S83°W	S81°W	81	88	219*	199	10·49	3·88	Bangalore ...	
·652	·658	·638	+·032	95	75	76	84	+2	9·1	8·8	9·0	+0·3	1	.	...		...	...	12	28	21	N83°W	W	84	90	87*	106	2·64	1·09	Hassan ...	
·620	·670	·643	+·018	95	64	67	77	+1	9·2	9·2	9·2	+0·4	...	...	...	..	...	...	18	41	3	S79°W	S84°W	92	86	278*	300	3·71	1·56	Mysore ...	
·804	839	·844	+·008	...	61	62	71	—2	5·7	6·4	6·1	—0·8	...	...	...	3	13	4	9	22	11	S64°W	S36°W	43	56	166	166	1·93	0·60	Madras ...	
·686	701	·696	+·048	81	62	58	69	+5	7·6	8·2	7·9	—0·5	1	2	...	...	...	...	9	33	17	N82°W	N87°W	84	87	216*	269	5·19	1·89	Bellary ...	
·869	·892	·870	+·007	84	73	75	78	+5	8·2	7·7	8·0	+0·7	...	...	...	1	...	22	34	5	...	S31°W	S49°W	87	67	134	...	5·45	1·26	Waltair ...	
·292	·245	·287	—·087	63	25	16	36	—8	0·1	0·8	0·5	—1·0	36	5	...	..	1	...	3	12	5	N72°W	N78°W	29	33	24*	65	0	0	Quetta ...	Hill Station, Baluchistan.
·288	·362	·289	+·024	67	44	44	55	+4	4·1	3·9	4·0	—1·3	...	2	...	4	3	14	20	18	1	S51°W	S72°W	55	42	41**	43	0	0	Leh ...	
687	·862	·628	+·015	85	75	67	76‡‡	—4	2·9	2·2	2·6	—1·2	10	7	4	..	5	9	3	10	14	N73°W	N48°W	26	9	85*	86	1·02	0·66	Srinagar ...	Hill Stations, Northern India.
·473	·495	...	...	...	67	74	...	...	6·3	6·0	6·2	...	18	3	...	2	2	13	16	7	1	S35°W	...	43	...	70*	...	5·92	1·55	Sarain ...	
·349	·351		...	...	91	88	...	...	7·7	7·0	7·4	...	7	18	...	2	1	...	...	4	30	N30°W	...	71	...	344*	...	10·22	2·05	Kalabagh ...	
·510	·549	·504	—·022	‡88	86	86	88	—3	8·2	7·8	8·0	—0·9	8	40	2	...	...	1	...	4	7	N9°W	N33°E	74	19	94*	86	11·60	2·30	Simla (Ridge).	
·569	·596	·558	+·016	97	89	93	94	+2	7·0	8·6	7·8	—0·8	14	.	...	...	7	40	1	...	...	S5°E	S66°W	74	42	185*	130	15·31	2·68	Chakrata ...	
·599	·622	·588	+·014	94	87	83	89	0	8·5	8·0	8·3	—0·4	31	1	...	1	...	...	10	12	7	S87°W	S60°W	37	26	90*	55	10·15	1·42	Ranikhet ..	
·532	·562	·524	...	97	92	89	94	...	9·0	8·3	8·7	...	10	...	...	4	6	..	9	31	2	S73°W	...	52	...	206*	...	9·28	2·26	Muktesar ...	
·689	·714	·698	+·016	97	74	78	84	+2	6·9	7·4	7·2	+0·1	4	1	...	24	2	1	3	22	5	W	N66°W	3	2	17	18	12·84	1·60	Katmandu ...	
·552	·563	·532	+·021	99	95	95	97	+1	9·2	9·1	9·2	+0·3	29	1	2	...	...	1	9	7	13	N78°W	S84°E	35	28	49*	89	40·25	4·18	Darjeeling ..	
·605	·627	·603	—·013	94	87	81	89	—2	8·7	7·6	8·2	—0·2	..	...	2	...	...	3	56	1	...	S44°W	S57°W	92	75	331*	269	1·46	0·64	Mount Abu ...	
·654	·677	·662	—·006	95	88	81	89	—2	9·2	9·1	9·2	+0·1	...	4	...	...	...	...	8	35	15	N80°W	N84°W	84	73	287*	223	11·97	2·50	Pachmarhi ...	Hill Stations, Central India.
678	·707	·676	+·025	97	96	91	96	+1	8·1	7·8	8·0	—0·9	3	36	4	...	...	...	...	1	18	N12°W	N36°W	85	74	196*	274	10·35	1·87	Chikalda ...	
·393	437	·373	...	77	73	87	80	...	5·9	8·8	7·4	...	1	11	1	3	3	6	1	6	28	N42°W	...	50	...	323	...	8·54	1·53	Kodaikanal†† ...	Hill Stations, South India.
·379	·396	362	...	84	72	76	77	...	7·2	9·0	8·1	...	3	2	1	..	1	..	4	39	12	N81°W	...	79	...	136*	..	4·51	1·23	Ootacamund ...	
·383	·384	...	...	...	89	92	...	...	8·7	9·8	9·3	...	...	12	3	...	...	1	.	11	35	N42°W	...	81	...	340	..	6·68	1·45	Dodabetta ...	
·995	·890	·942	+·131	78	69	59	70	+5	1·3	0·5	0·9	—1·1	...	...	8	8	20	5	14	3	4	S30°E	S3°E	39	70	‡‡ 199*	257	0·14	0·14	Aden ...	Extra India.
899	·915	·895	+·019	65	57	56	60	—2	0·7	1·1	0·9	¶ —1·7	...	7	1	6	14	...	..	1	33	N20°W	N88°W	37	41	370*	331	0·01	0·01	Perim ..	
885	·873	...	...	...	78	79	...	...	5·7	6·5	6·1	...	...	6	...	...	...	...	1	22	33	N58°W	...	87	...	196*	...	14·86	4·48	Mincoy ...	
...	·756	...	...	87	...	73	...	...	...	4·5	...	...	...	...	3	2	12	13	...	1	..	S31°E	S9°E	74	77	164	166	2·61	0·51	Zanzibar ...	
771	·774	·757	+·019	76	75	74	76	—2	6·9	6·6	6·8	¶ +0·4	2	...	...	2	43	13	2	...	..	S35°E	S33°E	87	85	298	323	6·33	2·43	Port Victoria (Seychelles).	
...	...	·502	°°—·006	...	...	...	74	—1	...	...	6·3	+0·8	...	.	..	..	...	...	...	...	...	S55°E	S68°E	...	...	235	296	2·43	0·88	Mauritius (Pamplemouses).	

°° Mean of 30¼ days. ‡‡ Mean of 29¼ days. ¶ Departure from old normal. • Corrected.

†† Wind variable 2. †‡ Mean of three previous columns.

. P. A. P. No. 3594. Meteor.—30-11-05.—385.

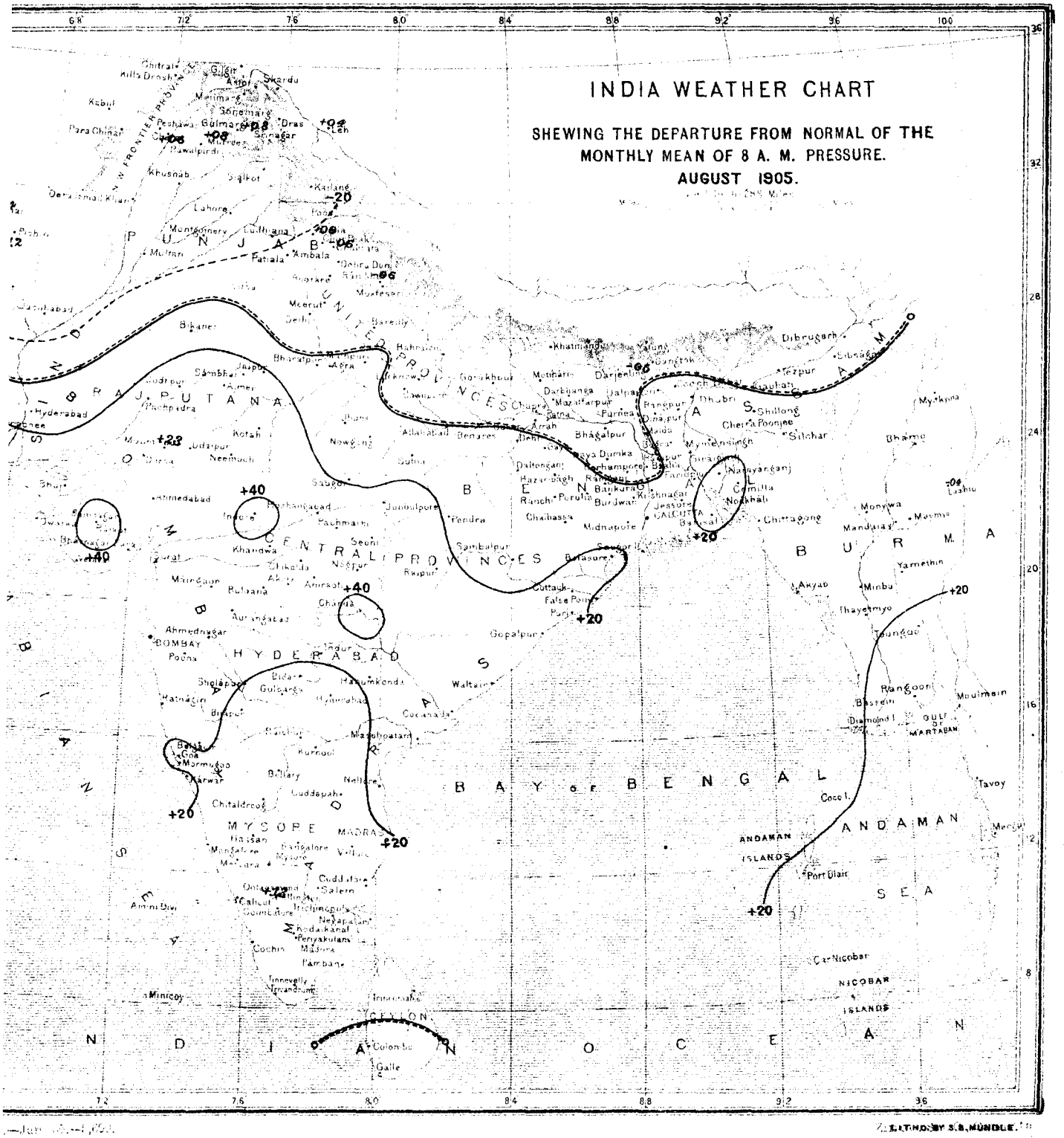
I.—Jan. 05.—5,600

LITHO. BY S. S. MUNDLE. Zinco, S. I. O., Calcutta.

he lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric e in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the bservations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

he mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of rt's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are ed by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added	to	the	wind	arrow.
,,	,, 2 to 5	,,	,,	,,	...	two	feathers	,,	,,	,,	,,
,,	,, 5 to 10	,,	,,	,,	...	three	,,	,,	,,	,,	,,
,,	,, 10 to 20	,,	,,	,,	...	four	,,	,,	,,	,,	,,
	over 20	,,	,,	,,	...	five	,,	,,	,,	,,	,,



he chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal ts of departure. The numbers are given in thousandths of an inch, 20 representing ·020″ or two hundredths of an inch, &c. uous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted hat it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continu- l the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative ures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

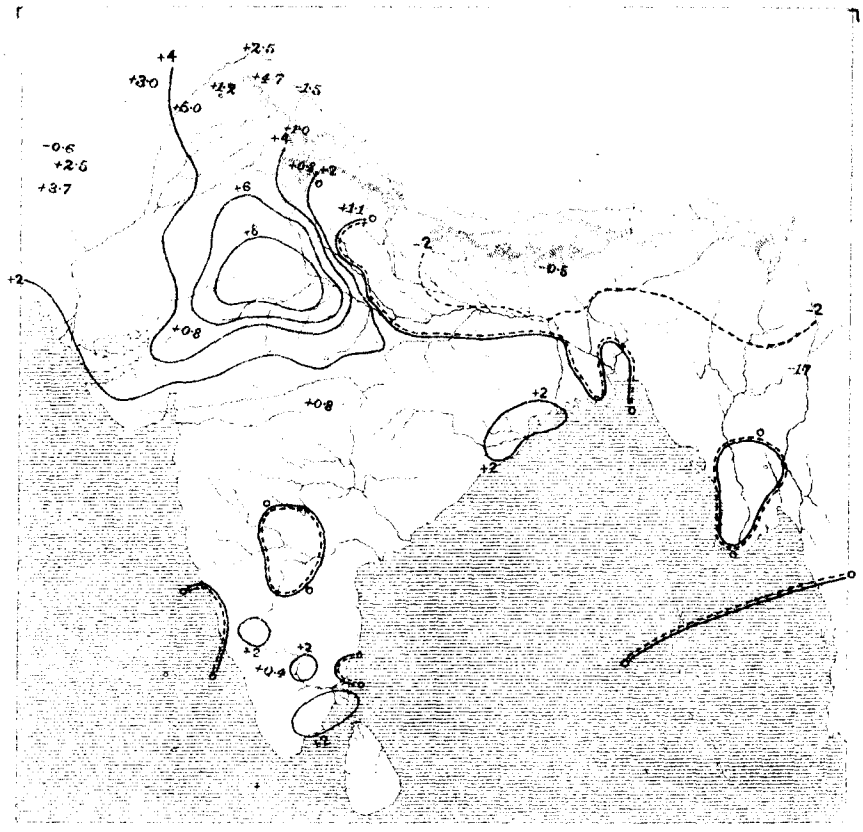
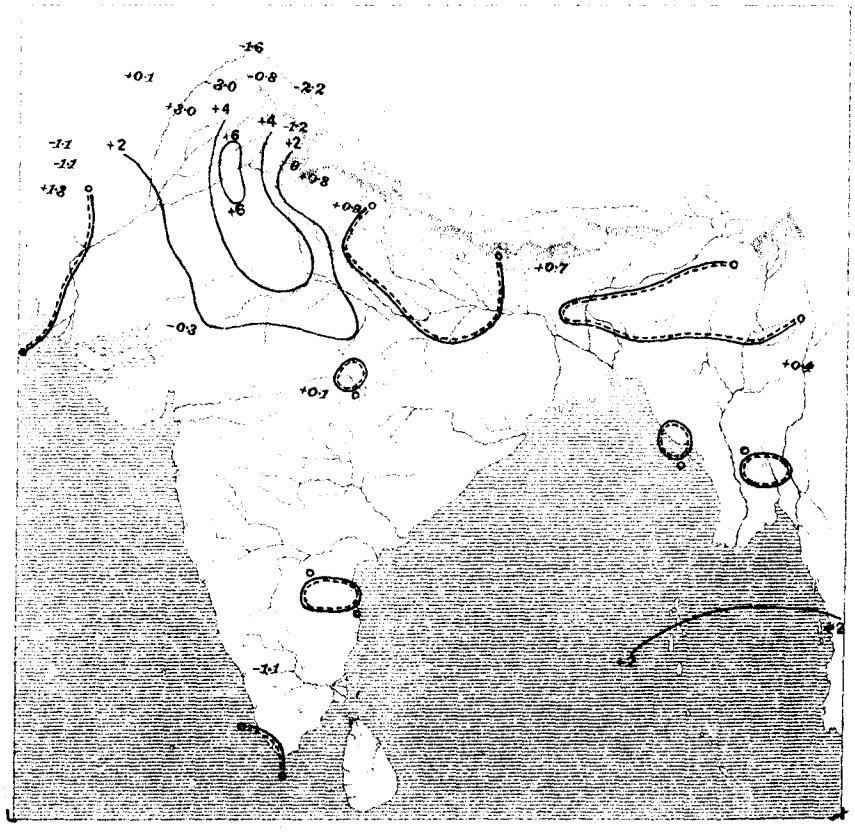


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

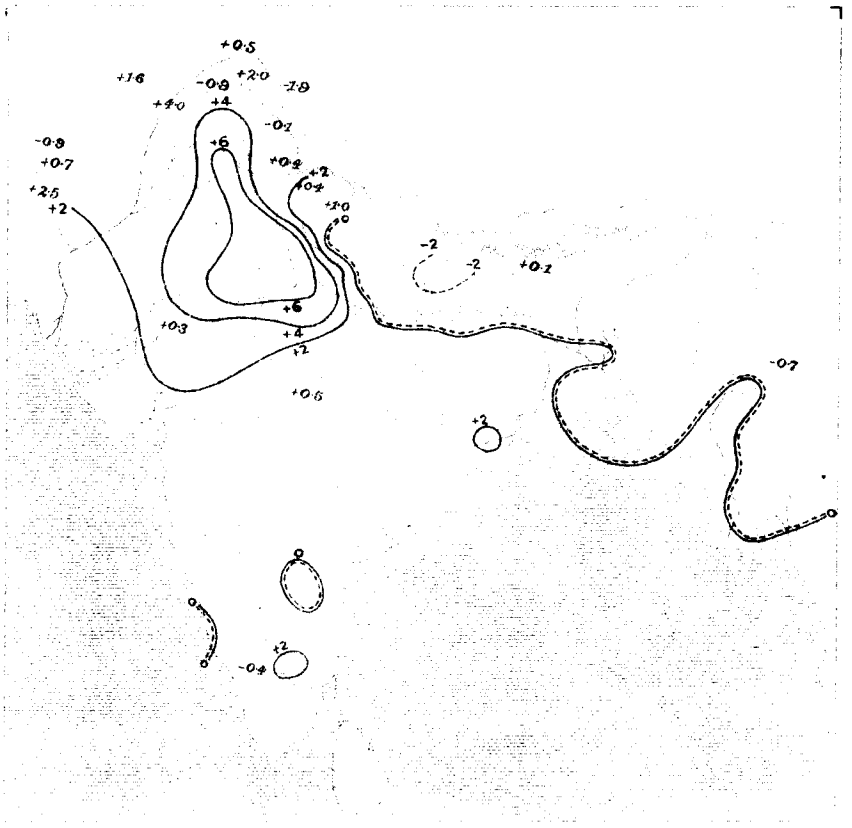
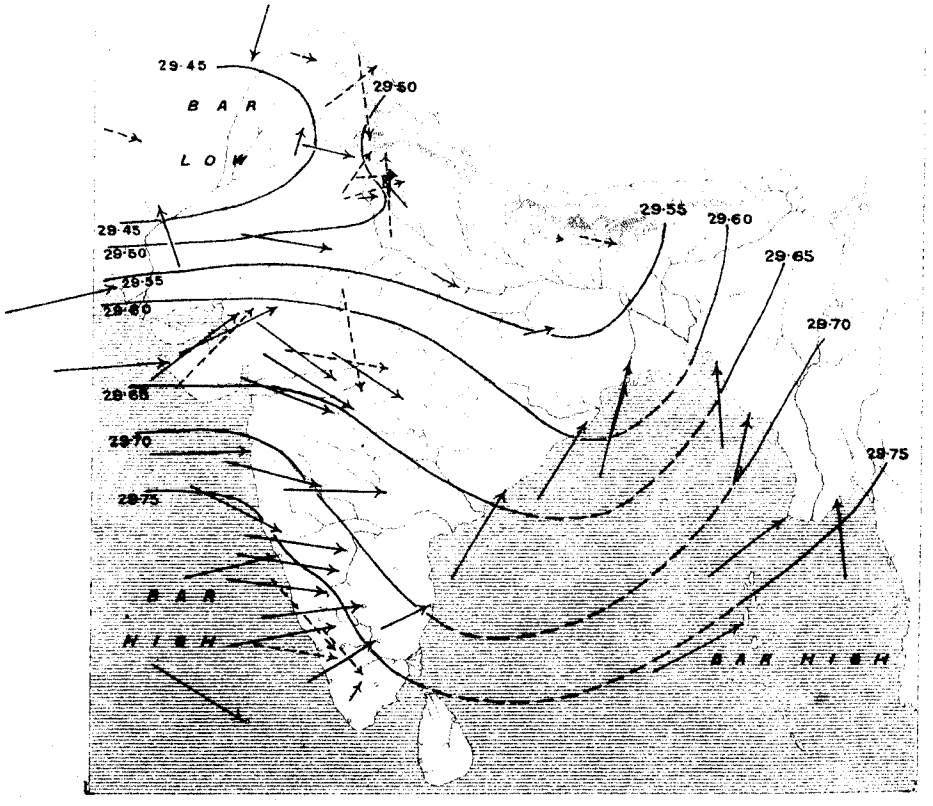


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 A. M.

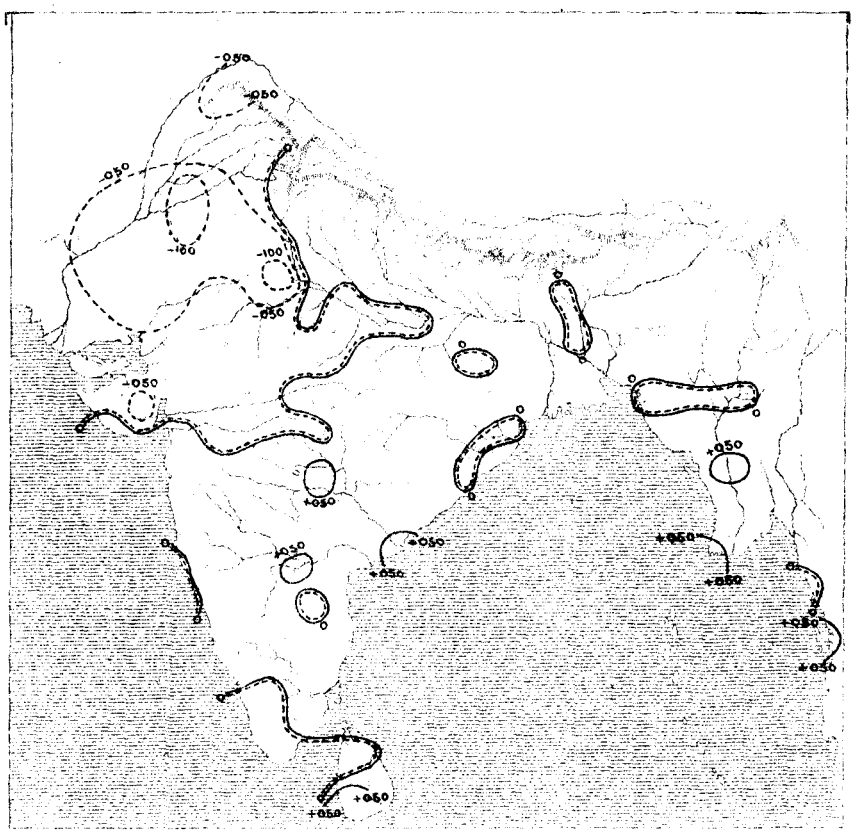
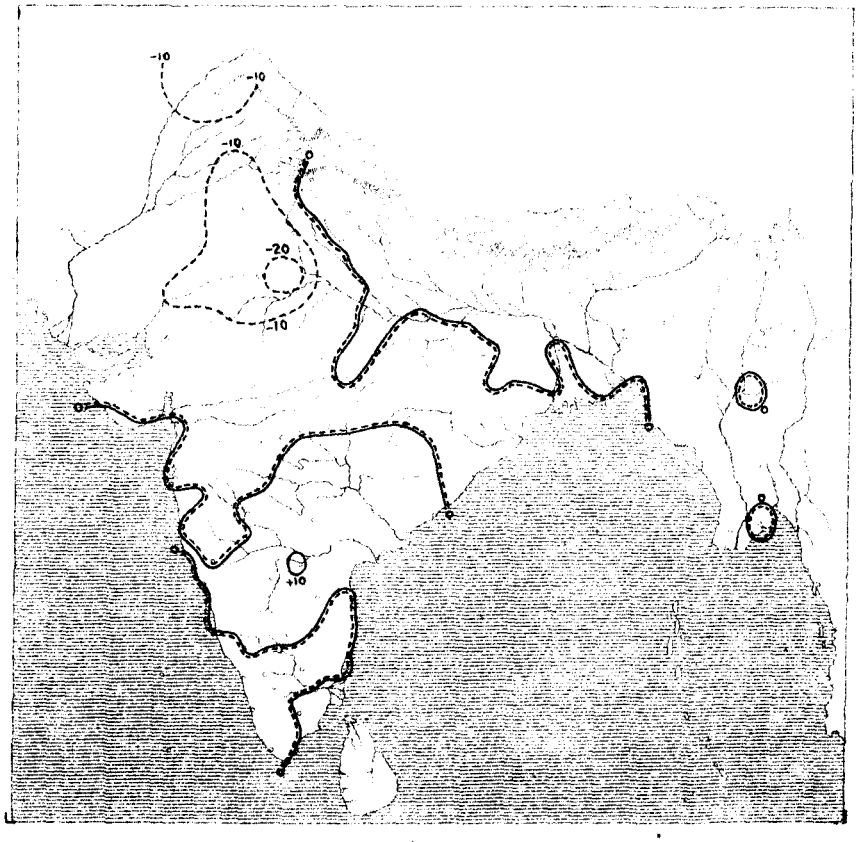


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 A. M.



LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 A. M.

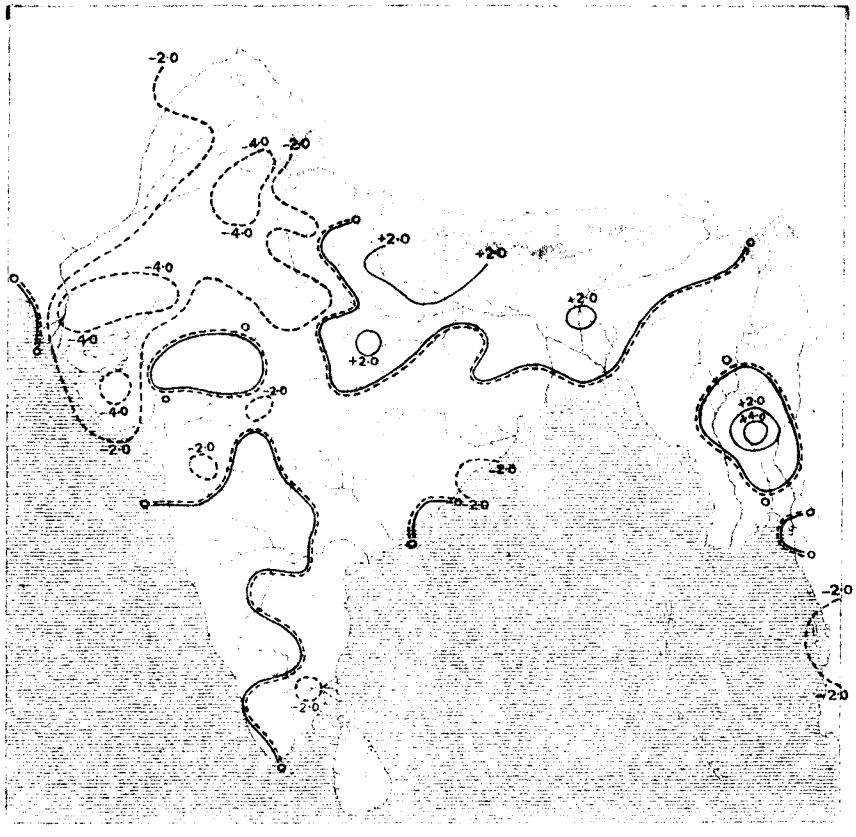
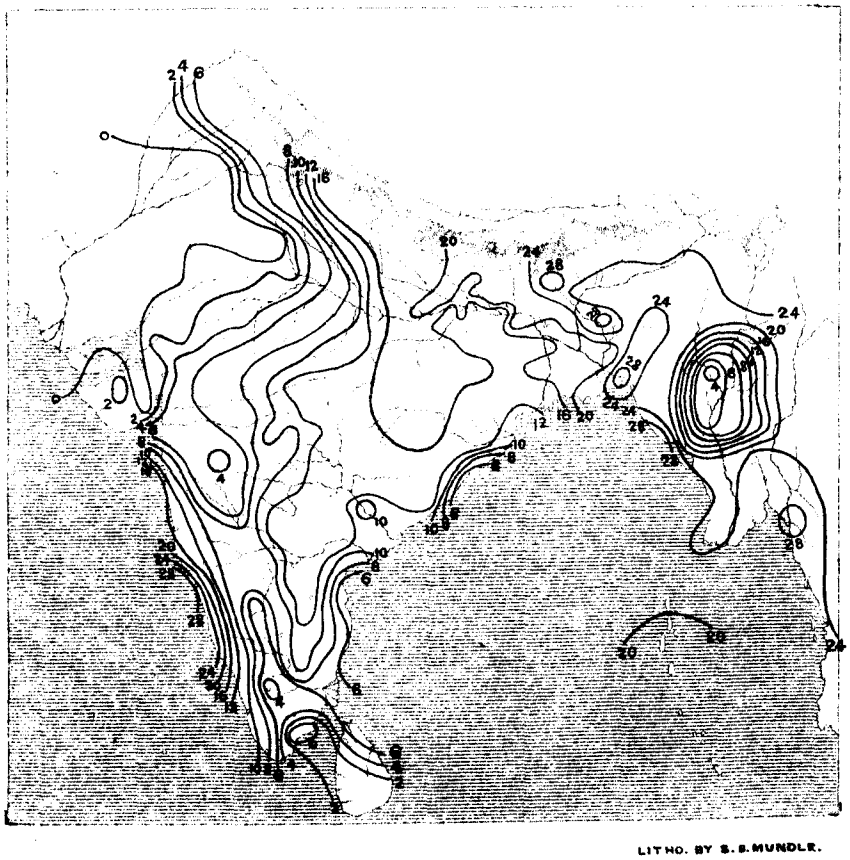


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

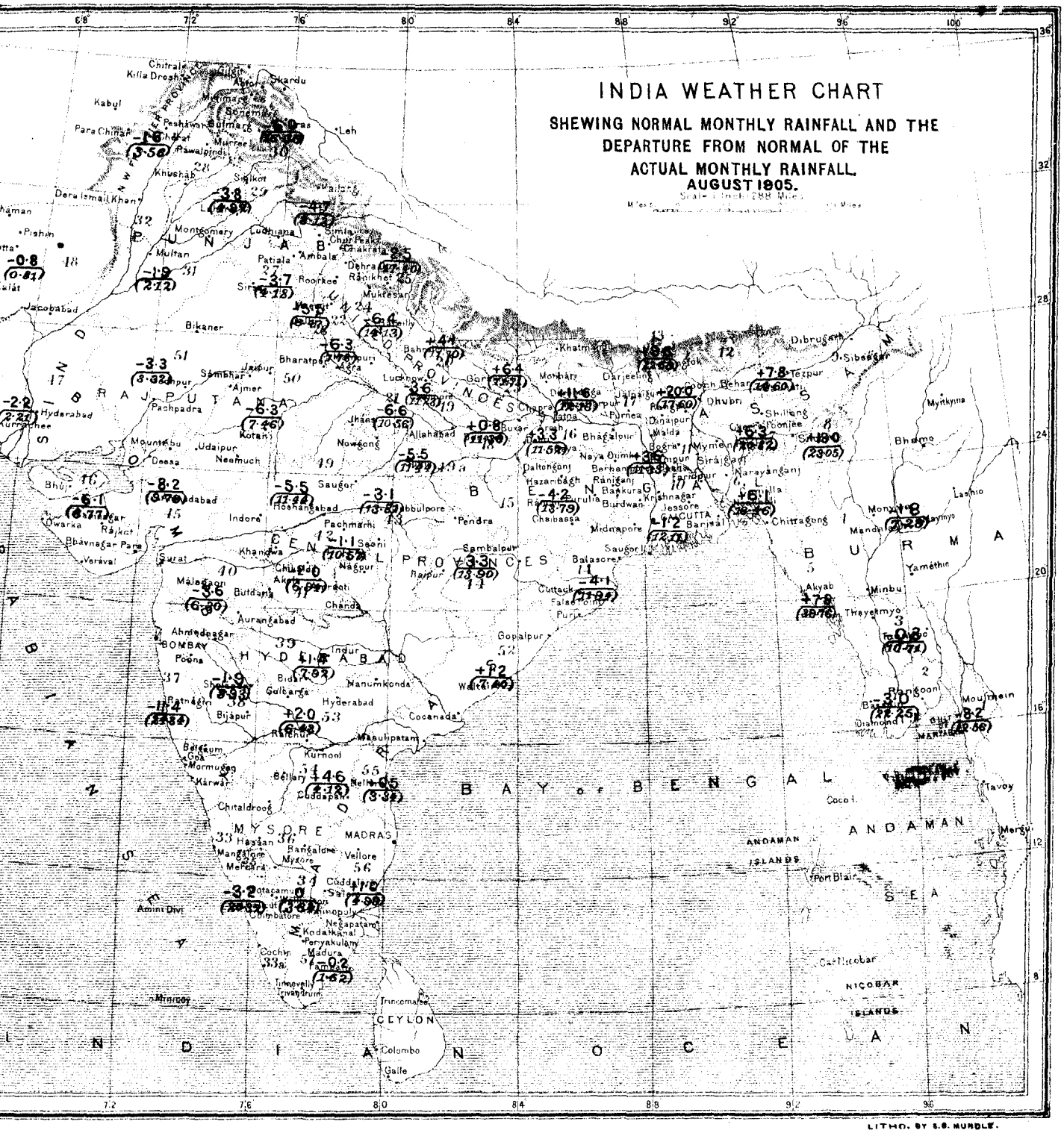


LITHO. BY S. S. MUNDLE.

—Jan. 05.—5,600.

ZINCOG. BY I.S.O., MONTREAL.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data n the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet vation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S.G. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar racter. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall: the numbers above give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained erring in the following list to the number given in each district in red figures

enasserim
ower Burma Deltaic
entral do.
pper do.
rakan
ast Bengal
ssam, Surma
Do., Hills
Do., Brahmaputra
eltaic Bengal
ntral do.
orth do.
ngal Hills
issa
ota Nagpur
uth Bihar

17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province

33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind

48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, SEPTEMBER, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of September 1905, is based on observations aken daily at 8 A.M. at 232 stations, and on additional bservations taken at 10 A.M. and 4 P.M. at 65 stations. n the rainfall summary the rainfall data of the meteorological observatories and the rainfall statements of the month published by the Provincial Governments that has been received up to the date of the publication of the review, are utilized, and brief notes on Solar and Magnetic disturbances are supplied by the observatories.

Summary of the chief features of the weather in India during the month of September, 1905.

The Arabian Sea monsoon as a rain-giving current, to a reat extent, failed during the month under review. Except vhen under the influence of a storm from the Bay this urrent gave only scattered showers—principally to the oast districts—to the Peninsula and never penetrated pro- erly into north-west India. On the other hand, the Bay urrent was vigorous. Storms of slight or moderate inten- ity, formed at frequent intervals over the Bay, and travel- ing in some northerly direction, occasioned heavy general ain over Burma and north-east India.

The first storm of the month of September was that of the rd to the 5th, which passed from the north-west of the Bay nto west Bengal. It occasioned rain over Bengal and the east f the Central Provinces and brought about a considerable eduction of temperature over those areas. The following ives comparative temperature data in illustration.

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	3rd September.	4th September.	5th September.
	°	°	°
Orissa	+1·7	—2·4	+1·0
Bihar	+3·5	+1·2	+0·4
Chota Nagpur	+4·5	+1·4	+0·5
United Provinces	+5·5	+6·1	+2·7
Central Provinces	+3·9	+3·0	—0·3

The most important storm of the month, both from a meteorological and economic point of view, was that of the 6th to 12th. This storm also formed over the north-west of the Bay, passed thence westward through Orissa and the Central Provinces, then turned north-westward to Central India, and then northward into the Punjab, finally breaking up among the Punjab Himalayas on the 12th. The storm carried heavy to very heavy rain with it, throughout its course, and temperature, which had been exceedingly high over north-west India previous to the appearance of the storm, fell to largely below the normal as rain advanced over the country. The following gives comparative data of temperature for all divisions for each alternate day from the 5th to the 13th, and shows the extent of this change :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	5th September.	7th September.	9th September.	11th September.	13th September.
	°	°	°	°	°
Burma . . .	—0·6	—0·7	—0·2	—2·1	—0·9
Assam . . .	+0·8	+2·6	—0·1	+2·1	—0·9
Bengal . . .	+1·0	+1·6	+0·2	+0·8	—3·1
Orissa . . .	+1·0	+0·6	—0·7	+0·6	—2·7
Bihar . . .	+0·4	+2·2	—0·2	+1·3	—2·7

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	5th September.	7th September.	9th September.	11th September.	13th September.
	°	°	°	°	°
Chota Nagpur . .	+0·5	—0·2	—2·4	—0·3	—1·6
United Provinces of Agra and Oudh.	+2·7	+2·3	+1·2	+1·9	—2·1
Punjab . . .	+7·2	+6·4	+6·2	—1·4	—7·7
North-west Frontier Province.	+4·1	+4·2	+4·1	—2·8	—5·4
Baluchistan . .	+3·6	+3·0	+5·9	—3·1	—5·4
Sind	—0·2	+1·2	+1·0	+4·1	0
Rajputana . . .	+8·3	+7·1	+8·7	—3·8	—2·6
Gujarat, East . .	+2·5	+2·5	+3·3	—0·6	+1·2
Central India . .	+0·9	+1·4	+2·1	—0·7	—0·2
Central Provinces .	—0·3	—0·3	—1·2	—0·6	—2·0
Berar . . .	+1·5	—2·4	—3·6	—0·9	—1·0
West Coast . .	+1·3	+1·3	+0·4	0	+0·2
Bombay Deccan .	+2·6	+2·4	—2·4	+0·2	+0·8
Mysore . . .	—0·5	—1·4	—0·7	+0·5	—1·2
Madras Coast . .	+1·6	+0·6	+0·7	+2·2	—0·9
Madras Deccan . .	+2·0	+0·8	—1·1	+2·1	+0·1
South India . .	+0·5	—0·7	+0·1	+1·6	+0·5

The third storm of the month was a land-formed depression over west Bengal between the 14th and 16th. The storm occasioned heavy rain in its neighbourhood and reduced temperature to largely below the normal over north-east India. This is shown below :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	14th September.	15th September.	16th September.
	°	°	°
Burma	—2·3	—2·4	—1·0
Assam	—1·8	—2·1	—3·5
Bengal	—3·9	—4·5	—4·2
Orissa	—1·5	—1·7	—2·0
Bihar	—3·9	—4·8	—5·4
Chota Nagpur	—2·8	—5·6	—5·9
United Provinces of Agra and Oudh .	—1·3	—2·3	—2·0
Central provinces	—2·3	—4·3	—3·0

Between the 17th and 19th the weather was quiet and temperature rose generally, but on the 20th, the fourth storm of the month appeared over the Bay. The storm took some time to develop and did not cross the coast till the early morning of the 24th. The centre passed from the neighbourhood of Waltair on the 24th north-westward into the Central Provinces, where it filled up during the 26th. The rainfall, though heavy, was concentrated about the centre and, while occasioning a considerable fall of temperature in the immediate neighbourhood of the storm, hardly affected the temperature conditions in other parts of the country, where the heat remained generally excessive. The following gives comparative data of temperature for each alternate day for all divisions from the 20th to the 26th :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	20th September.	22nd September.	24th September.	26th September.
	°	°	°	°
Burma	0	+0·2	—0·4	+1·2
Assam	+0·8	+0·2	—0·7	—0·8
Bengal	+1·1	+0·3	0	+0·6
Orissa	+2·4	+0·1	—1·1	—0·1
Bihar	—2·3	—2·7	+0·1	—0·2
Chota Nagpur . .	+0·6	—0·4	—0·4	—0·5
United Provinces of Agra and Oudh.	+1·1	+0·8	0	+1·1
Punjab	+0·1	+0·1	0	+1·0
North-west Frontier Province	—2·8	—1·5	—1·2	+0·4
Baluchistan . . .	—7·0	—4·4	—3·5	—2·4
Sind	0	—0·6	+0·5	+1·5
Rajputana . . .	+1·1	+1·5	+1·9	+2·9
Gujarat, East . .	—0·2	+1·0	+1·2	+3·1
Central India . .	—0·1	—0·1	+0·8	+2·3
Central Provinces . .	—0·2	—0·6	+0·6	—3·5
Berar	—0·9	—0·2	+1·0	+0·2
West Coast . . .	+0·2	+0·5	+1·4	+1·8
Bombay Deccan . .	+2·3	+2·7	+2·4	+3·1
Mysore	+1·4	+0·2	+1·3	+1·1
Madras Coast . .	+2·4	+2·8	+1·9	+2·6
Madras Deccan . .	+4·7	+4·5	+3·1	+2·8
South India . . .	—0·5	—0·5	+0·9	+2·3

The fifth and last storm of the month appeared over central Burma on the 26th. It passed north-west to the neighbourhood of the Arakan coast on the 27th, to Calcutta on the 28th, to Chota Nagpur on the 29th and to north Bihar on the 30th. Heavy rain accompanied it in its progress and large changes of temperature consequently

occurred. The following gives temperature data in illustration :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	26th September.	27th September.	28th September.	29th September.	30th September.
	°	°	°	°	°
Burma . . .	+1·2	−0·7	−2·6	−0·7	+0·8
Assam . . .	−0·8	+1·7	+3·0	+1·7	−0·1
Bengal . . .	+0·6	+1·8	+1·7	−2·2	−1·6
Orissa . . .	−0·1	−0·1	+0·2	−3·4	−1·3
Bihar . . .	−0·2	+0·2	+2·3	−0·1	−5·9
Chota Nagpur . .	−0·5	+0·2	+2·1	−0·9	−3·9
United Provinces of Agra and Oudh.	+1·1	+0·4	+2·2	+1·8	−0·9

As was the case with the previous storm, the rainfall was concentrated around the centre and temperature conditions were hardly affected in parts of the Indian area away from the track of the storm. In consequence temperature remained low over the central parts of the country, a residual effect of the rainfall of the previous storm, and was generally excessive elsewhere. The following gives comparative data of the divisions not included in the preceding table for the last five days of the month :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	26th September.	27th September.	28th September.	29th September.	30th September.
	°	°	°	°	°
Punjab . . .	+1·0	−0·1	+1·2	+1·6	+0·9
North-west Frontier Province.	+0·4	−2·2	+0·1	−0·9	−0·4
Baluchistan . .	−2·4	−4·8	−5·3	−5·8	−7·1
Sind	+1·5	+2·6	+2·2	+0·8	+0·5
Rajputana . . .	+2·9	+1·5	+2·8	+2·5	+2·4
Gujarat, East . .	+3·1	+2·2	+2·4	+2·3	+1·5
Central India . .	+2·3	+0·2	+0·6	+1·8	+0·5
Central Provinces .	−3·5	−5·1	−2·7	−1·2	+0·4
Berar . . .	+0·2	−2·0	−2·9	−1·2	−0·3
West Coast . .	+1·8	+1·2	+1·5	+1·5	+2·1
Bombay Deccan .	+3·1	+0·7	+2·3	+3·3	+5·1
Mysore . . .	+1·1	+1·0	+1·3	+2·6	+5·0
Madras Coast . .	+2·6	+3·5	+3·8	+3·4	+1·2
Madras Deccan . .	+2·8	+4·5	+5·2	+6·8	+7·5
South India . .	+2·3	+1·4	+1·2	+2·6	+3·6

Solar and Magnetic Disturbances.

The following notes on solar, seismic and magnetic disturbances have been received from the observatories :—

KODAIKANAL OBSERVATORY, SOLAR OBSERVATIONS.

The observing conditions during the month were very poor, for, though there were only two days on which all observations were impossible, there were 15 other days unfavourable for spot spectrum, and 13 for prominence observations. On six of these days part of the limb was examined for prominences.

Spots.—Of the 27 new groups of spots seen during the month, no less than 19 formed on the visible disc and most of them were short-lived, only four remaining for as much as five days. The average daily number was 4·9, in spite of the fact that on two days only one group and on two days only two groups were visible. The difference between the northern and southern hemispheres was less marked than last month but was still large, 17 groups appearing in the northern and only 10 in the southern hemisphere. Taking both hemispheres together three spots were between latitudes 0°and 5°, eight between 5° and 10°, seven between 10° and 20°, and three in higher latitudes. The lowest latitude reached was 1° and the highest 31°. Two examples of long-lived groups were observed during the month. Group 644 was the second return of a group seen on July 20th (No. 604) while group 659 may be considered the third return of the large group 589-90 seen on July 6. This latter group suffered many changes of form during previous appearances and when it last went round the west limb (as No. 637) it was a moderate-sized regular spot. It did not appear at the east limb when due, but burst out afresh some distance from the limb, two or three days later, as several small spots. It again increased in size for a time but filled up and disappeared by October 2.

The larger spots of the month were 637, 649, 650, and 660. All went through a fairly quiet course except 649. It was seen first on the 9th at the east limb as a moderate-sized double spot group. By the 11th it had broken up into an irregular train of spots which underwent many changes till, on the 16th, it had again become a group of two regular shaped spots. Next day it was reduced to a mere dot and could not be seen on the 19th.

Prominences.—As stated above, the month was a very unfavourable one for prominence work but judged from available data the average daily number was fairly high. There were four prominences seen of 100″ and upwards. One of these seen on the 10th, was a slender arch reaching to a height of 120″ and joining two points of the limb 16° apart. On the 30th one was seen 140″ high which was particularly bright in hydrogen light and very faint in calcium light. It is not uncommon to find considerable differences in brightness between calcium and hydrogen light but it is not very common to find such a striking difference as was shown in this case. Only two metallic prominences were observed, one on the 23rd and one on the 27th. The latter was associated with spot 660 and showed slight displacements to both sides.

There were no great magnetic disturbances during the month but there were only four days classed as calm. There were moderate disturbances on the 3rd and 18th and on both days there were spots not far from the central meridian.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay.

Note on the Magnetic Record.

During the month the traces showed twelve calm days, sixteen days of small and two days of moderate disturbances.

The selected quiet days of the month were the 2nd, 7th, 16th, 20th and 29th.

The mean observed values of the several elements as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follows:—

Declination . . .	0° 11′ 10″ East.
Horizontal Force . .	·37379 C. G. S. unit.
Dip	22° 0′ 5.
Horizontal Force range .	·00042 C. G. S. unit.
Horizontal Force summed range	·00258 C. G. S. unit.
Declination range . .	5′·85
Declination summed range .	21″·42

[Summed range means sum without regard to signs of 24 ordinates of diurnal inequality]

Five seismic disturbances were recorded during the month, one on the 8th, 26th and 29th and two on the 15th. The second of the two recorded on the 15th was the largest in the month, the amplitude recorded being 12·6 m.m. indicating an apparent tilt of 5·9 seconds of arc.

MAGNETIC DISTURBANCES.

September, 1905.		September, 1905.		September, 1905.	
1	S.	11	S.	21	S.
2	C.	12	S.	22	S.
3	M.	13	C.	23	C.
4	S.	14	C.	24	C.
5	S.	15	C.	25	S.
6	C.	16	C.	26	S.
7	C.	17	C.	27	S.
8	S.	18	M.	28	S.
9	S.	19	S.	29	C.
10	S.	20	C.	30	S.

The magnitudes of the disturbances are determined from Horizontal Force traces. C=Calm; S=Small; M=Moderate; G=Great; V. G.=Very great. Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Government Observatory, Bombay.

ALIPUR OBSERVATORY, CALCUTTA.

List of displacements recorded by the Seismograph at the Alipore Observatory in September 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima G. M. T.	End in G. M. T.	Maximum amplitude in m. m.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M	
1st .	3-1·9	3-5·5	3-8-0	3-30·4	0·50	0-28·5	Sensibility 1 m.m.=0″·38 of tilt.
8th .	0-54·5	2-22·0	2-28·1	3-33·2	3·00	2-38·7	Do.
14th .	20-1·0	20-20·8	20-33·4	21-15·2	1·75	1-14·2	Do.
15th .	6-14·2	6-23·4	6-50·3	9-23·4	16·0*	3-9·2	Do.
	13-49·8			14-0·0		0-10·2	Thickening of line 1 mm.=0″·38 of tilt.
16th .	7-13·5			7-35·9		0-22·4	Do.
22nd .	21-8·8		21-9·3	21-23·0	0·50	0-14·2	Do.
26th .	1-29·3	1-37·5	1-39·5	2-37·5	6·00*	1-8·2	Do.
29th .	12-3·1	12-9·2	12-14·8	13-27·0	2·50	1-23·9	Do.

* Measured from the base line.

The local times of the commencement:—

Date 1905.	H. M.
September 1	8-55·2
„ 8	6-47·8
„ 15	1-54·3
.....	12-7·5
.....	19-43·1
„ 16	13-6·8
„ 23	3-2·1
„ 26	7-22·6
„ 29	17-56·4

G. W. KÜCHLER,
Asst. Meteo. Reporter to the Govt. of India.

Simla:—List of earthquakes recorded by the Omori-Ewing Seismograph at the Simla Observatory during September 1905.

Date.	Beginning of P. T. G. M. T.	End of P. T. G. M. T.	Beginning of L. W. G. M. T.	Maxima G. M. T.	End approximately, G. M. T.	Duration approximately.	Maximum amplitude in m. m.	REMARKS.
	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.		
2nd .	...	...	...	9 15?	---	0 0'03	·05	Local.
5th .	...	...	...	10 11	...	0 0'3	·05	Do.
8th .	1 47	1 54	2 8	2 14	3 20	1 31'0	·03	Calabria, Italy.
11th .	...	...	...	7 14	...	0 0'2	·02	Local.
14th .	...	...	...	17 23	...	0 0'1	·02	Do.
15th .	6 9'5	6 18'6	6 34'7	6 42	8 0	1 50	...	The distance of the centre of disturbance comparable with 4,000 miles.
28th .	3 43	3 44'2	3 44'2	3 45	3 55	0 11'0	·07	Centre of the disturbance at some distance.
29th .	12 4	...	...	...	13 0	0 56'0	·01	The distance of the centre of disturbance comparable with 4,000 miles.

J. PATTERSON,
Deputy Meteorologist.

Royal Alfred Observatory, Mauritius. The Italian rthquake of September 8th, 1905, was not recorded by e Milne Horizontal Pendulum at the Royal Alfred bservatory.

Spots :—No spots were observed on the sun on the 6th, th, 21st, and 29th, when the weather was disturbed. roups of spots were observed on all other days of the onth and in addition isolated spots were recorded except the 1st, 20th, 22nd to 25th, and 28th. Faculæ were served on all days on which solar observations were ssible.

The groups of spots were arranged as follows:—

1	Group	was observed	on the	23rd, 24th, 26th, and 27th.
2	Groups	were	„ „	7th, 20th, 22nd, and 30th.
3	„	„	„ „	2nd, 5th, 8th, 9th. and 11th to 18th.
4	„	„	„ „	3rd, 4th, and 10th.
5	„	„	„ „	1st and 28th.

MAGNETIC DISTURBANCES.

Day.	Hours.	Magnetic Disturbances.
3 to 4	11 ¾ to 11 ¾	Large disturbance.
18	6h. 23m.	Sudden increase of Horizontal Force (·00015).
	12h.—15h.	Decrease of force with superposed fluctuations and wave (+·00020).
	19h.—23h.	Fluctuation (±·00010).
19	4h.—7h.	Wave in Horizontal Force (+·00025) followed by decrease of force (·00065) till 14½h. and increase (·00081) till 20d. 0½h. with wave (+·00020) from 19d 15 to 20½h.
22	18h.—22h.	Small fluctuations in Horizontal Force.
25	18h.—33m.	Sudden increase of force (·00010) followed by small fluctuations till 28d. 6h.
26		Accentuated diurnal variation in Horizontal Force (range = ·00060.)
26	10h.—14 h.	Wave in Horizontal Force (—·00037).
27		Accentuated diurnal variation in Horizontal Force (range=·00062).
30	23h.—Oct. 1½h.	Wave in Horizontal Force (+·00050).

T. F. CLAXTON,
Director,
Royal Alfred Observatory, Mauritius.

Weather in the Indian Monsoon region.

Except that there were fairly frequent slight cyclonic orms over the Bay of Bengal the weather over the rades monsoon area was generally quiet during the onth of September 1905. The following gives the partures from normal of the different meteorological ements in the South-east Trades region:—

September, 1905.	Mauritius.	Zanzibar.	Seychelles.
	"	"	"
essure Departure .	—·048	—·054	—·012
tual mean wind direction.	S 87° E	S 35°E	S 44°E
rmal mean wind direction	S 72° E	S 6°E	S 39°E
tual mean wind velocity (miles per diem).	183	133	272
rmal mean wind velocity (miles per diem).	288	134	292
infall departure .	+0·71	+0·95	+7·35

The above shows that the mean pressure of the month as in moderate defect of the average at Mauritius and nzibar and was normal at the Seychelles. In consequence the baric gradient over the Equatorial Belt was ghter than usual and this was accompanied with increased sting in the wind's direction and lighter winds than ual at all three stations though the difference of velocity as quite unimportant in the case of Zanzibar. The infall was greater than usual at all stations. The fall was out 50 per cent. in excess of the average at Mauritius d Zanzibar and was more than twice as heavy as usual the Seychelles. The principal abnormal features of the uatorial Belt were hence diminished pressure gradients, minished wind velocity, increased easting in the wind's rection and increased rainfall. Between the northern rgin of the Equatorial Belt and the west coast of India the ric gradient was less than usual except between the 3rd and the 11th when the second storm of the month reduced pressure over India. This was accompanied with light monsoon conditions over the Arabian Sea, as is shown by the following extracts from the logs of the mail steamers, etc., traversing the Arabian Sea at this time:—

The mail steamer *Oriental* left Aden on the 3rd and experienced from Long. 54° to Long 63°E. a moderate to fresh monsoon and considerable south-west swell; thence to arrival at Bombay on the morning of the 8th, a moderate to gentle monsoon, cloudy weather and moderate sea.

The mail steamer *Arcadia* left Aden on the 10th and experienced from Long. 52° to Long. 70°E. a moderate to gentle monsoon and moderate to considerable swell and passing clouds, thence to arrival at Bombay on the 15th gentle north-west winds and fine weather.

The *S. S. Somali* left Lamu on the 8th and experienced up to Lat. 3°N. in Long. 46°E. moderate to fresh southerly winds, cloudy weather and moderate southerly seas; thence to Lat. 11°N. in Long. 56°E. a strong monsoon, cloudy weather and high seas; thence to Lat. 16°N. in Long. 66°E. a moderate to gentle monsoon, cloudy weather and moderate sea; thence to arrival at Bombay on the 17th light west-north-westerly and north-easterly winds, cloudy weather and a smooth sea.

The mail-steamer *Peninsular* left Aden on the 17th and experienced up to Long. 60°E. light south-easterly winds, passing clouds and a rain-squall; thence to arrival at Bombay on the morning of the 22nd light south-westerly, westerly and north-westerly winds and fine weather.

The mail steamer *Arabia* left Aden on the 24th and experienced from Long. 48° to Long. 62°E. light to gentle south-westerly and variable winds with calms at times and passing clouds; thence to arrival at Bombay on the morning of the 29th light north-westerly winds and fine weather.

The preceding extracts show that the monsoon which was moderate to fresh over the centre and gentle over the east of the Arabian Sea at the commencement of the month, decreased quickly in strength as the month

progressed and that the *Arabia* when crossing between the 24th and 29th experienced light to gentle south-west and variable winds and calms over the centre of the sea and light north-west winds near the coast of India.

The following table gives a summary of the principal departure data of the monsoon area for the month of September 1905:—

Day of month September 1905.	Diurnal departure of pressure gradient from normal between Mauritius and Seychelles.	Diurnal departure of pressure gradient from normal between Seychelles and Bombay.	Easterly deflection of wind at Mauritius.	Easterly deflection of wind at Seychelles.	Departure of hourly wind velocity at Mauritius.	Departure of daily wind velocity at Seychelles.	Mean rainfall departure of India.
	"	"					"
1	—·051	+·002	—32	—15	—4·7	— 37	—0·17
2	—·018	—·003	—59	—15	—6·4	+ 25	—0·18
3	—·016	+·046	—18	—15	—4·9	+ 24	—0·07
4	—·028	+·071	+14	—15	—1·3	+ 42	—0·05
5	—·072	+·089	+ 4	...	—3·3	—131	—0·10
6	—·084	+·057	—32	—39	—3·9	— 53	—0·12
7	—·084	+·075	+32	+ 6	—5·2	—113	+0·01
8	—·031	+·057	+35	+ 6	—5·6	— 5	+0·09
9	—·051	+·081	+12	+ 6	—3·6	+ 78	+0·05
10	—·054	+·098	+13	+ 6	—4·0	— 46	0
11	—·069	+·044	+24	+ 6	—3·4	— 83	+0·13
12	—·067	—·018	+27	+ 6	—3·5	— 80	+0·28
13	—·038	—·023	— 6	—15	—9·3	—167	+0·28
14	—·048	—·046	—33	+ 6	—7·7	—104	+0·27
15	—·021	—·107	+14	+ 6	—3·9	+ 70	+0·28
16	—·038	—·094	+32	—15	—2·9	+ 64	0
17	—·062	—·102	+42	+ 6	—1·3	— 63	—0·07
18	—·091	—·087	+68	+27	—2·0	—179	—0·13
19	—·054	—·085	+73	+ 6	—1·8	— 75	—0·17
20	+·017	—·081	+63	—15	—4·9	+ 81	—0·18
21	—·001	—·014	+25	—39	—4·3	— 20	—0·19
22	+·042	—·053	+ 4	+ 6	—3·3	+130	—0·07
23	+·007	—·051	+ 8	+ 6	—3·3	+102	—0·05
24	—·009	—·061	+22	+51	—3·3	— 9	—0·03
25	—·029	—·011	+43	+ 6	—5·0	— 19	—0·07
26	—·016	—·028	+25	+ 6	—4·1	— 25	+0·05
27	—·038	—·038	+38	+ 6	—4·1	— 93	—0·12
28	—·034	—·040	+245	+ 6	—9·2	+ 68	—0·05
29	+·009	—·031	—24	+ 6	+1·5	+ 25	+0·12
30	+·003	—·038	— 5	+ 6	+3·0	+ 7	+0·07

The preceding data show (1) that the barometric gradient was slighter than usual between Mauritius and the Seychelles on nearly all days of the month and between the Seychelles and Bombay on all days except between the 3rd and the 11th, (2) that the Trades were more easterly than usual on twenty two days of the month at Mauritius and on twenty days at the Seychelles, (3) that the wind's velocity was below the normal on twenty eight days at Mauritius and on eighteen days at the Seychelles, and (4) that the mean rainfall of India was less than usual on seventeen days during the month, was exactly normal on two days (10th and 16th) and was in excess on eleven days. On those days on which any excess of rain was reported the heavy rainfall was due to the action of cyclonic storms and hence was apparently attributable to local and not to extra-Indian conditions.

Depressions and cyclonic storms.

During the 1st and 2nd September the barometer was generally rising and the weather was quiet over the Indian area, but the winds were cyclonic in direction, though light in force, at the head of the Bay and on the 3rd there were signs of the development of a storm over the north of the Bay.

hallowstorm of 3rd to 5th September:—On the morning of the 3rd the barometer was steady over Bengal and on the Bengal coast. A small depression, surrounded by feeble cyclonic winds, lay over east Bengal, while at the same time the wind was north-easterly at Saugor Island, showing that pressure was also low over the head of the Bay. The whole disturbed area apparently moved westward or north-westward during the day and the reports of the 4th showed a shallow depression over west Bengal. Moderate general rain had fallen in the neighbourhood of the storm and the winds were strong over the central parts of India. The depression moved very slowly westward during the 4th, but only a very shallow diffused disturbance was shown by the reports of the 5th.

Moderate storm of the 6th to the 12th.—While the above depression was still in existence the winds shifted

:o the eastward over deltaic Bengal and the barometer :ommenced to fall over the Bay and by the morning of the 5th a well-defined storm was shown over the north-west of the Bay, where the barometer read 0·23″ below the normal. Comparatively little rain accompanied the storm except in Burma. The observations of 8 A.M. of the 7th showed that the storm still lay over the north-west of the Bay. The storm had become deeper and the barometer readings at False Point and Gopalpur were about 0·28″ below the average. Rain had increased in amount and become more extensive over the eastern half of India. The storm moved very slowly and the centre crossed the coast early on the morning of the 8th. At 8 A.M. it lay between False Point, Balasore and Cuttack and pressure in this region was 0·3″ below the normal, while it was more or less below the average in almost all parts of the Indian area. Rain was again general and in places heavy over the eastern half of India. The observations of the 9th showed that the storm had continued to move westward and at 8 A.M. was central over the area outlined by the stations of Raipur, Sutna, Seoni and Nagpur. The storm had filled up somewhat and the greatest departure of pressure from the normal was —·196″ at Nagpur. There had been a marked extension of rain over the central parts of the country. The reports of the 10th showed that the storm had commenced to move west-north-westward and the centre at 8 A.M. lay close to Seemuch, where the barometer read 0·22″ below the average. A further extension of rain into north-west India had occurred during the preceding 24 hours. Between 8 A.M. on the 10th and 8 A.M. on the 11th the storm continued its movement north-westward and on the latter date was shown over the Rajputana desert near Jodhpur. Its barometric depth was unchanged; strong monsoon winds were blowing over Rajputana and into Upper India where nearly general and moderate to heavy rain had fallen. The direction of movement of the storm changed to north during the 11th, and the 8 A.M. observations of the 12th showed that the centre lay between Lahore and Sialkot, its barometric depth continuing to be about 0·22″. The storm had occasioned general, moderate to heavy rain in the Punjab. (See Rainfall Section, p. 271.) The storm had disappeared among the Himalayas by the morning of the 13th.

Shallow depression of 11th to 13th:—When the former storm had reached the western desert a fresh but very shallow depression appeared over the north-west of the Bay (11th). It drew the winds into cyclonic directions over the north of the Bay and increased rainfall on the Burma and part of the Bengal coasts. The depression moved north-north-westward during the day and on the morning of the 12th was shown as a very diffused depression over the east Gangetic Plain. Fairly general rain had fallen in its neighbourhood. The storm subsequently moved into north Bihar and filled up. Throughout its existence it was a very shallow and insignificant disturbance.

Land-formed depression of the 14th to 16th.—Between the 14th and 16th a small depression, the barometric depth of which ranged between —·15 and —·17, lay over west Bengal. The depression was of little consequence beyond determining heavy rain to parts of Bengal. (See Rainfall Section, p. 270.)

Between the 16th and 19th the barometer generally rose over India and was considerably in excess of the average, but on the 20th a brisk fall commenced over the Bay.

Depression of the 20th to 26th.—On the 20th the barometer was falling briskly over the north of the Bay with north-east winds on the Arakan and north-west winds on the Orissa and Ganjam coasts. At the Bay Islands the winds were west-north-westerly and exhibited no indication of cyclonic influence. By the morning of the 21st the storm, though still shallow, had become better defined and the winds had become cyclonic all over the Bay though the force remained low. Very little rain accompanied the depression. The reports of the 22nd exhibited little change. The depression still lay over the north-west of the Bay and cyclonic winds of low velocity were reported from the Bay and the east of India. There had, however, been a slight increase of rainfall. By the morning of the 23rd the storm had intensified slightly, but the greatest departure of barometric pressure at the land stations was only—·089″ at Waltair. The winds were generally unchanged, but rain had again extended. The storm apparently developed quickly during this day (the 23rd) and when it crossed the Madras coast, which it did near Waltair early on the morning of the 24th, barometric pressure was ·307″ below the normal. The wind circulation had increased in vigour and a fresh gale from east-south-east was blowing at Gopalpur. Rain had again increased and was moderately heavy on the Circars coast. The storm advanced slowly north-westward during the day and was central near Raipur, at 8 A.M. of the 25th. Rain was mainly confined to the area to the north-east of the storm and was not heavy except at Raipur. On the morning of the 26th the storm was central over the Central Provinces. Very heavy rain had fallen in its immediate neighbourhood (See Rainfall Section, p. 273), but there had been little in other parts of the country. During the 26th and 27th the depression filled up and on the latter date wholly disappeared.

Depression of the 27th to 30th:—On the 27th a depression was shown off the Arakan coast, so that southerly winds prevailed in Burma and north-westerly winds over Bengal. The storm moved slowly in a north-westerly direction during the day and was shown close to Calcutta on the morning of the 28th, pressure near the centre having been 0·22″ below the normal. Moderately heavy rain was falling over lower Bengal. The storm continued to move north-westward and at 8 A.M. on the 29th was central near Hazaribagh where pressure was 0·16″ below the normal. Moderate rain had fallen to the east of the centre. The storm advanced nearly northward during the day and was shown at the foot of the hills near Darbhanga on the morning of the 30th. Heavy rain had fallen over the west Bengal (See Rainfall Section, p. 270) during the previous 24 hours. The storm broke up among the hills during the 30th.

There were thus five cyclonic storms or depressions during the month. Not one of them was of more than moderate intensity and only one *viz.*, that of the 3rd to 12th, was long-lived. They were all remarkable for heavy rainfall, but this rainfall was concentrated around the storm centre, the surrounding regions having been but little affected.

Pressure.

The mean 8 A.M. pressure of the Indian land area was 0·011″ below the normal. The actual distribution of presure at 8 A.M., on the mean of the month, is shown in Plate I. Pressure was highest in the extreme south-west and south; was relatively low over Bengal, Orissa, Ganjam, the east of the Central Provinces and the Gangetic Plain and was lowest over the Indus Valley. Barometric differences or gradients were greater than usual over some areas. The mean 8 A.M. pressure was slightly higher than usual over the south of the Bay, parts of the east and west of the Peninsula and over Gujarat and was lower than usual elsewhere. The departures of pressure from normal in many parts of the country agreed directly with the temperature departures. The following gives data for the larger divisions :—

Meteorological Province.	Departure from normal of	
	Mean pressure, September 1905.	Mean temperature, September 1905.
	″	°
Burma Coast and Bay Islands	+·001	−0·2
Burma Inland	−·018	−0·6
Assam	−·014	+0·4
Bengal and Orissa	−·024	−0·3
Gangetic Plain and Chota Nagpur	−·031	−0·3
Upper Sub-Himalayas	−·015	+1·3
Indus Valley and North-West Rajputana	−·012	+0·2
East Rajputana, Central India, and Gujarat	−·002	+1·9
Deccan	−·009	+0·3
West Coast	+·001	+0·8
South India	−·005	+1·3

The above shows that pressure and temperature were above the normal over the west coast and both were below the normal over Burma Inland, Bengal, Orissa and the Gangetic Plain and Chota Nagpur.

Relatively to the geographical mean pressure was below the normal over the Indus Valley, along the foot of the Himalayas and over the whole of north-east and part of centra India and was in excess elsewhere. The following how the principal anomalies :—

Station.	Positive pressure anomalies, September 1905.	Station.	Negative pressure anomalies, September 1905.
	″		″
Rajkot	+·027	Patna	−·039
Madura	+·027	Hazaribagh	−·035
Mergui	+·025	Chaibassa	−·033
Ratnagiri	+·024	Sambalpur	−·033
Hyderabad (S.)	+·023	Jacobabad	−·033
Bhuj	+·022	Darbhanga	−·030
Tavoy	+·022	Gaya	−·029
Admednagar	+·020	Burdwan	−·026
Indore	+·020	False Point	−·025
		Berhampore	−·024
		Ranchi	−·024
		Gopalpur	−·023

At all the hill stations the mean 8 A.M. pressure of the month was normal or nearly so and the vertical pressure gradients were also generally normal. The following gives data for eleven pairs of stations :—

Hill station.	Departure from normal pressure, September 1905.	Plain station.	Departure from normal pressure, September 1905.	Departure of pressure difference.
	″		″	″
Quetta	+·001	Jacobabad	−·044	−·045
Leh	+·008	Lahore	−·022	−·030
Murree	−·008	Peshawar	−·021	−·013
Simla	−·005	Ludhiana	−·029	−·024
Chakrata	−·003	Roorkee	−·010	−·007
Ranikhet	−·003	Bareilly	−·007	−·004
Darjeeling	−·014	Dhubri	−·013	+·001
Lashio	−·029	Bhamo	−·009	+·020
Mount Abu	−·006	Deesa	−·002	+·004
Pachmarhi	−·023	Khandwa	−·010	+·013
Wellington	−·001	Coimbatore	−·001	0

The deficiency of barometric pressure noticed over north-west India extended westward through Baluchistan and Afghanistan into Persia. It was very slight over these areas, but increased on proceeding westward and amounted to 0·037″ at Baghdad. Over Ceylon the departures from normal were irregular, but further to the southward in the South-east Trades region the mean pressure was deficient and in the case of Mauritius and Zanzibar by moderate

amounts. The following gives comparative data of pressure for the extra-Indian stations for the month of September:—

Station.	Departure from normal of mean 8 A.M. pressure of September 1905.
	°
Trincomalee	+·025
Colombo	—·011
Bushire	—·004
Jask	—·007
Muscat	—·003
Baghdad	—·037
Aden	—·013
Perim	+·024
Zanzibar	—·054
Seychelles	—·012
Mauritius	—·048

The following is a summary of the chief abnormal features of the pressure conditions of the month:—

(1) The mean 8 A.M. pressure of the Indian land area at 8 A.M. was 0·011″ below the normal.

(2) Relatively to this condition the mean pressure of the month was lower than usual over the Indus Valley, along the foot of the Himalayas and over the whole of north-east and part of central India.

(3) Relatively to the general condition the mean 8 A.M. pressure was in excess over the south, centre and west of the Peninsula and considerable parts of central and north-west India.

(4) At the hill stations the mean pressure was almost exactly normal and the vertical pressure gradients were approximately normal.

(5) At most of the extra-Indian stations the mean pressure of the month was lower than usual but in Persia the deficiency was quite unimportant.

Temperature.

Rain fell fairly frequently over Burma and north-east India during the month under review and the mean temperature was below the normal over that area, but in other parts of the country rain was infrequent or light and the heat greater than usual.

The mean maximum temperature of the month was lower than usual over Burma, Bengal, the east of the United Provinces, Orissa, Ganjam and the Central Provinces as well as over the North-west Frontier Province and the Central Punjab. The deficiency exceeded 2° at the stations for which comparative data are given below:—

Province or Division.	Station.	Mean maximum temperature.		
		Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
		°	°	°
Burma	Yamethin	88·1	91·7	—3·6
	Minbu	88·7	90·9	—2·2
Bengal	Patna	87·5	89·9	—2·4
	Gaya	88·7	91·0	—2·3
United Provinces.	Gorakhpur	88·3	90·5	—2·2
Central Provinces.	Nagpur	86·8	89·3	—2·5
	Sambalpur	87·0	89·3	—2·3

In all other parts of the country the mean maximum temperature exceeded the normal. The excess was greatest over Madras and the Deccan, but was large over the south-east Punjab, the west of the United Provinces, eastern Rajputana and Gujarat. At the following stations the excess amounted to 3° or more:—

Province or Division.	Station.	Mean maximum temperature.		
		Actual, Sept. 1905.	Normal, Sept.	Departure from normal, September 1905.
		°	°	°
Madras	Cuddalore	94·9	91·9	+3·0
	Kurnool	92·4	89·2	+3·2
Deccan	Sholapur	93·2	88·4	+4·8
	Bijapur	90·2	85·9	+4·3
	Raichur	92·0	87·7	+4·3
	Ahmednagar	88·7	85·2	+3·5
United Provinces West.	Jhansi	95·2	91·7	+3·5
	Agra	96·5	93·1	+3·4
	Meerut	95·2	91·8	+3·4
Eastern Rajputana	Ajmer	94·5	90·8	+3·7
	Sambhar	97·2	93·7	+3·5
Gujarat East	Rajkot	94·9	91·4	+3·5
	Deesa	96·1	92·8	+3·3

The following table gives the highest maximum temperature recorded in each division or province of India during the month with the date and station together with the highest temperatures previously recorded at those stations during September :—

Province or division.	Station.	Highest maximum temperature recorded in September 1905.	Date on which recorded.	Highest maximum temperature recorded in September previous to 1905.	Year in which recorded.
		°		°	
Burma	Mandalay	99·5	27th	102·0	1892
Assam	Silchar	96·6	4th	101·3	1887
Bengal	Cooch Behar	94·4	3rd	95·9	1902
Orissa	Balasore	94·4	20th	95·4	1899
Bihar	Arrah	95·9	7th	98·4	1884
Chota Nagpur	Chaibassa	94·4	3rd	95·9	1899
United Provinces.	Mainpuri	105·3	4th	103 8	1899
Punjab	Lahore	109·9	4th	108·6	1899
North-west Frontier Province.	D. I. Khan	107·7	4th	110·5	1888
Sind	Jacobabad	110·3	4th	115·3	1877
Baluchistan	Chaman	99·2	4th & 7th	104·2	1899
Rajputana	Bharatpur	107·4	5th	99·4	1902
Gujarat (East)	Deesa	104·6	30th	108·0	1901
Central India	Nowgong	100·0	4th	99·6	1880
Central Provinces.	Hoshangabad	97·8	18th	99·9	1877
Berar	Akola	93·9	3rd	104·2	1899
West Coast	Cochin	90·3	30th	91·0	1900
Bombay Deccan	Sholapur	98·2	21st & 29th	98·7	1899
Mysore	Chitaldroog	95·1	30th	91·1	1901
Madras Coast	Madras	102·0	27th	102·3	1883
Madras Deccan	Cuddapah	103·2	30th	103·2	1899
South India	Tinnevelly	101·4	13th & 30th.	103·4	1899

The preceding data show that in the case of the United Provinces, the Punjab, Rajputana, Central India and Mysore the maxima recorded during September 1905 were higher than had previously been recorded in the month of September in previous years.

The mean maximum temperature of the month was considerably lower than usual at some of the interior stations of the north-west Himalayas and also at Chaman. This is shown below :—

Hill Station.	Mean maximum temperature.		
	Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
	°	°	°
Kailang	66·1	69·2	—3·1
Leh	66·4	70·3	—3·9
Gilgit	81·9	86·7	—4·8
Chaman	87·2	91·6	—4·4

At Kabul the mean maximum temperature considerably exceeded the average (+3°·6), while at the remaining hill stations the departures from normal were generally unimportant.

The departures of the mean minimum temperatures from normal were, on the whole, irregular. Within five areas the mean minimum temperature was lower than usual, *viz.* (1) part of Burma and east and deltaic Bengal, (2) Bihar, (3) the Central Provinces and the Bombay Deccan, (4) Mysore and part of the Malabar coast and (5) the Indus Valley. The departures from normal within these areas were generally small and amounted to —1°·0 or more only at the following places:—

Station.	Mean minimum temperature.		
	Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
	°	°	°
Toungoo	74·0	75·6	—1·6
Sambalpur	76·3	77·3	—1·0
Poona	67·6	68·6	—1·0

Over the remainder of the country, with a few local exceptions, the mean minimum temperature was higher than usual, but the departures were not large, except at the Andamans, in the Madras Coast districts and over part of north-west India, where at the following stations the excess was more than 2°.

Province.	Station.	Mean minimum temperature.		
		Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
		°	°	°
Andamans	Port Blair	78·7	76·5	+2·2
Madras	Cuddapah	79·2	75·8	+3·4
	Kurnool	75·7	73·1	+2·6
	Madras	79·1	77·0	+2·1
	Cuddalore	77·8	75·7	+2·1

Province	Station.	Mean minimum temperature. Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
		°	°	°
North-West India.	Jhansi	79·6	75·8	+3·8
	Agra	80·5	76·7	+3·8
	Ajmer	77·4	73·6	+3·8
	Lahore	75·9	72·6	+3·3
	Sialkot	77·0	73·8	+3·2
	Sirsa	78·7	75·7	+3·0
	Jaipur	76·4	73·6	+2·8
	Sambhar	77·5	75·1	+2·4
	Delhi	79·4	77·0	+2·4
	Ludhiana	77·0	74·8	+2·2

On the hills the departures from normal were irregular, ut in Baluchistan, and at Gilgit and Murree there was a ıoderate to large deficiency. The following gives data:—

Hill Station.	Mean minimum temperature. Actual, September 1905.	Normal, September	Departure from normal, September 1905.
	°	°	°
alat	26·2?	39·5	−13·3?
haman	58·8	62·3	− 3·5
uetta	47·5	49·5	− 2·0
ilgit	61·8	64·5	− 2·7
urree	56·4	58·8	− 2·4
sh	40·7	41·5	− 0·8
ailang	42·0	42·1	− 0·1
inagar	54·8	53·0	+ 1·8
arjeeling	56·2	55·5	+ 0·7
hakrata	57·5	57·0	+ 0·5
mla	56·9	56·4	+ 0·5
anikhet	60·5	60·0	+ 0·5
herat	66·2	65·9	+ 0·3
ount Abu	65·4	64·6	+ 0·8
achmarhi	66·8	66·3	+ 0·5
ashio	67·9	67·8	+ 0·1
Vellington	55·1	55·8	− 0·7

The mean temperature of the month was lower than sual over Burma, Bengal, the east of the United Provinces, Orissa, Ganjam and the Central Provinces, as well as at a few stations in Mysore and in the extreme north-west of India. The deficiency amounted to 1°·0 or more at the following places:—

Station.	Mean temperature. Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
	°	°	°
Yamethin	81·4	83·3	−1·9
Sambalpur	81·7	83·4	−1·7
Nagpur	80·0	81·6	−1·6
Chanda	80·4	81·9	−1·5
Gaya	82·9	84·4	−1·5
Patna	83·1	84·6	−1·5
Toungoo	80·9	82·3	−1·4
Minbu	82·7	83·9	−1·2
Montgomery	87·8	89·0	−1·2
D. I. Khan	86·7	87·7	−1·0
Akola	79·9	80·9	−1·0
Amraoti	79·3	80·3	−1·0
Benares	83·3	84·3	−1·0
Gorakhpur	83·1	84·1	−1·0
Bogra	82·0	83·0	−1·0
Jessore	83·0	84·0	−1·0

Elsewhere the mean temperature exceeded the normal and the excess, though generally moderate or small, was considerable over parts of Madras and of the Deccan and over Rajputana and neighbouring regions. It amounted to +2° or more at the following places:—

Province.	Station.	Mean temperature. Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
		°	°	°
Madras	Cuddapah	88·5	84·2	+4·3
	Kurnool	84·1	81·2	+2·9
	Madras	87·4	85·0	+2·4
	Cuddalore	86·4	83·8	+2·6
	Bellary	83·7	81·7	+2·0
Bombay Deccan	Sholapur	82·8	79·4	+3·4

Province.	Station.	Mean temperature. Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
		°	°	°
United Provinces.	Jhansi	87·4	83·7	+3·7
	Agra	88·5	84·9	+3·6
Rajputana	Ajmer	86·0	82·2	+3·8
	Jaipur	86·8	83·9	+2·9
	Sambhar	87·4	84·4	+3·0
Punjab	Delhi	87·4	84·9	+2·5
	Sialkot	86·9	84·8	+2·1

At most of the hill stations the departures from normal were small and unimportant, but at Leh, Gilgit and Chaman there was some defect and at Kabul some excess. The following gives data for these stations:—

Hill Station	Mean temperature. Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
	°		°
Leh	53·6	56·0	−2·4
Gilgit	71·9	75·7	−3·8
Chaman	73·0	77·0	−4·0
Kabul	71·7	69·1	+2·6

The following gives mean temperature data for the 57 meteorological divisions of the Empire:—

Province.	Division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Departure from normal of month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	83·9	75·4	79·7	8·6	15·3	−0·7	+1·1	−1·8
	Lower Burma (Deltaic)	84·5	76·3	80·4	8·2	14·7	−0·8	+0·4	−1·2
	Central do.	88·6	75·0	81·8	13·6	23·9	−0·9	−0·8	−0·1
	Upper do.	89·8	76·3	83·0	13·5	23·8	−1·8	+0·4	−2·2
	Arakan	85·6	77·4	81·5	8·2	14·7	−1·0	−0·6	−0·4
Bengal and Assam	Eastern Bengal	86·9	77·4	82·2	9·5	18·2	−0·6	−0·2	−0·4
	Assam (Surma)	90·1	76·3	83·2	13·8	22·8	+0·3	−0·1	+0·4
	Do. (Hills)	74·7	64·3	69·5	10·4	21·4	...	...	...
	Do. (Brahmaputra)	88·2	76·5	82·4	11·7	22·2	+0·5	+0·5	0
	Deltaic Bengal	88·5	78·6	83·5	9·8	18·0	−0·1	−0·1	0
	Central do.	87·8	78·0	82·9	9·8	19·2	−1·1	+0·1	−1·2
	North do.	88·1	77·0	82·6	11·1	21·0	+0·2	+0·4	−0·2
	Bengal Hills	62·7	51·4	57·1	11·4	23·8	+0·7	+0·7	0
	Orissa	88·3	78·6	83·4	9·7	18·3	−0·7	+0·2	−0·9
	Chota Nagpur	86·1	74·4	80·3	11·7	21·7	−1·6	+0·4	−2·0
	South Bihar	88·1	77·9	83·0	10·2	21·9	−2·4	−0·6	−1·8
	North do.	88·1	78·1	83·1	10·0	19·8	−1·3	+0·1	−1·4
United Provinces of Agra and Oudh.	United Provinces (East)	90·4	77·4	83·9	13·0	24·2	−0·9	+0·3	−1·2
	Oudh (South)	91·6	77·1	84·4	14·5	24·0	−0·5	+0·6	−1·1
	Do. (North)	90·9	77·0	83·9	13·9	24·8	−0·1	+0·8	−0·9
	United Provinces (Central)	94·3	78·3	86·3	16·1	30·3	+1·9	+2·2	−0·3
	Do. (West)	95·9	78·2	87·0	17·7	32·3	+3·4	+2·5	+0·9
	Do. (Submontane, East)	88·3	77·9	83·1	10·4	19·2	−2·2	+0·2	−2·4
	Do. (Submontane, West)	89·7	72·9	81·3	16·8	27·8	+1·0	−0·1	+1·1
	Do. (Hills)	69·8	58·0	63·9	11·8	22·3	+0·1	+0·6	−0·5
Punjab	Punjab (South-East)	95·5	79·4	87·4	16·1	30·4	+2·5	+2·4	+0·1
	Do. (South)	96·5	76·7	86·6	19·8	36·5	−0·4	+3·0	−3·4
	Do. (Central)	97·6	75·9	86·8	21·7	41·2	−1·3	+3·3	−4·6
	Do. (Submontane)	95·7	74·6	85·2	21·1	39·3	+1·2	+1·8	−0·6
	Do. (Hills)	70·9	50·2	60·6	20·8	40·8	−2·3	−0·6	−1·7
	Do. (West)	99·9	76·5	88·2	23·4	37·7	−0·6	0	−0·6
N.-W. F. Province	N.-W. F. Province	97·1	72·4	84·8	24·7	40·8	−1·2	−0·1	−1·1

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Departure from normal of month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Bombay and Malabar Coast Districts (Madras).	Malabar	84·7	74·8	79·8	9·9	15·1	+0·9	+0·2	+0·7
	Madras (South Central)	91·1	72·1	81·6	19·1	27·2	+0·7	+0·8	−0·1
	Coorg	72·4	61·5	67·0	10·9	17·4	+0·2	−0·4	+0·6
	Mysore	84·1	65·9	75·0	18·2	28·9	+1·6	0	+1·6
	Konkan	84·5	76·0	80·3	8·5	13·6	+1·0	+1·0	0
	Bombay Deccan	87·4	68·7	78·1	18·7	30·2	+3·0	+0·3	+2·7
	Hyderabad (North)	85·8	70.4	78·1	15·4	26·0	...	...	...
	Khandesh	88·7	67·7	78·2	21·0	35·9	+3·5	−0·3	+3·8
Central Provinces and Berar.	Berar	87·0	72·2	79·6	14·9	24·9	−1·8	−0·3	−1·5
	Central Provinces (West)	87·0	73·2	80·1	13·8	26·9	−1·5	−0·3	−1·2
	Do. (Central)	86·3	72·5	79·4	13·8	25·6	−0·9	+0·1	−1·0
	Do. (East)	86·2	74·1	80·2	12·1	22·0	−1·9	−0·6	−1·3
Bombay (North)	Gujarat (East)	93·3	76·3	84·8	17·0	27·6	+2·1	+1·1	+1·0
	Kathiawar and Cutch	91·3	76·0	83·7	15·4	22·8	+2·1	+0·6	+1·5
	Sind	97·7	76·2	87·0	21·7	34·1	+1·3	−0·2	+1·5
	Baluchistan Hills	85·2	45·6	65·4	39·7	61·9	−2·4	−6·3	+3·9
Rajputana and Central India.	Central India	88·4	73·5	81·0	14·9	25·7	+0·5	+0·6	−0·1
	Rajputana (East)	95·5	77·2	86·4	18·3	31·1	+3·4	+3·0	+0·4
	Do. (West)	98·5	78·0	88·3	20·5	31·1	+1·3	+1·2	+0·1
Madras	East Coast (North)	87·7	77·9	82·8	9·8	21·3	−0·8	+0·2	−1·0
	Hyderabad (South)	88·9	73·1	81·1	15·8	26·1	+2·2	+1·4	+0·8
	Madras (Central)	94·4	76·4	85·4	18·0	27·1	+3·6	+2·5	+1·1
	East Coast (Central)	94·3	78·4	86·4	16·0	28·2	+1·7	+0·8	+0·9
	Do. (South)	93·9	77·4	85·7	16·5	24·4	+2·3	+1·7	+0·6
	Madras (South)	94·7	78·1	86·5	16·6	22·9	+0·7	+0·7	0

The hottest area thus included western Rajputana, the west Punjab, the south-east Punjab and the west of the United Provinces and Sind where the mean temperature of the month ranged between 87° and 88°·3, while the coolest areas, on the plains, were Tenasserim, Malabar, the Deccan, Khandesh, Berar, and the central division of the Central Provinces, where the mean temperature of the month ranged between 78°·1 and 79°·8. The highest mean maximum temperature was 99°·9 in the west Punjab. The mean daily range of temperature was generally less than usual, except over the Peninsula and parts of north-west India.

The following gives temperature data for the extra-Indian stations :—

Station.	Mean temperature. Actual, September 1905.	Normal, September.	Departure from normal, September, 1905.
	°	°	
Trincomalee	84·0	83·9	+0·1
Colombo	81·5	81·6	−0·1
Amini Divi	82·4	81·1	+1·3
Kashgar	70·7	69·2	+1·5

Station.	Mean temperature. Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
	°	°	°
Kabul	71·7	69·1	+2·6
Ispahan	72·1	72·8	−0·7
Bushire	86·4	86·7	−0·3
Jask	87·5	87·2	+0·3
Muscat	88·2	85·3	+2·9
Baghdad	88·5	85·8	+2·7
Aden	86·1	87·2	−1·1
Perim	87·8	88·3	−0·5
Zanzibar	78·1	77·0	+1·1
Seychelles	78·4	77·7	+0·7
Mauritius	70·1	69·6	+0·5

The above shows that the mean temperature of the month of September 1905, was less than usual at Colombo, Ispahan, Bushire, Aden and Perim, and was more or less excessive elsewhere.

The following summarises the chief abnormal features of the temperature conditions of the month of September 1905:—

(1) The mean maximum temperature, the mean minimum temperature, and consequently also the mean temperature slightly exceeded the normal over Assam.

(2) The mean maximum temperature, the mean minimum temperature, and hence also the mean temperature, were generally slightly below the normal over Burma, north-east India (except Assam), the north-east of the Peninsula and part of the Central Provinces.

(3) The mean maximum temperature, the mean minimum temperature and hence the mean temperature generally exceeded the normal over the Peninsula and north-west India.

(4) The excess was considerable over parts of Madras, the Deccan and north-west India.

(5) At the higher stations in the north-west Himalayas and at Chaman the mean maximum, mean minimum and consequently the mean temperature, were considerably below the average.

(6) In Afghanistan both the maximum and minimum exceeded the normal and the mean temperature was higher than usual in the Persian Gulf and South-east Trades regions.

The following table gives the mean temperature departure data of the eleven meteorological provinces:—

Meteorological province.	Departure from normal of		
	Mean maximum temperature, September 1905.	Mean minimum temperature, September. 1905.	Mean temperature, September 1905.
	°	°	°
Burma Coast and Bay Islands	— 0·8	+0·4	—0·2
Burma Inland	— 1·6	+0·3	—0·6
Assam	+ 0·4	+0·3	+0·4
Bengal and Orissa	— 0·6	+0·1	—0·3
Gangetic Plain and Chota Nagpur	— 1·0	+0·3	—0·3
Upper Sub-Himalayas	+ 1·1	+1·5	+1·3
Indus Valley and North-West Rajputana.	+ 0·2	+0·2	+0·2
East Rajputana, Central India and Gujarat.	+ 2·2	+1·7	+1·9
Deccan	+ 0·4	+0·2	+0·3
West Coast	+ 1·0	+0·6	+0·8
South India	+ 1·6	+1·0	+1·3

The following gives a brief account of the principal daily changes of temperature during the month under review:—

The temperature changes were mainly determined by the rainfall which accompanied the different cyclonic storms of the month.

On the first and second the weather was quiet and the mean temperature generally high, more especially over Rajputana and neighbouring districts. Between the 3rd and the 13th the temperature changes were generally determined by the rainfall of two depressions. The first of these, between the 3rd and the 5th, passed from the north-west of the Bay into west Bengal giving rain to the north-east of the Peninsula, west Bengal and the United Provinces. The following gives comparative data for these areas for these three days:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	3rd September.	4th September.	5th September.
	°	°	°
Bengal	+2·0	—0·3	+1·0
Bihar	+3·5	+1·2	+0·4
Chota Nagpur	+4·5	+1·4	+0·5
United Provinces	+5·5	+6·1	+2·7
Orissa	+1·7	—2·4	+1·0
Central Provinces	+3·9	+3·0	—0·3
Madras Coast	—0.1	—0·7	+1·6

During this time the heat was very great over north-west India. This is shown below:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	3rd September.	4th September.	5th September.
	°	°	°
Punjab	+5·5	+7·7	+7·2
North-west Frontier Province	+1·8	+4·2	+4·1
Baluchistan	—1·8	+2·7	+3·6
Sind	+1·4	+1·7	—0·2
Rajputana	+7·6	+8·3	+8·3
Gujarat East	+2·6	+3.0	+2·5
Central India	+4·6	+5·4	+0·9

On the 6th the second storm appeared over the Bay and passing through Orissa, the Central Provinces, Central India and thence northward into the Punjab, which it reached on the 12th, carried rain to all these districts. This rainfall brought about a very large reduction of temperature, more particularly in the north-west and more or less all over the country. The following gives com-

parative data for all divisions for each alternate day from the 7th to the 13th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 a. m. of			
	7th September.	9th September.	11th September.	13th September.
	°	°	°	°
Burma	−0·7	−0·2	−2·1	−0·9
Assam	+2·6	−0·1	+2·1	−0·9
Bengal	+1·6	+0·2	+0·8	−3·1
Orissa	+0·6	−0·7	+0·6	−2·7
Bihar	+2·2	−0·2	+1·3	−2·7
Chota Nagpur	−0·2	−2·4	−0·3	−1·6
United Provinces of Agra and Oudh.	+2·3	+1·2	+1·9	−2·1
Punjab	+6·4	+6·2	−1·4	−7·7
North-west Frontier Province.	+4·2	+4·1	−2·8	−5·4
Baluchistan	+3·0	+5·9	−3·1	−5·4
Sind	+1·2	+1·0	+4·1	0
Rajputana	+7·1	+8·7	−3·8	−2·6
Gujarat, East	+2·5	+3·3	−0·6	+1·2
Central India	+1·4	+2·1	−0·7	−0·2
Central Provinces	−0·3	−1·2	−0·6	−2·0
Berar	−2·4	−3·6	−0·9	−1·0
West Coast	+1·3	+0·4	0	+0·2
Bombay Deccan	+2·4	−2·4	+0·2	+0·8
Mysore	−1·4	−0·7	+0·5	−1·2
Madras Coast	+0·6	+0·7	+2·2	−0·9
Madras Deccan	+0·8	−1·1	+2·1	+0·1
South India	−0·7	+0·1	+1·6	+0·5

The greatest effect of this rainfall was shown in the north-west and in the maximum temperature, which was more than 15° below the normal at the following places on the 12th and 13th :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
12th September.	Sialkot	74·0	96·1	−22·1
	Montgomery	83·8	102·1	−18·3
	Lahore	81·3	98·9	−17·6
	Khushab	82·8	100·2	−17·4
	Multan	83·3	100·4	−17·1
	Rawalpindi	78·9	94·1	−15·2
	Sirsa	83·8	99·0	−15·2
13th September.	Sialkot	78·5	96·2	−17·7
	Rawalpindi	77·4	94·1	−16·7
	Lahore	83·4	99·0	−15·6
	Ambala	78·0	93·3	−15·3

Between the 11th and the 13th the third storm of the month passed from the north-west of the Bay into west Bengal. Rain consequently increased over north-east India and temperature fell over Bengal, as is shown in a preceding table.

Between the 14th and the 16th, a depression formed over west Bengal giving rain to the surrounding districts and occasioning a marked reduction of temperature in Bengal and the United Provinces. The following gives comparative data for these areas for these three days :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 a.m. of		
	14th September.	15th September.	16th September.
	°	°	°
Bengal	−3·9	−4·5	−4·2
Orissa	−1·5	−1·7	−2·0
Bihar	−3·9	−4·8	−5·4
Chota Nagpur	−2·8	−5·6	−5·9
United Provinces	−1·3	−2·3	−2·0

About the 16th and 17th, the weather commenced to recover from the disturbed conditions and temperature to rise. This rise continued moderately steadily for the next six days, and on the 22nd the mean temperature exceeded the normal over a considerable part of the country, but more especially over the Peninsula. The following gives data for all divisions for this day :—

Province or division.	Departure from normal of		
	Mean maximum temperature, 22nd September.	Mean minimum temperature, 22nd September.	Mean temperature, 22nd September.
	°	°	°
Burma	0	+0·3	+0·2
Assam	+1·1	−0·7	+0·2
Bengal	+1·9	−1·4	+0·3
Orissa	+1·1	−0·9	+0·1

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 22nd September.	Mean minimum temperature, 22nd September.	Mean temperature, 22nd September.
	°	°	°
Bihar	−3·6	−1·7	−2·7
Chota Nagpur	+0·9	−1·7	−0·4
United Provinces of Agra and Oudh	+2·0	−0·4	+0·8
Punjab	−0·4	+0·5	+0·1
North-west Frontier Province	−1·4	−1·5	−1·5
Baluchistan	−3·0	−5·7	−4·4
Sind	−0·2	−1·0	−0·6
Rajputana	+1·0	+2·0	+1·5
Gujarat East	+1·2	+0·8	+1·0
Central India	+0·3	−0·4	−0·1
Central Provinces	+0·7	−1·9	−0·6
Berar	+1·2	−1·6	−0·2
West Coast	+1·5	−0·6	+0·5
Bombay Deccan	+5·1	+0·3	+2·7
Mysore	+3·4	−3·1	+0·2
Madras Coast	+4·4	+1·2	+2·8
Madras Deccan	+6·6	+2·3	+4·5
South India	+0·8	−1·7	−0·5

In the meantime on the 20th a fresh depression appeared over the Bay. It developed without much movement during the next three days and crossed the Madras coast near Waltair on the morning of the 24th. The storm advanced slowly into the Central Provinces where it broke after giving heavy rain. It occasioned a marked reduction of temperature over the central parts of the country, as is shown below :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	21st September.	23rd September.	25th September.	27th September.
	°	°	°	°
Orissa	+1·9	−2·4	−0·8	−0·1
Central Provinces	−1·1	+0·2	+0·2	−5·1
Central India	−1·0	+0·3	+1·8	+0·2
Berar	−1·2	−1·5	−0·2	−2·0

On the 27th another storm appeared, this time off the Arakan coast, and thence passed north-westward through deltaic and west Bengal to Bihar, and disappeared among the Himalayas on the 30th. It occasioned heavy rain and low temperatures over Burma and north-east India. The following gives comparative data for these areas for each day from the 27th to the 30th :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	27th Sept.	28th Sept.	29th Sept.	30th Sept.
	°	°	°	°
Burma	−0·7	−2·6	−0·7	+0·8
Assam	+1·7	+3·0	+1·7	−0·1
Bengal	+1·8	+1·7	−2·2	−1·6
Orissa	−0·1	+0·2	−3·4	−1·3
Bihar	+0·2	+2·3	−0·1	−5·9
Chota Nagpur	+0·2	+2·1	−0·9	−3·9

This rainfall in the north-east did not affect the temperature in other parts of India where the mean temperature was generally—but particularly in the Madras Deccan—in excess of the normal. The following gives data for the remaining divisions for the last four days of the month :—

PROVINCE OR DIVISION.	DEPARTURE FORM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	27th Sept.	28th Sept.	29th Sept.	30th Sept.
	°	°	°	°
United Provinces of Agra and Oudh.	+0·4	+2·2	+1·8	−0·9
Punjab	−0·1	+1·2	+1·6	+0·9
North-west Frontier Province	−2·2	+0·1	−0·9	−0·4
Sind	+2·6	+2·2	+0·8	+0·5
Rajputana	+1·5	+2·8	+2·5	+2·4
Gujarat East	+2·2	+2·4	+2·3	+1·5
Central India	+0·2	+0·6	+1·8	+0·5
Central Provinces	−5·1	−2·7	−1·2	+0·4
Berar	−2·0	−2·9	−1·2	−0·3
West Coast	+1·2	+1·5	+1·5	+2·1
Bombay Deccan	+0·7	+2·3	+3·3	+5·1
Mysore	+1·0	+1·3	+2·6	+5·0
Madras Coast	+3·5	+3·8	+3·4	−1·2
Madras Deccan	+4·5	+5·2	+6·8	+7·5
South India	+1·4	+1·2	+2·6	+3·6

Winds.

The wind direction, on the mean of the month, was ightly more westerly than usual at the Bay Islands and n the Burma and Orissa coasts and the velocity within his area was above the average. This is shown below :—

Station.	Mean wind direction.			Mean wind velocity in miles per diem.		
	Actual, September 1905.	Normal, September.	Westerly Deflection.	Actual, September 1905.	Normal, September.	Departure from normal, September 1905.
	°	°				
ort Blair . . .	S 57 W	S 54 W	+ 3	315	228	+87
angoon . . .	S 10 W	S 24 W	—14	63	84	—21
iamond Island . .	S 51 W	S 45 W	+ 6	235	190	+45
alse Point . . .	S 20 W	S 18 W	+ 2	242	204	+38

On the other hand, at Akyab and over deltaic Bengal he mean direction was unusually easterly. In this region so, however, the velocity exceeded the average while he steadiness was about normal. The following gives ata :—

Station.	Mean wind direction.			Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, September, 1905.	Normal, September.	Easterly Deflection.	Actual percentage, September, 1905.	Normal percentage, September.	Departure from normal, September, 1905.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	°	°							
kyab . .	S 18 E	S 3 E	+15	53	42	+11	126	72	+ 54
hittagong .	S 17 E	S 21 E	— 4	48	37	+11	137	106	+ 31
lcutta . .	S 18 E	S 9 W	+27	45	46	— 1	130	98	+ 32
ugor Island .	S 11 E	S 3 W	+14	47	48	— 1	370	264	+106

In the Gangetic Plain the wind was also unusually sterly, the mean direction having been north-north-easterly. he velocity was low. The following gives data :—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual, Sept., 1905.	Normal, Sept.	Actual, Sept., 1905.	Normal, Sept.	Departure from normal, Sept., 1905.
	°	°			
lahabad . . .	N 33 E	N 15 W	88	142	—54

In the Upper Sub-Himalayas the wind was unsteady and departed irregularly from the average both as regards velocity and direction. At Kurrachee the wind conditions were approximately normal, but in the Upper Indus Valley the winds, as in the Upper Sub-Himalayas, varied irregularly from the normal.

In Rajputana and Gujarat the wind's direction and velocity were approximately normal, but the steadiness was greater than usual. The following gives data:—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, September, 1905.	Normal, September.	Actual percentage, September, 1905.	Normal percentage, September.	Departure from normal, September, 1905.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	°	°						
Jaipur . .	N 42 W	N 42 W	53	43	+ 10	105	101	+4
Deesa . .	S 76 W	S 72 W	70	53	+ 17	180	199	—19

The following gives mean comparative data of the air movement for the different divisions of northern India and for Burma and the Bay Islands :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, September, 1905.	Normal percentage, September.	Departure from normal, September, 1905.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
Bay Islands . .	73	73	0	315	228	+87
Burma . . .	55	49	+ 6	141	115	+26
Bengal . . .	47	44	+ 3	212	156	+56
Chota Nagpur .	15	8	+ 7	191	178	+13
Orissa . . .	38	36	+ 2	242	204	+38
United Provinces of Agra and Oudh.	22	15	+ 7	46	64	—18
Punjab . .	32	36	— 4	38	42	— 4
North-west Frontier Province.	27	49	—22	20	67	—47
Rajputana .	53	43	+10	105	101	+ 4
Gujarat, East . .	70	53	+17	180	199	—19
Sind . . .	73	66	+ 7	205	210	— 5

A steady north-westerly and west-north-westerly wind prevailed over the Deccan and at several stations, the

velocity exceeded the normal. The following gives mean data of the Deccan stations :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, September, 1905.	Normal, September.	Actual percentage, September, 1905.	Normal percentage, September	Departure from normal, September, 1905.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	°	°						
Belgaum . .	N 58 W	S 78 W	53	74	—21	298	377	—79
Sholapur . .	N 62 W	N 69 W	74	65	+ 9	296	202	+94
Akola . . .	N 52 W	N 60 W	90	68	+22	164	156	+ 8
Buldana . .	N 66 W	N 48 W	82	64	+18	212	194	+18
Khandwa . .	N 49 W	N 63 W	82	67	+15	343?	154	+189?
Nagpur . .	N 57 W	N 52 W	59	36	+23	152	127	+25
Hyderabad (D) .	N 86 W	N 75 W	73	53	+20	122	134	—12

At Bombay the mean wind was slightly more southerly, less steady and lighter than usual, while at Karwar it was more northerly, stronger and steadier than the average. The following gives data for these two stations :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, September 1905.	Normal, September.	Actual percentage, September, 1905.	Normal percentage, September.	Departure from normal, September, 1905.	Actual, September 1905.	Normal, September.	Departure from normal, September, 1905.
	°	°						
Bombay . .	S 88 W	N 84 W	47	52	— 5	191	259	—68
Karwar . .	N 74 W	N 78 W	80	77	+ 3	120	70	+50

Over South India the wind conditions were approximately normal.

The following gives mean comparative data of the air movement for the different divisions of the Peninsula :—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, September, 1905.	Normal percentage, September.	Departure from normal, September, 1905.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
Central Provinces .	71	52	+19	152	127	+25
Berar	86	66	+20	188	175	+13
Bombay Deccan . .	64	70	— 6	297	290	+ 7
Madras Deccan . .	75	63	+12	164	178	—14
West Coast . .	64	65	— 1	156	165	— 9
Mysore . . .	76	75	+ 1	179	176	+ 3
Madras Coast . .	61	53	+ 8	177	144	+33
South India . .	59	67	— 8	102	82	+20

In Baluchistan and at the Himalayan hill stations the wind conditions, on the mean of the month, were approximately normal, though the mean direction was slightly more westerly than usual at the stations for which comparative data are given below :—

HILL STATION.	MEAN WIND DIRECTION.	
	Actual, September, 1905.	Normal, September.
	°	°
Leh	S 83 W	S 66 W
Srinagar	N 56 W	N 33 W
Simla	N 13 W	N 8 E
Ranikhet	S 62 W	S 59 W

At the central hill stations the winds were steadier and generally stronger than the average, but the mean directions were about normal.

The wind was more easterly than usual in the Gulf of Aden and was considerably stronger than the average at Perim. This is shown below :—

STATION.	MEAN WIND DIRECTION.		MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, September, 1905.	Normal, September.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
Aden . . .	S 32 E	S 24 E	202	230	— 28
Perim . .	S 27 E	N 23 E	423	288	+135

At all three stations in the South-east Trades region the wind direction, on the mean of the month, was more easterly

than usual. The velocity was low at Mauritius and about normal elsewhere. The following gives data :—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual, September, 1905.	Normal, September.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	°	°			
Zanzibar . . .	S 35 E	S 6 E	133	134	— 1
Seychelles . .	S 41 E	S 39 E	272	292	—20
Mauritius . . .	S 87 E	S 72 E	183	288	—105

The following summarises the chief features of the wind circulation of the month :—

(1) The wind was unusually easterly over the Equatorial Belt and was light at Mauritius.

(2) It was approximately normal over the Peninsula and the central parts of the country both on the hills and plains.

(3) Over the central parts of the Bay the wind direction, on the mean of the month, was somewhat more westerly than usual, but over the head of the Bay and deltaic Bengal the wind became more easterly than usual and this feature was shown as far west as Allahabad.

(4) In Upper India the winds were, as usual, unsteady and varied irregularly as regards direction.

(5) On the hills the winds were approximately normal, though in some places they were more westerly than usual.

Humidity and Cloud.

The departures from normal of the mean 8 A.M. vapour tension for the month of September exhibited an irregular distribution. The absolute humidity, on the mean of the month, exceeded the average over (1) Inland Burma, (2) the Brahmaputra Valley, (3) west and south-west Bengal and the United Provinces, (4) the central Punjab, (5) parts of Lower Sind and of Gujarat, (6) part of the Deccan, (7) Mysore and part of the Malabar coast, and (8) part of south India. In most of these areas the departures were generally small, but at the following places amounted to +·050″ or more :—

Province or division.	Station.	Absolute humidity.		
		Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
		″	″	
Burma . .	Thayetmyo . . .	·931	·876	+·055
Orissa .	Cuttack . . .	·949	·894	+·055
Punjab .	Lahore . . .	·835	·734	+·101
	Khushab . . .	·751	·679	+·072
South India	Madura . . .	·795	·737	+·058
	Cocanada . . .	·923	·860	+·063
Central Provinces.	Chanda . . .	·863	·810	+·053

In other parts of the Indian area the mean 8 A.M. absolute humidity was less than usual. The negative departures were similar in amount to the positive departures and exceeded —·050″ only at the following places :—

Station.	Absolute humidity.		
	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	″	″	
Bhavnagar	·765	·856	—·091
Montgomery	·632	·702	—·070
Ahmednagar	·622	·685	—·063
Nellore	·787	·849	—·062
Waltair	·827	·882	—·055
Poona	·627	·679	—·052

At the majority of the hill stations the mean absolute humidity was less than usual, but at the interior and eastern Himalayan stations there was some excess. The following gives data :—

Hill station.	Absolute humidity.		
	Actual, September, 1905.	Normal, September.	Departur from normal, September, 1905.
	″	″	
Quetta	·267	·330	—·063
Chaman	·239	·269	—·030
Simla	·371	·397	—·026

Hill station.	Absolute humidity. Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	"	"	
Srinagar	·447	·468	—·021
Murree	·367	·381	—·014
Chakrata	·448	·450	—·002
Leh	·213	·176	+·037
Ranikhet	·517	·485	+·032
Gilgit	·358	·331	+·027
Darjeeling	·492	·474	+·018
Pachmarhi	·601	·627	—·026
Mount Abu	·529	·551	—·022
Wellington	·443	·429	+·014
Lashio	·729	·732	—·003

Over northern India the distribution of the departures from normal of mean 8 A.M. relative humidity was generally similar to that of the absolute humidity departures, but in the Peninsula, where the mean temperature was very high, there was some change and the deficiency of mean relative humidity was more marked and more extensive than that of mean absolute humidity. The mean relative humidity was generally in excess of the normal over central and north-east India and Burma; over the central Punjab and over the south-east of the Peninsula and Ceylon. The departures from normal amounted to +5 or more at the following places:—

station.	Relative humidity. Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	%	%	
Lahore	78	67	+11
Chanda	89	80	+ 9
Ranchi	90	83	+ 7
Sutna	87	80	+ 7
Khushab	66	60	+ 6
Cocanada	86	80	+ 6
Cuttack	87	82	+ 5
Patna	88	83	+ 5
Jabbulpore	89	84	+ 5
Madura	73	68	+ 5
Colombo	84	78	+ 6

Within the areas of deficient relative humidity the defect amounted to more than 5 at the following stations:—

Station.	Relative humidity. Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	%	%	
Trivandrum	69	84	—15
Cuddapah	61	74	—13
Ahmednagar	70	82	—12
Sholapur	67	78	—11
Rajkot	71	82	—11
Bhavnagar	71	82	—11
Bijapur	74	84	—10
Raichur	70	80	—10
Jaipur	63	73	—10
Rawalpindi	59	72	—13
Kurnool	71	78	— 7
Gulbarga	73	80	— 7
Ajmer	68	75	— 7
Agra	67	74	— 7
Sambhar	63	69	— 6
Pachpadra	70	76	— 6
Poona	75	81	— 6
Hyderabad (D)	77	83	— 6
Nellore	70	76	— 6

The greatest deficiency was thus reported from the Deccan and within this area the following low humidities were recorded during the month:—

Station.	Date.	Hour.	Lowest humidity recorded during September, 1905.
			%
Ahmednagar	30th	8 A.M.	45
Cuddapah	19th	" "	49
Bellary	19th	" "	51
Cuddapah	20th	" "	52
	28th	" "	52
	29th	" "	52
Raichur	19th	" "	54
Bellary	29th	" "	54
Sholapur	30th	" "	54
Malegaon	30th	" "	55
Bellary	28th	" "	55
Sholapur	17th	" "	56
Malegaon	28th	" "	56

STATION.	Date.	Hour.	Lowest humidity recorded during September, 1905.
			%
Cuddapah	21st	8 A.M.	56
	22nd	" "	56
	27th	" "	56
Sholapur	18th	" "	57
Cuddapah	13th	" "	57

At the hill stations the departures of mean relative humidity from normal were generally small, but exceeded 5 at the following places :—

HILL STATION.	RELATIVE HUMIDITY.		
	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	%	%	
Leh	60	48	+12
Quetta	43	50	− 7
Simla	70	76	− 6

The following gives the highest (above 90%) and lowest below 65%) mean 8 A.M. humidities reported and hence shows the dampest and driest areas on the mean of the month :—

STATION.	Mean relative humidity exceeding 90%	STATION.	Mean relative humidity less than 65%
Bassein	95	Sirsa	63
Akyab	95	Jodhpur	63
Mergui	93	Jaipur	63
Sibsagar	93	Sambhar	63
Sibrugarh	93	Multan	62
Savoy	92	Peshawar	62
Moulmein	92	Cuddapah	61
Rangoon	92	Kotah	60
Thamo	92	Rawalpindi	59
Rajganj	92	Tinnevelly	56
Baniganj	92	Montgomery	55
Namethin	91		
Tezpur	91		
Muzaffarpur	91		

At Perim and Aden both the daily absolute and relative humidities were higher than usual on the mean of the month. This is shown below:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	"	"		%	%	
Perim	·917	·909	+·008	68	67	+1
Aden	·898	·859	+·039	70	66	+4

Both at the Seychelles and Mauritius the mean absolute humidity exceeded the normal, but at the former station the mean relative humidity was in trifling defect. The following gives data :—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	"	"		%	%	
Mauritius	·564	·522	+·042	76	72	+4
Seychelles	·792	·767	+·025	79	80	−1

The following summarises the mean humidity conditions of the month :—

(1) Both the absolute and relative humidities at 8 A.M., on the mean of the month, were generally in excess over Burma, north-east India, parts of central India and of the east of the Peninsula, the south of the Peninsula, part of Gujarat, and the central Punjab.

(2) The excess was greatest over the central Punjab and was generally moderate or slight elsewhere.

(3) In all other parts of the Indian area the absolute and relative humidities were in defect of the normal.

(4) The deficiency of mean relative humidity was large over the centre and south-west of the Peninsula, over part of Gujarat, over eastern Rajputana and neighbouring regions, and over the submontane Punjab.

(5) In the Gulf of Aden and in the South-east Trades region the mean absolute and relative humidities were about normal or in excess.

(6) At most of the hill stations the departures from normal were small.

The following table gives comparative data of the mean

aqueous vapour pressure and of mean humidity of the nine meteorological provinces for the month :—

METEOROLOGICAL PROVINCE.	MEAN ABSOLUTE HUMIDITY.		MEAN RELATIVE HUMIDITY.	
	Average actual, September, 1905.	Departure from normal, September, 1905.	Average actual, September, 1905.	Departure from normal, September, 1905.
	"		%	
Burma Coast and Bay Islands	·894	—·006	87	—2
Bengal and Orissa	·942	—·010	87	0
Gangetic Plain and Chota Nagpur	·839	+·015	85	+1
Upper Sub-Himalayas	·760	+·009	72	—1
Indus Valley and North-West Rajputana.	·719	—·009	63	—2
East Rajputana, Central India and Gujarat.	·684	—·031	61	—8
Deccan	·711	—·013	77	—3
West Coast	·843	—·001	84	—3
South India	·713	+·009	75	—1

The mean 8 A.M. cloud amount of the month exceeded the normal over the extreme north-west of India, and over large parts of the Gangetic Plain, of central and north-east India, and of Burma. The excess was more than 2·0 at the following places :—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
Yamethin	8·5	4·0	+4·5
Neemuch	5·9	3·4	+2·5
Ajmer	5·5	3·1	+2·4
Sutna	8·1	5·9	+2·2

In other parts of the country the mean 8 A.M. cloud amount was less than usual, the deficiency amounting to 2·0 or more at the following places :—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
Raichur	3·9	6·7	—2·8
Malegaon	2·8	5·6	—2·8
Pachpadra	1·1	3·5	—2·4
Silchar	6·3	8·7	—2·4
Deesa	2·8	5·0	—2·2
Bijapur	5·2	7·3	—2·1
Mergui	5·0	7·1	—2·1

At the following stations the mean 8 A.M. cloud amount of the month was more than 8·0 or less than 2·0 and these places hence outline the areas of least and greatest serenity on the mean of the month :—

STATION.	Mean cloud amount exceeding 8·0	STATION.	Mean cloud amount less than 2·0
Dhubri	9·2	Sirsa	1·8
Rangoon	8·8	Sialkot	1·8
Waltair (Vizag.)	8·8	Peshawar	1·8
Sibsagar	8·7	Ludhiana	1·5
Yamethin	8·5	Khushab	1·5
Moulmein	8·4	Bikaner	1·5
Hazaribagh	8·4	Montgomery	1·3
Toungoo	8·3	D. I. Khan	1·1
False Point	8·3	Jacobabad	1·1
Sutna	8·1	Pachpadra	1·1
		Multan	1·0
		Hyderabad (Sind)	0·5

At Perim and Aden the mean daily cloud amount of the month was considerably less than usual and was very low, while, on the contrary, in the South-east Trades region the mean daily cloud amount slightly exceeded the normal. The following gives data :—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, September, 1905.	Normal, September.	Departure from normal, September, 1905.
	"		"
Perim	1·6	2·8	—1·2
Aden	0·9	2·4	—1·5
Seychelles	6·1	5·6	+0·5
Mauritius	5·9	5·6	+0·3

The following summarises the principal features of the cloud distribution of the month :—

(1) The sky was more cloudy than usual in the extreme north-west of India and also over large parts of the Gangetic Plain, of central and north-east India, and of Burma.

(2) Elsewhere the sky was generally clearer than usual.

(3) The deficiency of cloud amount was most marked over southern Rajputana and parts of the centre of the Peninsula.

(4) At Aden and Perim the cloud amount was low and less than usual.

(5) In the South-east Trades the mean cloud amount slightly exceeded the average.

The following table gives comparative data of the mean oud amount for the nine meteorological divisions :—

Meteorological province.	Mean cloud amount.	
	Average actual, September, 1905.	Departure from normal, September, 1905.
rma Coast and Bay Islands . . .	7·5	—0·2
engal and Orissa	7·6	+0·1
angetic Plain and Chota Nagpur . .	7·3	+ 0·3
Upper Sub-Himalayas . . .	2·7	—0·6
Indus Valley and North-West Rajputana	2·3	+ 0·2
East Rajputana, Central India, and Gujarat	4·1	—0·6
Deccan	6 5	—0·4
West Coast	5·1	—1·3
South India	7·1	+0·2

Rainfall.

During the month under review the Arabian Sea mon- oon current, as a rain-giving current, was weak, but a eries of five cyclonic storms or depressions were deve- oped over the Bay and passing north-westward into India ccasioned heavy rain over considerable areas. Thus ie rainfall was mainly cyclonic and in many parts of the ountry only fell during limited portions of the month, yet ie amounts were heavy and the total fall was, in a large umber of divisions, in excess of the normal.

The principal periods of rainfall were :—

The 3rd to the 5th, when Burma, north-east India, and the outh of the Peninsula received fairly general rain ;

The 6th to the 13th, when Burma, northern and central ndia, and the north-west Himalayas received general and n places heavy rain ;

The 10th to the 12th, when Burma and north-east India eceived rain from the third storm of the month ;

The 14th to 16th, when Bengal received moderate to eavy rain ;

The 20th to 26th, when Burma and north-east and central India received moderate to heavy rain ; and

The 27th to the 30th, when Burma and north-east India received general rain.

The preceding statement shows that in Burma and north-east India the weather was almost continuously wet, but that there were no marked periods of rain over the Peninsula and that there was only one period of general rain over northern and central India, *viz.*, during the existence of the second storm of the month between the 6th and the 13th.

The chart, Plate VII, shows the distribution of rain for the month according to the meteorological observatories. In Baluchistan and the Indus Valley, as well as at Pamban in the extreme south of the Peninsula, there was no rain throughout the month, while in Kathiawar and part of the Bombay Deccan there was less than half an inch. From these areas of light rain the amount increased and the total fall of the month amounted to over 30 inches at Darjeeling, Mymensingh, Noakhali, Tavoy, and Mergui.

The following table gives the mean actual, mean normal, and departure data for 57 meteorological divisions of India :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, September, 1905.	Average normal, September.	Average actual, September, 1905.	Average normal, September.	Departure of actual from normal, September, 1905.
				Inches.	Inches.	Inches.
URMA . . .	Tenasserim	22·0	22·8	31·17	30·67	+ 0·50
	Lower Burma (Deltaic)	20·6	19·7	17·66	15·77	+ 1·89
	Central do.	18·0	13·9	12·61	8·53	+ 4·08
	Upper do.	12·4	10·0	11·25	7·47	+ 3·78
	Arakan	19·2	18·6	23·96	18·93	+ 5·03

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, September, 1905.	Average normal, September.	Average actual, September, 1905.	Average normal, September.	Departure of actual from normal, September, 1905.
				Inches.	Inches.	Inches.
Bengal and Assam	Eastern Bengal	15·7	13·1	20·10	11·40	+8·70
	Assam (Surma)	15·8	15·5	11·55	15·72	—4·17
	Do. (Hills)	17·2	17·0	17·82	18·09	—0·27
	Do. (Brahmaputra)	11·7	12·9	9·01	11·24	—2·23
	Deltaic Bengal	15·8	11·7	13·77	9·24	+4·53
	Central do.	15·5	11·6	12·69	10·16	+2·53
	North do.	14·2	13·5	13·51	17·73	—4·22
	Bengal Hills	16·6	16·6	19·14	16·59	+2·55
	Orissa	16·4	12·1	10·87	9·93	+0·94
	Chota Nagpur	14·9	10·4	13·60	8·30	+5·30
	Bihar (South)	13·3	8·7	14·57	7·61	+6·96
	Do. (North)	13·5	9·3	13·40	10·31	+3·09
United Provinces of Agra and Oudh.	United Provinces (East)	9·0	8·0	9·48	6·81	+2·67
	Oudh (South)	6·3	7·3	5·62	6·47	—0·85
	Do. (North)	7·6	7·2	4·81	7·54	—2·73
	United Provinces (Central)	5·8	6·6	4·24	5·53	—1·29
	Do. do. (West)	3·7	4·7	2·52	4·34	—1·82
	Do. do. (East Submontane)	10·2	7·7	7·58	8·07	—0·49
	Do. do. (West do.)	4·6	6·3	4·82	6·91	—2·09
	Do. do. (Hill)	7·0	8·5	4·98	7·79	—2·81
Punjab	Punjab (South-East)	2·9	3·7	3·17	3·88	—0·71
	Do. (South)	3·1	2·9	4·05	2·40	+1·65
	Do. (Central)	2·8	2·3	7·15	1·92	+5·23
	Do. (Submontane)	3·5	3·6	5·66	3·48	+2·18
	Do. (Hills)	4·9	6·6	5·59	6·09	—0·50
	Do. (West)	1·8	1·1	2·27	0·79	+1·48
N.-W.F. Province	North-west Frontier Province	3·0	2·2	1·98	1·36	+0·62
Bombay and Malabar Coast Districts (Madras).	Malabar	11·8	14·0	7·72	9·30	—1·58
	Travancore	9·7	...	6·32	...	...
	Madras (South, Central)	4·6	6·6	2·48	4·73	—2·25
	Coorg	10·8	...	5·64	...	...
	Mysore	3·8	7·4	1·53	4·83	—3·30
	Konkan	10·9	16·0	7·70	13·50	—5·80
	Bombay Deccan	2·9	8·6	1·23	5·89	—4·66
	Hyderabad North	8·9	10·5	7·95	8·24	—0·29
	Khandesh	6·0	8·9	3·23	6·59	—3·36
Central Provinces and Berar.	Berar	9·4	8·0	8·99	5·93	+3·06
	Central Provinces (West)	10·7	9·8	15·50	8·67	+6·83
	Do. (Central)	10·8	10·0	12·19	8·17	+4·02
	Do. (East)	14·2	9·9	13·29	7·78	+5·51
Bombay (North)	Gujarat East	4·3	7·4	3·27	6·61	—3·34
	Kathiawar and Cutch	2·1	5·0	1·87	4·41	—2·54
	Sind	0·3	0·7	0·10	0·47	—0·37
	Baluchistan Hills	0·1	0·3	0·09	0·13	—0·04
Rajputana and Central India.	Central India (East)	7·5	7·8	5·74	6·32	—0·58
	Rajputana (East), Central India (West)	4·2	4·9	3·00	4·01	—1·01
	Do. (West)	2·4	2·3	2·73	2·08	+0·65
Madras	East Coast (North)	9·3	10·0	9·08	7·52	+1·56
	Hyderabad South	6·3	10·3	3·30	6·80	—3·50
	Madras (Central)	2·1	7·5	0·83	5·30	—4·47
	East Coast (Central)	4·4	6·4	2·83	4·01	—1·18
	Do. (South)	5·0	6·8	3·52	5·34	—1·82
	Madras (South)	3·2	3·5	1·01	2·15	—0·54

The preceding data show that the average actual fall of the month was 0·09″ in Baluchistan, 0·10″ in Sind and 0·83″ in Central Madras, but increased from these areas and equalled 20·10″ in East Bengal, 23·96″ in Arakan and 31·17″ in Tenasserim.

The total rainfall was in excess of the normal in twenty-five and in defect in thirty-one divisions. The total rainfall was more than 70% in excess of the normal in the following divisions:—

Division.	Rainfall.			
	Average actual, September 1905.	Average normal, September.	Departure from normal, September 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Eastern Bengal	20·10	11·40	+8·70	+ 76
South Bihar	14·57	7·61	+6·96	+ 91
Central Punjab	7·15	1·92	+5·23	+272
West „	2·27	0·79	+1·48	+187
Central Provinces West	15·50	8·67	+6·83	+ 79
„ „ East	13·29	7·78	+5·51	+ 71

It was more than 50% in defect of the normal in the following divisions:—

Division.	Rainfall.			
	Average actual, September 1905.	Average normal, September.	Departure from normal, September 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Mysore	1·53	4·83	−3·30	−68
Bombay Deccan	1·23	5·89	−4·66	−79
Khandesh	3·23	6·59	−3·36	−51
Gujarat East	3·27	6·61	−3·34	−51
Kathiawar and Cutch	1·87	4·41	−2·54	−58
Sind	0·10	0·47	−0·37	−79
Hyderabad South	3·30	6·80	−3·50	−51
Madras Central	0·83	5·30	−4·47	−84

The rainfall was thus generally deficient over the Peninsula and North Bombay and generally in excess elsewhere. The departure from normal of the rainfall of the whole country (excluding the hill divisions) calculated from the fifth figure column of the table on pp. 267 and 268 was +0·42″.

Fairly general daily rain fell over Tenasserim, Lower and Central Burma and Arakan during the month, though, with the exception of a heavy fall on the 26th and 27th, rain was both less heavy and less general after the 23rd than in the earlier part of the month. The heaviest falls exceeding 4″ in 24 hours ordinarily occurred during the first week when the first and second storms of the month were developing over the Bay or on the 26th and 27th when the last storm of the month was passing through Burma. This is shown below:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Thaton	Kyaikto	1st Sept. 1905	4·86
Tavoy	Launglon	4th „	6·40
Do.	Thayetchaung	„ „	4·70
Do.	Tavoy	5th „	4·25
Mergui	Mergui	6th „	4·10
Rangoon Town	Rangoon	9th „	6·53
Hanthawaddy	Hmawbi	„ „	4·90
Do.	Kyauktan	10th „	5·21
Kyaukpyu	Kyaukpyu	14th „	4·32
Tavoy	Launglon	17th „	6·58
Amherst	Amherst	26th „	5·10
Do.	Do.	27th „	5·05
Tharrawaddy	Minhla	„ „	5·00
Do.	Tharrawaddy	„ „	4·16
Do.	Nattalin	„ „	4·15

In Upper Burma the rainfall was less continuous than in other parts of the Province, the principal periods of rainfall having been the 2nd to 4th, the 6th and 7th, the 10th to 13th, the 20th to 24th and the 26th to 28th. The heaviest falls exceeding 4″ in 24 hours were recorded under the same conditions as those of Lower Burma and were generally registered in the first week or on the 26th and 27th. The following gives data:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Meiktila	Yegyo	1st Sept. 1905	6·17
Pakokku	Minza	„ „	5·00
Lower Chindwin	Monywa	2nd „	5·64
Meiktila	Meiktila	„ „	5·05
Kyaukse	Kume	„ „	4·85
Sagaing	Tada-u	„ „	4·61
Mandalay	Maymyo	„ „	4·50
Meiktila	Pyin-Nyaung	„ „	4·50
Southern Shan States	Fort Stedman	„ „	4·40
Sagaing	Myinmu	„ „	4·15

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Myitkyina . . .	Mogaung . . .	4th Sep. 1905 .	4·35
Yamethin . . .	Yamethin . . .	6th „ .	4·60
Sagaing . . .	Tada-u . . .	7th „ .	8·05
Do. . . .	Myotha . . .	10th „ .	4·87
Do. . . .	Chaungu . . .	„ „ .	4·20
Myitkyina . . .	Myitkyina . .	11th „ .	4·48
Sagaing . . .	Tada-u . . .	21st „ .	4·12
Pakokku . . .	Pasok . . .	26th „ .	5·46
Chin Hills (Pakokku) . .	Kanpetlet . . .	27th „ .	6·66
Chin Hills . .	Fort White . .	28th „ .	8·28

The rainfall of the whole Province was normal or in excess of the normal.

In the Assam plains divisions the rainfall was fairly continuous between the 3rd and 8th and the 11th and 18th, but was lighter and intermittent after the latter date. Both in the Surma and Brahmaputra Valleys the total rainfall of the month was lighter than usual, but falls exceeding 4″ in 24 hours were recorded at the following places on the following days during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Cachar . . .	Koyah . . .	5th Septr. 1905	4·21
Kamrup . . .	Nalbari . . .	8th „ „	4·30
Sylhet . . .	Sunamganj . .	16th „ „	4·50
Do. . . .	Lalakhal . .	18th „ „	5·15
Darrang . . .	Kerkeriya . .	26th „ „	4·88

On the hills the total rainfall of the month was normal. At Cherra Poonjee the total fall equalled 68·22″ instead of the normal 53·25″. There was only one heavy burst of rain at this station, *viz.*, between the 12th and 17th, when 57·27″ was received. The heaviest fall in 24 hours was 16·25″ registered on the 15th.

Over Bengal fairly continuous daily rain was received, but the rainfall was most general during the development and passage of the various cyclonic storms of the month or between the 3rd and 9th, the 12th and 16th, the 22nd and 26th, and the 28th and 30th. The total rainfall of the month was less than usual in North Bengal, which division was, like Assam, away from the paths of the various depressions; normal in Orissa and between 25% and 90% in excess in the remaining divisions. The rainfall was heavy in Bengal between the 1st and 5th when the first storm was developing or passing through the province; on the 14th and 15th when the third storm of the month lay over West Bengal, and on the 28th, 29th and 30th when the last storm was passing through the province. The following amounts exceeding 7·00″ in 24 hours were registered at the following places on the following days during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Mymensingh . .	Diwanganj . .	13th Septr. 1905	7·88
Noakhali . . .	Harishpur . .	„ „ .	7·10
Do.	Hatiya . . .	14th „ .	10·31
Do.	Harishpur . .	„ „ .	9·28
Shahabad . . .	Mohanea . .	„ „ .	7·25
Do.	Sasaram . .	„ „ .	7·20
Do.	Do. . . .	15th „ .	9·07
Noakhali . . .	Harishpur . .	„ „ .	8·14
Gaya . . .	Jahanabad . .	„ „ .	8·13
Khulna . . .	Kaliganj . .	„ „ .	7·50
24-Parganas . .	Canning Town .	„ „ .	7·28
Gaya	Nabinagar . .	16th „ .	11·20
Shahabad . . .	Bassowan . .	„ „ .	9·16
Palamau . . .	Husainabad . .	„ „ .	8·67
Do.	Garnwa . .	„ „ .	8·46
Do.	Ranka . . .	„ „ .	7·95
Do.	Bhaonathpur . .	„ „ .	7·85
Shahabad . . .	Bhabhua . .	„ „ .	7·80
Do.	Sasaram . .	„ „ .	7·23
24-Parganas . .	Canning Town .	28th „ .	7·21
Darbhanga . . .	Laukahi . .	29th „ .	11·00
Monghyr . . .	Chupreon . .	30th „ .	12·40
Bhagalpur . . .	Supaul . . .	„ „ .	11·10
Muzaffarpur . .	Pupri . . .	„ „ .	11·05
Do.	Sitamarhi . .	„ „ .	10·65
Darbhanga . . .	Khutonia . .	„ „ .	10·27
Bhagalpur . . .	Bangaon (Syfabad) .	„ „ .	10·00
Darbhanga . . .	Darbhanga . .	„ „ .	9·10

There were three periods of fairly general rain over the United Provinces, *viz.*, between the 4th and the 10th, the 12th and the 19th, and on the 29th and 30th. The amount of rain and the length of the periods both, how-

ever, diminished on proceeding westward and it was only in the eastern division that the month's rainfall exceeded the normal. The greatest deficiency was in the west division and the following gives comparative data of the contained districts:—

Division.	Station.	Rainfall. Average actual, September 1905.	Average normal, September.	Departure from normal, September 1905.	Percentage departure from normal.
		Inches.	Inches.	Inches.	
United Provinces West.	Agra	2·76	4·46	−1·70	−38
	Muttra	2·16	4·02	−1·86	−46
	Aligarh	2·57	4·27	−1·70	−40
	Bulandshahr	2·22	4·37	−2·15	−49
	Meerut	2·72	4·53	−1·81	−40

The heaviest rainfall occurred on the 6th or between the 12th and 16th when the following amounts exceeding 4″ in 24 hours were recorded:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Banda	Karwi	6th Septr. 1905	4·64
Partabgarh	Kunda	12th „ „	4·60
Hardoi	Sandila	12th „	4·50
Ghazipur	Zamania	14th „	5·50
Jhansi	Narhat	„ „	4·70
Ghazipur	Ghazipur	„ „	4·15
Benares	Benares	15th „	5·60
Mirzapur	Chakia	„ „	4·85
Benares	Chandauli	„ „	4·01
Ghazipur	Muhammadabad	16th „	6·93
Do.	Zamania	„ „	6·80
Mirzapur	Chakia	„ „	5·41
Ghazipur	Ghazipur	„ „	5·10
Ballia	Rasra	„ „	5·10
Ghazipur	Sayadpur Bhitari	„ „	4·64
Benares	Chandauli	„ „	4·30
Mirzapur	Dudhi	„ „	4·26
Do.	Robertsganj	„ „	4·20
Gonda	Gonda	„ „	4·05

The total rainfall of the month was normal over the hills and south-east divisions of the Punjab and was in large to very large excess in the other divisions. There was only one burst of general rain over the Punjab—between the 10th and 14th—but there were showers on the 1st in some parts of the province and at the close of the month in the north-west and hills divisions. Several heavy falls of rain were recorded during the general fall about the middle of the month, and at the following places amounts of 5·00″ or more in 24 hours were recorded on the following dates:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Amritsar	Buggeh	10th September	6·00
Frozpor	Jalalabad	11th „	5·41
	Gobindgarh	„ „	5·00
Gujranwala	Gujranwala	12th „	11·74
Rawalpindi	Murree	„ „	8·05
Sialkot	Pasrur	„ „	7·48
Lahore	Lahore	„ „	7·05
Gurdaspur	Madhopur	„ „	6·80
Shahpur	Midh	„ „	6·75
Gujranwala	Wazirabad	„ „	6·70
Amritsar	Buchar	„ „	6·40
Gurdaspur	Pathankot	„ „	6·27
Lahore	Nijabat	„ „	6·10
	Mianmir	„ „	6·00
Sialkot	Daska	„ „	5·88
Rawalpindi	Gujar Khan	„ „	5·88
	Kahuta	„ „	5·80
Gujrat	Sadar (Gujrat)	„ „	5·65
Gujranwala	Shekhupura	„ „	5·50
Lahore	Niaz Beg	„ „	5·50
Jhang	Chiniot	„ „	5·33
Gurdaspur	Shakargarh	„ „	5·30
Gujrat	Kharian	„ „	5·29
Sialkot	Zafarwal	„ „	5·26
Jhelum	Pind Dadan Khan	„ „	5·25
Gujranwala	Ramnagar	„ „	5·23
Lahore	Chunian	„ „	5·10
	Pambe	„ „	5·10
	Van	„ „	5·00
Karnal	Karnal	13th „	6·90

In the North-west Frontier Province general rain occurred between the 10th and 13th and scattered showers between the 19th and 30th. The total amount for the

month was nearly 50 per cent. heavier than usual. Falls exceeding 2″ in 24 hours were registered as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Hazara	Dunga Gali	12th September	6·80
	Abbottabad	„ „	4·92
	Mansahra	„ „	2·95
	Haripur	„ „	2·80
	Dunga Gali	13th „	2·81

The rainfall of Baluchistan for the month was unimportant though some showers were received in Zhob on the 11th.

Kashmir received general and heavy rain between the 9th and the 13th when the second storm of the month was breaking up in the north-west Himalayas. The rainfall was heaviest in Jummoo and the following heavy falls, exceeding 5″ in 24 hours, were recorded :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Jummoo	Riasi	11th September	8·82
	Manawar	„ „	8·70
	Meerpore	„ „	8·32
	Akhnur	„ „	6·84
	Ramnagar	„ „	6·80
	Jummoo	„ „	6·58
	Sambha	„ „	6·42
	Kathua	„ „	6·36
	Kotli	„ „	6·20
Kashmir	Kolgam	„ „	5·61
Jummoo	Ramban	„ „	5·50
	Rampore Rajauri	12th „	8·65
	Udampore	„ „	7·10
	Sri Ranbir Singh Pora	„ „	6·10
	Bhimber	„ „	5·80

The following remarks on this heavy rainfall have been received from the Meteorological Reporter, Kashmir :—"Srinagar, 15th September. Continuous rain for over 36 hours, measuring 5″, caused high flood on the Jhelum on night of the 14th. Height of water about 3 feet below the height of the great flood of 1903. The European quarters, the Cantonment, and the whole area near first bridge are submerged. Many slips have occurred on the Jhelum Valley road and nine miles of road from Srinagar are under water."

There was a general fall of rain over Rajputana between the 9th and the 13th and showers in several States between the 26th and the 29th. The fall was unevenly distributed and over the eastern States the total fall was less than the normal. The following gives comparative data of the larger States :—

State.	Rainfall.			
	Average actual, September 1905.	Average normal, September.	Departure from normal, September 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Jaisalmer	1·57	0·83	+0·74	+89
Jodhpur	2·88	2·25	+0·63	+28
Bikaner	1·68	1·08	+0·60	+56
Jaipur	2·28	3·17	—0·89	—28
Alwar	2·74	3·77	—1·03	—27
Bharatpur	2·72	4·59	—1·87	—41
Dholpur	2·44	4·61	—2·17	—47
Karauli	1·66	4·31	—2·65	—61
Kotah	3·37	3·84	—0·47	—12
Ajmer Merwara	3·53	3·71	—0·18	— 5
Udaipur	4·13	5·15	—1·02	—20
Sirohi	6·86	5·39	+1·47	+27

The rainfall was generally heaviest on the 9th and 10th and at some stations exceptionally large amounts were received; the following gives data of falls exceeding 3″ in 24 hours during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Jhalawar	Gangdhar	9th Sept. 1905	9·73
	Dug	„ „	6·90
Kusalgarh	Kusalgarh	„ „	4·34
Banswara	Banswara	„ „	3·80
Kotah	Bakani	„ „	3·21
Jhalawar	Pachpahar	„ „	3·08
Jodhpur	Siwana	10th „	7·50
	Jasol	„ „	5·44
Bharatpur	Kaman	„ „	4·34
Jodhpur	Desuri	„ „	3·72
Bharatpur	Dig	„ „	3·20
Jodhpur	Jalor	11th „	11·00
Sirohi	Mount Abu	„ „	7·26
Jodhpur	Bali	„ „	6·60
Sirohi	Erinpura	„ „	5·56

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
AJMER-MERWARA	Jawaja	11th Sept. 1905	5·00
SIROHI	Sirohi	" "	4·34
AJMER-MERWARA	Beawar	" "	3·53
JODHPUR	Pachpadra	" "	3·51
	Desuri	" "	3·31
UDAIPUR	Udaipur	" "	3·02
ALWAR	Kishangarh	12th "	3·55
KOTAH	Sangod	13th "	3·38

Central India reported two periods of general rain, *viz.*, between the 4th and the 14th, and the 25th and the 30th. The total fall was generally less than normal, as is shown by the following comparative data of the larger States:—

STATE.	RAINFALL.			
	Average actual, September, 1905.	Average normal, September.	Departure from normal, September, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Indore	3·32	7·46	—4·14	—55
Rutlam	6·67	7·65	—0·98	—13
Bhopal Agency	7·98	7·01	+0·97	+14
Gwalior	4·85	5·40	—0·55	—10
Rewah	8·38	7·14	+1·24	+17
Bundelkhand	3·96	6·74	—2·78	—41

Falls of over 4″ in 24 hours were recorded at the following places on the following dates during the month:—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
REWAH	Umaria	5th Sept. 1905	7·00
GWALIOR	Sitamau	9th "	4·80
	Jaora	" "	4·56
RUTLAM	Rutlam	10th "	5·75
GWALIOR	Agar Western Malwa.	" "	4·41
	Shujaulpur	" "	4·12
	Mungaoli	27th "	7·05
BHOPAL AGENCY	Kurwai	" "	5·27
	Narsinghgarh	" "	4·26
	Bhopal	" "	4·02

In the Central Provinces also there were two bursts of general rain due to the second and fourth storms of the month. The rainfall periods extended from the 5th to the 15th and from the 25th to the 28th. The second storm of the month affected the Central Provinces from the 7th to the 9th, and the following amounts exceeding 5″ in 24 hours were recorded about those dates:—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
WARDHA	Wardha	7th Sept. 1905	9·50
CHANDA	Brahmapuri	" "	8·75
NAGPUR	Umrer	" "	8·12
CHANDA	Allapalli	" "	5·84
FEUDATORY STATES	Bolangir	8th "	11·11
	Bhawanipatna	" "	5·81
BHANDARA	Bhandara	" "	5·69
CHHINDWARA	Tamia	9th "	8·23
CHANDA	Allapalli	" "	5·81
HOSHANGABAD	Seoni	" "	5·08
NARSINGHPUR	Tendukhera	13th "	5·50
BULDANA	Jalgaon	14th "	5·10

The fourth storm of the month entered the Central Provinces on the 25th and 26th and occasioned the following falls of over 5″ in 24 hours:—

DISTRICT.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
RAIPUR	Drug	25th Sept. 1905	6·23
	Raipur	" "	5·85
CHHINDWARA	Tamia	26th "	11·48
NAGPUR	Ramtek	" "	8·55
HOSHANGABAD	Pachmarhi	" "	7·15
NAGPUR	Umrer	" "	6·20
	Nagpur	" "	6·10
CHHINDWARA	Chhindwara	" "	5·91
SEONI	Seoni	" "	5·20

The total rainfall of the Central Provinces for the month

was between 50 per cent. and 80 per cent. in excess of the normal.

In all parts of the Bombay Presidency the total rainfall of the month was below the normal and in most divisions by about 50 per cent. In the Konkan moderately general daily rain fell up to the 15th after which the rain, to a great extent, failed and only light scattered showers were received. The total rainfall was about half the average and the only heavy fall exceeding 4″ in 24 hours was 4·98″ at Dapoli (Ratnagiri) on the 19th. In the Karnatak, Deccan, and Khandesh moderate general rain fell between the 8th and the 16th and a few showers at other times. The Deccan received less than one-fourth and Khandesh less than half the normal. There were no heavy falls.

Gujarat received general rain from the second storm of the month between the 10th and the 13th and experienced fine weather with a few passing showers at other times. The total fall of the month was only half the average, but the rainfall was heavy on the 19th and the following amounts exceeding 4″ in 24 hours were recorded :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Panch Mahals	Halol	10th Sept. 1905	6·32
Rewa Kantha	Chhotta Udepur	" "	5·90
Panch Mahals	Kalol	" "	5·52
	Jambughoda	" "	4·50
Rewa Kantha	Baria	" "	4·50
	Lunavada	" "	4·20

Sind received a few scattered showers. In Mysore the rainfall was only one-third of the average and there were no heavy falls.

Madras, with the exception of the East Coast (north) division, had less rain than usual during the month. Malabar received daily rain up to the 15th, when the fall ceased and only a few showers were reported. The total fall of the month was, however, nearly normal though there were no heavy amounts. South-Central Madras received rain between the 1st and the 4th and the 17th and 19th and a few showers at other times. The total fall was about half the normal; Central Madras had only light local rain throughout the month and the total fall was less than one-sixth of the normal. In the north division of the East Coast there were four periods of nearly general rain, *viz.*, between the 1st and 4th, the 7th and 8th, the 11th and 15th and the 23rd and 25th, though the rainfall was less general in the southern than in the northern districts. The total fall slightly exceeded the average and falls of over 5″ in 24 hours occurred at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Ganjam	Tekkali	7th Sept. 1905	5·92
	Sompeta	" "	5·50
	Calingapatam	24th "	8·05
	Narasannapeta	" "	7·48
	Ramagiri	" "	6·18
	Parlakamedi	" "	6·10
	Tekkali	" "	5·80
	Pundi	" "	5·45
	Chicacole	" "	5·10
Vizagapatam	Pottanghi	25th "	12·00
	Koraput	" "	8·90
	Jeypore	" "	5·70
	Nowrangapur	" "	5·57
	Yellamanchili	29th "	5·28

In the central division of the East Coast rain fell between the 2nd and 4th, and on the 12th, but there was very little rain at other times and the total amount was less than usual. There was one fall of 4″ at Dugarazpatnam on the 2nd. The south division of the East Coast received general rain between the 1st and 4th and scattered showers between the 11th and 26th. The total fall was short of the normal. Falls exceeding 4″ in 24 hours were registered as follows during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Trichinopoly	Ariyalur	1st Sept. 1905	4·95
North Arcot	Chittoor	19th "	4·19

In South Madras showers were received between the 1st and 4th, and 13th and 20th, and the total was less than usual.

The following gives data for the extra-Indian stations:—

STATION.	RAINFALL.			
	Actual, September 1905.	Normal, September.	Departure from normal, September 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee	3·60	4·56	—0·96	— 21
Colombo	8·83	4·82	+4·01	+ 83
Minicoy	4·23	5·97	—1·74	— 29
Amini Divi	3·40	5·54	—2·14	— 39
Kashgar	0	0·43	—0·43	—100
Kabul	0	0·03	—0·03	—100
Meshed	0	0·02	—0·02	—100
Ispahan	0	0	0	0
Jask	0	0	0	0
Bushire	0	0	0	0
Baghdad	0·02	0	+0·02	.....
Muscat	0	0	0	0
Aden	0·60	0·13	+0·47	+362
Perim	0·01	0·01	0	.....
Zanzibar	2·98	2·03	+0·95	+ 47
Seychelles	12·72	5·37	+7·35	+137
Mauritius	2·02	1·31	+0·71	+ 54

The preceding data show that the month's rainfall was heavier than usual in the South-east Trades region and locally at Aden and Colombo.

The following summarises the principal features of the rainfall distribution:—

(1) The Arabian Sea monsoon was generally weak and practically the whole of the Peninsula received less rain than usual.

(2) Frequent storms were developed over the Bay and rain was continuous and heavier than usual over Burma and north-east India.

(3) There was only one burst of rain over north-west India, *viz.*, from the second storm of the month, but the fall was heavy and over many divisions the total fall of the month exceeded the average.

(4) The rainfall in the South-east Trades region was in excess of the average.

The following table gives mean comparative data for the eleven meteorological provinces for the month:—

METEOROLOGICAL PROVINCE.	RAINFALL.			
	Mean actual for September 1905.	Mean normal for September.	Departure from normal, September 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands	21·76	21·08	+2·17*	+ 10
Burma Inland	11·87	6·57	+5·09*	+ 77
Assam	8·91	11·92	—3·00	— 25
Bengal and Orissa	14·95	11·33	+3·62	+ 32
Gangetic Plain and Chota Nagpur	10·71	7·22	+3·50	+ 48
Upper Sub-Himalayas	4·86	4·49	+0·57*	+ 13
Indus Valley and North-west Rajputana.	1·71	0·76	+0·95	+125
East Rajputana, Central India and Gujarat.	2·33	4·36	—1·90*	— 44
Deccan	7·36	7·63	—0·05*	— 1
West Coast	6·21	9·20	—2·99	— 33
South India	3·11	5·12	—2·01	— 39

* A reference to Table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

Snowfall.

I.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Kashmir*:—No snow fell in Leh during September, but from the 10th to the 15th the weather was rainy, rain falling every day, though on the 14th the fall was too light to measure. On three days snow fell on the surrounding hills down to about 14,000 feet, there being about 1 foot of snow on the Khardong Pass (18,600 feet) on September 10th and more fell later. On the south side much melted again, though the road was always covered.

Much snow fell on the passes into Yarkhand about the middle of the month.

(2) *Srinagar*:—In September the weather was much disturbed from the 9th to the 14th, heavy rain falling in valleys and snow on the higher ranges. On the 7th, 1½ feet of snow fell on the Zojila. The first fresh snowfall visible on the higher hills around Srinagar was seen about the middle of the month a little earlier than usual. On the 23rd September fresh snow again fell on the higher ranges around Srinagar.

(3) *Simla Bashahr Division*:—The following falls of snow were reported:—

Sept.	12th	descending to	12,000 feet	where depth 1½ inches.
„	13th	„	12,000 „	„ 3 „
„	22nd	„	12,000 „	„ ½ inch.
„	23rd	„	12,000 „	„ ½ „
„	24th	„	12,000 „	„ 1 „
„	29th	„	12,000 „	„ 1 „
„	30th	„	12,000 „	„ 1 „

The accumulated snow on the various passes was as follows:—

Rupin Pass	. . .	16,000 feet	7 feet.
Bruin „	. . .	16,000 „	6 „
Harang „	. . .	12,000 „	*nil.*
Shatul „	. . .	15,000 „	3 feet.
Buldar „	. . .	16,000 „	6 „
Runang „	. . .	14,000 „	2 „

Generally the passes were open during the month.

II.—United Provinces Himalayas.

(1) *Almora*:—Reports give the approximate snowfall in this district as follows:—

	Feet.	Inches.
Johar Malla 8th	0	3
„ 9th	0	3
„ 12th	0	3
„ 17th	0	3
„ 21st	0	3
„ 27th	0	3
„ 28th	0	3
„ 29th	0	3
Total .	2	0

	Feet.	Inches.
Danpur Malla 16th	0	3
„ 28th	0	4
„ 29th	0	2
Total .	0	9

	Feet.	Inches.
Darma Malla 4th	1	0
Nirwe Pass 5th	1	0
„ 7th	1	0
„ 8th	1	0
„ 9th	1	0
„ 10th	1	0
„ 11th	1	0
„ 15th	1	0
„ 17th	1	0
„ 18th	1	0
„ 20th	1	0
„ 22nd	1	0
„ 25th	1	0
„ 27th	1	0
Total .	14	0

	Feet.	Inches.
Chandans 7th	0	3
„ 27th	0	3

The snowfall was confined to the mountain peaks.

The accumulated snow was reported to be as under:—

	Feet.	Inches.
Unt Dhura	15	0
Ralam Dhura	12	0
Millam Dhura	9	0
Pindari Peak	0	9
Kapini „	0	9
Kantela „	0	9
Nirwe Pass	21	0
Binkara Pass in Chandas . . .	10	0

The snowfall in this area in September was greater than in previous years.

Crop Report.

Madras:—Ploughing, sowing and transplanting were in progress throughout the month. At the close the standing crops were generally fair, but some, in parts of Godavari, Kistna, the Deccan, Chingleput, Salem, Coimbatore, Madura, Tinnevelly, and South Canara required more rain and some in parts of Chingleput, Coimbatore, and Tanjore were withering. Harvests continued with fair to normal outturn. The general improvement in prospects continued during the month, but more rain was still required.

Bombay:—The standing autumn crops had been damaged during the month in several districts and at the end of the month were suffering from want of sufficient rain in parts of Broach, Surat, the Konkan, the Deccan, the Karnatak, Cutch, Baroda, Kolhapur and Savantvadi.

Bengal:—Damage to crops by floods was reported from Mymensingh, Darbhanga and Monghyr. Prospects at the close of the month were generally fair.

United Provinces:—Rain fell during the month and generally improved the agricultural situation in the Meerut, Rohilkhand, and Agra divisions. In Mainpuri, Farrukhabad and parts of Etah, Etawah and Agra the rainfall was ample; elsewhere in the divisions named the rain was insufficient to secure the spring sowings. In Unao and Banda standing crops on light soils were withering and the prospect for spring sowings was doubtful.

Punjab:—The condition of the standing crops at the end of the month on irrigated land was good to average generally, but in Delhi below average. Crops on unirrigated lands were poor in Hissar, bad in Delhi, and below average in Shahpur. Fodder was scarce in Delhi and parts of Lahore and Mianwali.

North-west Frontier Province:—The condition of crops on irrigated land at the close of the month was good in Peshawar and Bannu and average in Dera Ismail Khan. More rain was badly wanted for the crops on unirrigated land.

Burma:—The standing crops were, on the whole, in good condition, and prospects were favourable.

Central Provinces:—There was a partial break in the rains towards the end of the month which proved beneficial to the crops over a large part of the area, but more rain was required for rice in Bilaspur.

Assam:—The plucking and manufacture of tea continued during the month; prospects were good in Nowgong and fair elsewhere. Prospects of jute and sugar-cane were generally fair, and of cotton generally good.

Mysore:—At the close of the month the crops required more rain and the future prospects depended on early rainfall.

Hyderabad :—More rain was generally required especially in five districts where, at the close of the month, the crops were withering. They were also in bad condition in three taluks and were withering in eight. They and the early rice crop required immediate rain in twenty-nine taluks. Elsewhere autumn crops were in good condition and the harvest was in progress in twelve taluks.

Rajputana :—Land was being prepared for spring sowings wherever sufficient rain had fallen and late autumn sowings continued during the month in Bikaner. Irrigated crops at the close of the month were generally doing well; those on dry ground were withering in parts of Kotah, and were practically lost before the rainfall of the month under review in Bikaner, Marwar, Jaisalmer, North Mewar, parts of Bundi, Tonk, Shahpura, Jaipur, Kishangarh, Karauli, Bharatpur, and Ajmer-Merwara.

Central India :—The standing crops at the close of the month were generally good or fair, except in parts of Gwalior and the Alampur Pargana of Indore. The probable outturn is uncertain in parts of Gwalior, below average in Malwa, average in Baghelkhand and good elsewhere, except in Alampur.

Kashmir : Jummoo :—The condition of the standing crops was good.

W. L. DALLAS.

Table I.—Abstract of Observations taken at 8 A.M. at 232 Stations in India, Burma, etc., in September, 1905.

Tabl

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma Coast and Bay Islands.			+·001								84·9	—0·8	75·8	+0·4	80·4	—0·2	9 2					16
1	Car Nicobar . .	25	29·858		29·811	29·949	16th	29·784	1st	·165	80·2	86·5		76·0		81·3		10·5	89·2	20th	72 9	17th	16
	Port Blair . .	61	29·830	+ ·012	29·822	29·951	16th	29·679	6th	·272	80·0	84 6	— 0·5	78·7	+2·2	81·7	+0 9	5 9	87·1	15th, 28th, 30th.	73·9	20th	13
	Slipper Island .		29·810			30·002	16th	29·690	6th	312													
	Mergui* . .	96	29 823	+ ·014	29·850	29·927	16th	29·681	1st	·246	77·5	83·6	—0·8	73 9	+1·7	78·8	+ 0·5	9·7	88·9	30th	71·9	10th	17
	Tavoy . . .	19	29·898	+ ·011	29 849	30·009	16th	29·750	5th	·259	76·9	83·2	- 0·8	74·2	+0·5	78·7	— 0·2	9·0	88·0	13th & 15th.	73·1	7 days	14
	Moulmein . .	94	29·773	—·006	29·805	29·899	12th	29·607	5th	·292	78·1	84·3	- 0·5	74·6	+ 0·1	79·5	— 0·2	9·7	89·0	29th	72·8	10th & 27th.	16
2	Rangoon . .	57	29·801	—·005	29·796	29·925	29th	29 610	6th	·313	78·6	84·5	—1·2	76·3	+0·4	80·4	0·4	8·2	87·6	30th	72·9	15th	14
	Easein. . .	27?	29·822	+ ·006	29·787	29·861	29th	29·618	6th	·343	78·3	85·2	—0·3	75·9	+0·1	80·6	— 0·1	9·3	89·2	1st	72·9	28th	16
	Diamond Island .	41	29·806	—·006	29·782	29·942	29th	29·623	6th	·319	80·6	83 8	- 1·0	76·6	+ 0·8	80·2	— 0 1	7·2	86·4	9th	73·2	10th & 11th.	13
5	Akyab . . .	20	29·787	—·011	29·750	29·947	29th	29·579	6th	·368	79·4	85·6	- 1·0	77·4	— 0·6	81·5	— 0·8	8·2	89·9	22nd	75·2	15th, 28th & 29th.	14
3	Toungoo . .	183	29·858	—·004	29·784	29·794	29th	29·471	6th	·323	79·2	87·8	—1·2	74·3	—1·6	80·9	—1·4	13·8	92·3	26th	65·6	9th	26
	II.—Burma Inland.			—·018								89·7	—1·6	76 2	+ 0·3	83·0	—0·6	13·5					23
3	Thayetmyo .	121	29·695	— 015	29·758	29·835	16th & 29th.	29·483	6th	·352	80·9	89·3	- 0·6	76·0	0	82·7	— 0·3	13·3	94·5	27th	73·5	15th & 29th.	21
4	Minbu . .	*165*	29·636	—·030	29·746	29·763	29th	29·453	6th	·340	79·6	88 7	- 2·2	76·7	—0·2	82·7	—1·2	12·0	95·2	2nd	74·1	15th & 28th.	21
	Yamethin . .	657	29·159	—·026	29·771	29·328	28th	28·954	6th	·374	78·1	88·1	— 3·6	74·6	— 0·2	81·4	— 1·9	13·5	95·3	2nd	70·2	15th	25
	Monywa . .	*280*	29·560		29·779	29·723	29th	29·358	2nd	·365	80·4	89·8		76·8		83·3		13·0	95·8	1st	73·2	22nd	22
	Mandalay . .	250	29·564	— ·010	29·763	29·728	29th	29·348	6th	·380	81·2	91·9	—0·9	77·7	+0·8	84·8	- 0·1	14·2	99·5	27th	75·3	15th & 21st	24
	Myitkyina . .	458	29·338		29·755	29·585	12th	29·105	2nd	·480	80·2	90·6		76·0		83·3		14·6	98·3	1st	73·1	12th	25
	Bhamo . .	*381*	29·427	— ·009	29·764	29·590	29th	29·199	2nd	·391	78·8	89·6	- 0·5	75·7	+1·2	82·7	+0·4	13·9	97 9	7th	73·1	12th	21
1(a)	Maymyo . .	3,545	26·381		26·329	26·513	29th	26·207	6th	·306	70·3	77·2		66·8		72·0		10·4	82·9	th	63·6	20th & 21st.	19
	Lashio . . .	*2,751*	27·047	—·029	26·993	27·165	29th	26·852	2nd	·313	72·4	83·7	—1·1	67·9	+0·1	75·8	— 0·5	15·8	91·5	2nd	62·0	23rd	29
	III.—Assam.			— 0.4								88·5	+ 0·4	76·4	+ 0·3	82·5	+ 0·4	12·1					22
7	Silchar . . .	104	29·691	—·012	29·748	29·880	25th	29·502	6th	·378	80·5	90·1	+ 0·3	76·3	— 0·1	83·2	+ 0·1	13·8	96·6	4th	73·8	1 th & 24th.	22
9	Sibsagar . .	333	29·464	—·016	29·755	29·611	29th	29·303	2nd	·308	79·4	88 6	+ 0·5	76·7	+ 0·5	82·7	+ 0·5	11·9	93·2	11th & 12th.	73·0	23rd & 25th.	20
	Dhubri . . .	115	29·656	—·013	29·727	29·860	29th	29·459	6th	·401	80·0	85·6	+ 0·5	77 5	+ 0·5	81·6	+ 0·5	8·1	90·2	3rd	73·2	17th	17
	Gauhati. . .	195	29·596		29·747	29·783	29th	29·426	6th	·357	80·5	88·7		76·7		82·7		12·0	92·5	11th & 18th.	72·5	17th	20
	Tezpur . .	252	29·535		29·746	29·713	29th	29·374	6th	·339	79·6	88·9		77·0		83·0		11·9	93·1	11th	73·4	23rd	19
	Dibrugarh . .	353	29·440		29·753	29·578	29th	29·283	2nd	·295	78·9	89·1		74·4		81·8		14·7	94·7	12th	60·5	26th	34
	IV.—Bengal and Orissa.			—·024								87·8	—0·6	77·9	+0·1	82·8	—0·3	9·9					18
6	Chittagong . .	87	29·698	—·017	29·733	29·905	29th	29·489	6th	·416	80·0	85·8	— 1·0	76·0	—0·3	80·9	—0 7	9·8	89·5	4 days	72·1	15th	17
	Noakhali . .	43	29·723		29·713	29·921	29th	29·534	6th	·387	80·9	85·8		77·0		81·4		8·8	90·7	28th	71·4	15th	19
	Comilla . .	36	29·737		29·721	29·921	29th	29·552	6th	·369	80·3	87·3		76·5		81·9		10·8	93·4	28th	73·3	15th & 16th,	20
	Sirajganj . .	49	29·713		29·712	29·886	29th	29·527	6th	·359	80·7	86·6		77·5		82·1		9·1	90·8	28th	73·7	14th, 15th & 17th,	17
	Narayanganj. .	26	29·748	—·003	29·722	29·942	29th	29·561	6th	·381	81·9	88·3	—0·2	78·6	—0	83·4	—0·3	9·7	93·1	28th	74·8	18th	18
	Barisal . .	12	29·748	—·020	29·706	29·932	29th	29·561	6th	·371	81·6	86·9	—1·6	78·1	—0·2	82·5	—0 9	8·8	91·3	2nd	74·1	15th	17
	Mymensingh .	63	29·717	—·010	29·731	29·905	29th	29·525	6th	·380	81·7	87·7	+0·6	77·7	+0·2	82·7	+0·4	10·0	93·2	28th	73·0	17th	20
	Faridpur . .	46	29·711		29·707	29·881	29th	29·539	6th	·342	81·1	86·6		77·9		82·3		8·7	90·3	28th	74·4	29th	15
)	Jessore . .	33	29·703	—·030	29·683	29·863	29th	29·523	6th	·340	82·0	87·8	- 1·6	78·2	—0·3	83·0	—1·0	9·6	92·0	20th	71·2	29th	17
	Calcutta (Alipore).	21	29·703	—·031	29·670	29·858	17th	29·522	7th	·336	81·5	88·4	+0·7	78·2	+0·2	83·3	+0·5	10·2	92·9	26th	74·4	29th	18
	Saugor Island .	25	29·695	—·027	29·664	29·859	30th	29·383	7th	·376	82·5	88·9	+0·7	79·6	—0·1	84·2	+ 0·3	9·3	91·9	2nd, 6th & 7th.	75·1	28th	16

* Mean of 29 days.

N.B.—Elevations in italics indicate barometrical determinations

Note 1.—When a query is inserted against any reading or in the returns

Note 2.—The data from which divisional means of the figure colum

The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the elevations of which exceed 3,200 feet.

I.

Stations in India, Burma, etc., in September 1905.

Wind Direction. Number of winds from Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September 1905.	Normal rainfall for period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														91	0	·904	0	7·6	−0·1				1·76	21·08	+2·17					I.—Burma Coast and Bay Islands.
12					3	6	1		S 36° W	4·5			4·5	89		·917		9·2		12			8·43						1·63	Car Nicobar
				1	4	12	11	2	S 60° W	11·7	9·3	+26		89	−1		−·007	6·4	+1·7	16			11·69	19·42	−7·73	75·08	84·90	−9·82	2·17	Port Blair.
				4	16	5	3	1	S 11° W	22·7																				Slipper Island
22	1	1		2	1	2			S 18° E	2·6	1·5	+73	2·3	93	+1	·863	+·005	5·0	−2·1	19	23·40	−4·40	30·15	28·07	+2·08	125·99	139·09	−13·10	4·10	Mergui.
30									Calm	1·4				92	−1	·856	−·010	7·1	−0·4	20	24·10	−4·10	38·30	31·88	+6·42	222·43	191·93	+30·50	4·33	Tavoy.
12				3	6	6	3		S 23° W	3·3	·8	+18	3·7	92	0	·878	−·002	8·4	+1·2	24	21·90	+2·10	24·93	27·52	−2·54	167·27	169·89	−2·62	3·10	Moulmein.
5		2	3	3	11	1	4	1	S 5° E	6·6	3·8	+74	5·8	92	−2	·908	−·007	8·8	+1·8	21	19·70	+1·30	22·35	15·84	+6·51	98·03	85·41	+12·62	4·50	Rangoon.
				6	8	10	4	2	S 25° W	4·3	3·4	+26		95	+2	·931	+·009	7·9	+1·0	23	20·80	+2·20	17·65	15·89	+1·76	102·35	98·24	+4·11	1·98	Bassein.
1				5	4	12	3	5	S 43° W	9·9	6·8	+46	9·9	86	0?	·902	+·011	7·9	+0·5	23	18·90	+4·10	15·36	17·33	−1·97	101·64	100·18	+1·46	2·73	Diamond Island.
		8	1	12	5	4			S 49° E	5·4	3·0	+80	5·2	95	+3	·953	−·006	6·5	−1·3	20	13·80	+6·20	29·55	22·18	+7·37	216·69	173·47	+43·22	3·66	Akyat.
1				5	6	4	3	1	S 14° W	11·5	2·8	+311	11·5	90	−1	·918	+·004	8·3	+0·1	25	17·50	+7·50	19·16	11·56	+7·60	77·88	68·56	+9·32	2·66	Toungoo.
														89	+3	·907	+·022	7·0	+0·9				11·87	6·57	+5·09					II.—Burma Inland.
			5	4	17	3		1	S 13° E	7·7	4·7	+64		88	+4	·931	+·055	5·8	−1·7	19	11·70	+7·30	12·20	6·07	+6·13	36·29	29·84	+6·45	1·56	Thayetmyo
2				19	4		1	4	S 34° E	5·2			6·2	88	+3	·899	+·018	6·5	+0·9	14	9·30	+4·70	7·19	5·46	+1·73	25·44	25·45	−0·01	1·25	Minbu.
0				7	2			1	S 35° E	3·5			3·7	91	+4	·870	+·036	8·5	+4·5	16	10·30	+5·70	14·00	6·65	+7·35	26·93	28·19	−1·26	4·60	Yamethin.
4	1				9	4		2	S 24° W	2·8			2·9	89		·929		7·8		11	8·90	+2·10	15·34	6·31	+9·03	29·74	22·34	+7·40	5·64	Monywa.
2		2		1	11	4			S 3° W	5·4			5·5	84	+1	·898	+·005	7·9	+1·6	13	8·80	+4·20	13·80	5·62	+8·18	31·25	24·00	+7·25	3·49	Mandalay.
9			5	4	2				S 58° E	3·4			3·5	89		·916		7·2		11			13·10			81·11			4·48	Myitkyina.
4	3	4	1			3	3	2	N 28° W	1·2			1·4	92	+2	·906	+·027	5·6	−1·0	14	11·50	+2·50	7·44	9·31	−1·87	45·79	65·05	−19·26	1·98	Bhamo.
		3	1	2	10	5			S 31° W	3·1				91		·671		6·9		20	15·20	+4·80	17·15	9·06	+8·09	47·28	44·24	+3·04	4·50	Maymyo.
5	3	2	1		2	9	1	2	N 70° W	1·7				91	−1	·729	−·003	7·7	−0·3	13			6·94	6·92	+0·02	41·35	51·30	−9·97	1·52	Lashio.
														90	−3	·925	+·005	7·6	−0·2				8·91	11·92	−3·00					III.—Assam.
0									Calm	0·1	2·7	−96	0·2	87	−4	·918	−·006	6·3	−2·4	17	15·30	+1·70	8·41	13·95	−5·54	87·16	91·87	−4·71	1·33	Silchar.
9	3	12			1	4		1	N 32° E	2·4	2·5	−4	2·2	93	−2	·933	+·002	8·7	0	9	14·50	−5·50	12·87	11·95	+0·92	66·53	71·82	−5·29	3·96	Sibsagar.
0		16	3	1					N 55° E	2·7	3·2	−16	3·2	90	−2	·929	+·018	9·2	+1·7	15	11·90	+3·10	14·48	14·61	−0·13	104·50	81·99	+22·51	3·03	Dhubri.
6	3	3	2		4	2			S 83° E	1·4			1·6	86		·923		7·1		14	10·00	+4·00	7·53	7·49	+0·04	48·28	49·86	−1·64	1·50	Gauhati.
		3	3						N 68° E	2·1			2·2	91		·927		7·6		9	12·50	−3·50	6·30	8·58	−2·28	62·10	57·04	+5·06	2·80	Tezpur.
1	1	7	2					2	N 37° E	1·3			1·2	93		·917		6·5		11	14·90	−3·90	3·89	14·91	−11·02	62·31	88·79	−26·48	0·88	Dibrugarh.
														89	0	·950	−·004	6·7	+0·1				14·95	11·33	+3·62					IV.—Bengal and Orissa.
	1	7	3	13	4	1			S 63° E	6·3	4·5	+40	5·8	88	0	·902	−·025	6·1	−1·2	14	13·06	+0·94	23·38	11·08	+12·30	118·29	79·95	+38·34	5·86	Chittagong.
			3	11	11		1	1	S 27° E	5·5			6·0	88		·927		6·3		16	15·48	+0·52	30·20	15·54	+14·66	112·07	94·92	+17·15	4·84	Noakhali.
			2	11	10			1	S 28° E	5·3			4·5	89		·927		4·8		17	15·28	+3·72	16·89	11·11	+5·78	74·46	72·88	+1·58	4·30	Comilla.
		3	3	3	2				S 74° E	1·5			1·6	92		·979		7·9		17	11·61	+5·39	23·24	9·08	+14·16	80·34	50·76	+29·58	5·54	Sirajganj.
	1	1	6	17	1	3		1	S 51° E	7·0	4·6	+52	6·0	89	+1	·984	+·013	7·8	0	15	11·83	+3·17	19·81	8·57	+11·24	73·65	54·97	+18·68	5·83	Narayanganj.
	1	3	1	8	8	1		1	S 33° E	2·9			2·5	89	+1	·959	−·018	6·8	−0·4	20	14·35	+5·65	21·99	10·74	+11·25	74·86	62·26	+12·60	3·58	Barisal.
	2		9	10	2	1			S 62° E	3·1			2·9	87	−4	·946	−·021	6·7	−0·4	15	15·03	−0·03	14·18	12·83	+1·35	97·18	72·80	+24·38	2·80	Mymensingh.
	1		6	9	9				S 41° E	4·6			3·9	90		·958		6·6		18	11·78	+6·22	25·52	9·09	+16·43	73·33	54·69	+18·64	4·90	Faridpur.
		1	4	8	7				S 40° E	2·5	3·4	−29	2·5	89	−1	·979	−·022	7·5	+0·4	13	11·94	+1·06	13·76	8·28	+5·48	65·78	51·35	+14·43	3·33	Jessore.
		2	6	7	6	5	2	2	S 23° E	5·3	4·5	+18		90	+3	·971	+·014	7·7	+1·0	18	13·38	+4·62	11·20	8·91	+2·29	53·96	50·59	+3·37	2·66	Calcutta (Alipore).
	1	3	6	5	6	4	4	1	S 24° E	15·0	10·1	+48		88	0	·979	−·005	7·3	−0·9	18	13·29	+4·71	12·72	11·30	+1·42	46·85	58·04	−11·19	3·11	Saugor Island.

any station, the data for that station are not utilized in calculating the provincial departures from normal.

s. 40, 42, and 44 are derived are incomplete.

† Wind variable 8.

Tabl

Abstract of Observations taken at 8 A.M. at 232 Station

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10	Krishnagar	47	29·678		29·673	29·825	29th	29·502	7th	·323	82·2	89·1		79·1		84·1		10·0	93·6	3rd	75·0	22nd & 30th.	18
	Midnapore	149	29·564		29·660	29·715	17th	29·381	7th	·334	81·9	88·2		78·1		83·1		10·1	93·3	20th	74·8	15th	18
11	Bankura	313	29·392		29·657	29·511	30th	29·224	7th	·287	81·2	88·3		78·1		83·2		10·2	94·1	20th	74·7	29th	19
	Raniganj	334	29·390		29·677	29·529	17th	29·230	7th	·299	80·1	88·2		77·4		82·8		10·8	93·0	3rd	72·9	16th	20
	Burdwan	99	29·625	—·037	29·672	29·765	17th	29·445	7th	·320	81·8	89·0	−0·7	79·1	+0·2	84·0	−0·3	9·9	93·4	2nd & 20th.	75·8	15th & 16th.	17
	Naya Dumka	489	29·219		29·667	29·340	17th	29·050	7th	·290	80·3	87·2		76·4		81·8		10·8	92·5	3rd	71·9	16th	20
	Berhampore	67	29·658	—·035	29·674	29·801	29th	29·494	6th	·307	82·1	88·2	−0·7	78·6	+0·1	83·4	−0·3	9·6	92·3	3rd & 7th.	74·8	18th	17
	Rampur Boalia	70	29·664		29·683	29·810	29th	29·498	6th	·312	82·0	87·2		78·4		82·8		8·8	92·1	3rd	75·1	16th	17
	Malda	72	29·647		29·671	29·784	29th	29·484	6th	·300	81·5	87·5		78·2		82·9		9·3	93·1	3rd	72·1	14th	21
	Bogra*	61	29·700		29·714	29·848	29th	29·565	1st & 6th.	·283	81·1	86·6	−1·8	77·4	−0·1	82·0	−1·0	9·2	92·2	3rd	72·2	17th	20
12	Dinajpur	123	29·617	—·023	29·695	29·781	29th	29·448	6th	·333	80·6	87·8	−0·4	77·5	+0·1	82·7	−0·2	10·3	94·3	3rd & 7th.	73·5	17th	20
	Rangpur	123	29·647†		29·725†	29·831	29th	29·463	6th	·368	81·2	88·3		77·1‡		82·7‡		11·2	93·7	11th	72·8	17th	20
	Jalpaiguri	284	29·483	—·010	29·725	29·662	29th	29·293	6th	·369	79·9	87·9	+0·7	76·0	+0·7	82·0	+0·7	11·9	93·9	3rd	72·1	25th	21
	Cooch Behar	156	29·612		29·724	29·809	29th	29·429	6th	·380	80·5	88·5		77·4		83·0		11·1	94·4	3rd	74·1	15th & 16th.	20
17	Purnea	125	29·612	—·020	29·692	29·751	29rh	29·444	6th	·307	81·3	87·5	−1·4	78·1	+0·7	82·8	−0·4	9·4	92·7	3rd	71·2	18th	18
14	Balasore	50	29·667	—·032	29·660	29·826	17th	29·405	8th	·421	81·6	88·3	−0·6	77·5	−0·3	82·9	−0·5	10·8	94·4	20th	74·3	28th	20
	False Point	21	29·690	—·036	29·653	29·872	17th	29·407	8th	·465	82·1	87·1	−0·8	78·6	+0·5	82·8	−0·2	8·5	93·5	20th	75·1	20th	18
	Cuttack	80	29·635	—·026	29·659	29·810	17th	29·372	8th	·438	81·7	89·5	−0·7	78·4	+0·3	84·0	−0·2	11·1	94·4	20th	76·2	2nd	18
	Puri	24	29·698		29·661	29·879	17th	29·410	7th	·469	82·1	88·1		79·9		84·0		8·2	93·7	21st	77·1	2nd	16
	V.—Gangetic Plain and Chota Nagpur.			—·031								88·7	−1·0	77·0	+0·3	82·9	−0·3	11·7					22
15	Hazaribagh	2,007	27·701	—·046	29·659	27·827	17th	27·559	6th	·268	76·1	83·5	−1·2	72·6	+0·4	78·0	−0·4	10·9	89·7	3rd	65·3	16th	24
	Ranchi	2,128	27·592	—·035	29·670	27·746	17th	27·443	6th & 7th.	·303	75·0	82·6	−1·8	72·2	+0·5	77·4	−0·7	10·4	87·2	3rd	67·4	16th	19
	Daltonganj	*730*	28·968		29·659	29·097	17th	28·807	6th	·290	78·3	88·4		75·4		82·0		13·0	92·1	3rd, 12th & 22nd.	70·5	16th	21
	Purulia	*816*	28·888		29·652	29·028	17th	28·732	6th	·296	79·8	7·9		75·5		81·7		12·4	92·5	30th	71·4	1f th	21
	Chaibassa	*760*	28·933	—·044	29·646	29·127	17th	28·741	8th	·386	78·6	88·2	−1·7	76·3	+0·2	82·3	−0·8	11·9	94·4	3rd	7 0	2nd	21
16	Gaya	375	29·321	—·040	29·650	29·449	24th	29·166	6th	·283	81·4	88·7	−2·3	77·1	−0·7	82·9	−1·5	11·6	93·4	3rd	71·8	16th, 17th & 30th.	21
	Dehri	351	29·337		29·643	29·453	24th	29·159	15th	·294	81·1	87·9		77·7		82·8		10·2	92·8	4th	70·5	16th	22
	Patna	183	29·513	—·050	29·650	29·627	24th	29·360	6th	·267	81·9	87·5	−2·4	78·6	−0·5	83·1	−1·5	8·9	92·5	3rd	72·7	30th	19
	Arrah	190	29·512		29·656	29·634	24th	29·342	15th	·292	81·9	88·3		78·3		83·3		10·0	96·9	7th	71·6	30th	25
	Buxar	239	29·458		29·654	29·584	24th	29·305	6th	·279	81·3	88·0		77·6		82·8		10·4	92·5	12th	72·1	17th	20
17	Bhagalpur	160	29·559		29·672	29·678	24th	29·401	6th	·277	82·2	87·5		77·7		82·6		9·8	93·2	3rd	73·1	16th	20
	Darbhanga	166	29·544	—·041	29·663	29·671	24th	29·383	6th	·288	81·0	87·2	−1·1	78·2	−0·6	82·7	−0·9	9·0	92·1	3rd	71·8	17th & 18th.	17
	Muzaffarpur	178	29·540		29·674	29·659	24th & 25th.	29·377	6th	·282	81·6	88·1		78·7		83·1		9·4	92·7	3rd	74·0	19th	18
	Motihari	224	29·499		29·683	29·615	29th	29·332	6th	·283	80·6	89·7		77·7		83·7		12·0	94·4	3rd	71·3	30th	23
	Chapra	181	29·511		29·647	29·629	24th	29·351	15th	·278	81·4	88·4		78·3		83·4		10·1	93·4	4th & 12th.	72·6	30th	20
18	Benares	267	29·437	—·027	29·659	29·542	29th	29·294	5th	·248	82·0	89·4	−1·6	77·1	−0·3	83·3	−1·0	12·3	95·1	4th	72·2	16th	22
	Allahabad	309	29·397	—·025	29·663	29·518	24th & 29th.	29·256	6th	·262	82·7	91·4	−0·1	77·7	+0·8	84·5	+0·4	13·7	97·5	4th	72·1	15th	25
23	Gorakhpur	257	29·456	—·021	29·670	29·573	24th	29·301	7th	·272	82·3	88·3	−2·2	77·9	+0·2	83·1	−1·0	10·4	93·2	4th	74·0	15th & 17th.	19
19	Lucknow	368	29·334	—·028	29·661	29·472	29th	29·197	7th	·275	82·0	91·6	−0·5	77·1	+0·6	84·4	+0·1	14·5	97·8	4th	73·8	24th	24
20	Bahraich	401	29·311	—·015	29·672	29·459	29th	29·154	7th	·305	82·2	90·9	−0·1	77·0	+0·8	83·9	+0·4	13·9	96·1	4th	71·3	16th	24
21	Cawnpore	416	29·290	—·020	29·661	29·417	29th	29·154	7th	·263	82·4	92·9	+0·5	77·7	+1·1	85·3	+0·8	15·2	99·4	3rd & 4th	72·7	24th	26
	Mainpuri	516	29·203	—·007	29·676	29·332	29th	29·097	6th	·235	82·6	94·9	+1·8	77·5	+1·6	86·2	+1·7	17·4	105·3	4th	72·3	29th	33

* Observations of 26 days. † Mean of 29 ,, ‡ Mean of 27 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of an

NOTE 2.—The data from which divisional means of the figure columns Nos. 1

continued.

India, Burma, etc., in September 1905—continued.

Wind Direction.								Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Station.
Number of winds from																											
N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour, Instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September 1905.	Normal rainfall for period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September 1905.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
1	5	9	8	3	1	1	S 28° E	2·6			2·9	89		·984		6·2		16	10·45	+ 5·55	14·91	7·97	+ 6·94	71·84	45·01	+26·83	2·59	Krishnagar.
8		4	10				S 66° E	3·7			3·3	87		·936		4·6		17	12·13	+ 4·87	9·57	9·39	+ 0·18	49·42	50·66	− 1·24	2·40	Midnapore.
2	6	6	2		2		S 68° E	4·3			3·8	87		·916		6·7		12	12·53	− 0·53	10·92	8·77	+ 2·15	40·76	47·51	− 6·75	6·04	Bankura.
1	6	6	1				S 70° E	2·7			2·1	92		·956		6·9		12	11·61	+ 0·39	8·41	7·60	+ 0·81	42·30	48·46	− 6·16	1·95	Raniganj.
3	6	2	3	4	3		S 39° E	2·6	3·1	− 16	2·6	88	+ 3	·964	+·034	7·1	+0·1	16	12·10	+ 3·90	10·23	8·59	+ 1·64	70·26	48·59	+21·67	1·76	Burdwan.
2	5	3	2	1			S 69° E	2·3			2·5	90		·927		6·2		14	13·30	+ 0·70	9·66	10·01	− 0·35	49·99	51·12	− 1·13	2·47	Naya Dumka.
11	2	7	1				S 56° E	3·6	3·7	− 3	3·1	90	0	·989	+·013	7·6	+0·2	17	12·48	+ 4·52	10·89	9·72	+ 1·17	51·48	46·89	+ 4·59	1·78	Berhampore.
	3	3	1				S 9° E	3·9			4·0	88		·967		6·3		17	12·36	+ 4·64	16·24	10·38	+ 5·86	64·35	48·61	+15·74	3·77	Rampur Boalia.
5	8	8	3	1	1		S 73° E	6·3			5·8	88		·960		5·4		17	11·45	+ 5·55	11·00	10·86	+ 0·14	58·31	45·94	+12·37	2·32	Malda.
	5						N 68° E	1·5			1·3	87	− 2	·929	−·033	6·5	−0·5	19	12·10	+ 6·90	30·84	12·11	+18·73	84·33	57·31	+27·02	6·21	Bogra.
10	12	3	1				N 77° E	3·2			3·0	89	− 1	·935	−·008	7·9	+1·1	15	12·56	+ 2·44	12·31	14·00	− 1·69	65·33	64·01	+ 1·32	3·88	Dinajpuri.
8	11	5	2	1		1	N 89° E	2·8			2·5	88		·944		6·5		12	13·55	− 1·55	10·86	14·16	− 3·30	77·05	73·51	+ 3·54	3·00	Rangpur.
6	6	6	1				N 72° E	1·2			1·5	88	− 3	·901	−·002	6·0	−1·0	16	14·75	+ 1·25	8·94	20·03	−11·09	116·12	113·18	+ 2·94	1·32	Jalpaiguri.
10	7	1					N 68° E	1·8			1·8	89		·921		6·9		15	14·34	+ 0·66	18·42	21·82	− 3·40	173·86	115·23	+58·63	3·56	Cooch Behar.
5	18						N 80° E	2·2	2·0	+ 10	2·0	90	0	·962	+·003	6·7	+0·7	15	11·40	+ 3·60	8·87	14·82	− 5·95	60·50	58·57	+ 1·93	1·37	Purnea.
3	1	1	2	9	3	3	S 76° W	4·8			3·6	85	− 3	·929	−·045	6·3	−0·7	18	13·87	+ 4·13	13·65	12·08	+ 1·57	38·93	52·39	−13·46	2·64	Balasore.
2	2	3	4	6	10	2	S 51° W	10·5	7·9	+ 33	10·9	87	+ 2	·943	−·017	8·3	+1·2	21	12·99	+ 8·10	10·15	11·11	− 0·96	27·94	50·21	−22·27	1·10	False Point.
4	3		3	9	4	2	S 50° W	3·0	8·4	− 64		87	+ 5	·949	+·055	7·5	+1·5	12	13·00	− 1·00	7·15	9·97	− 2·82	30·16	49·69	−19·53	1·51	Cuttack.
2	1	1	1	10	1		S 51° W	12·3†			12·0†	88		·971		6·5		17	12·18	+ 4·82	12·63	10·07	+ 2·56	29·27	43·04	−13·77	2·47	Puri.
												86	+ 2	·909	+·024	5·7	+0·6				10·71	7·22	+3·50				V.—Gangetic Plain and Chota Nagpur.
2	6	4	3	2	7	3	S 20° W	8·9	7·0	+ 27	7·9	84	0	·752	−·013	8·4	+1·7	14	11·97	+ 2·03	14·43	8·88	+ 5·55	41·36	47·33	− 5·97	3·48	Hazaribagh.
2	6	6	1	5	4	2	S 56° E	8·0			9·5	90	+ 7	·779	+·029	7·6	+1·9	17	13·66	+ 3·34	11·65	9·01	+ 2·64	42·65	48·53	− 5·88	2·35	Ranchi.
1	6			5	4		S 27° W	4·0			3·3	90		·882		5·1		16	10·48	+ 5·52	17·39	7·54	+ 9·85	42·30	39·30	+ 3·00	6·47	Daltonganj.
7	6	1	4	4	3	3	N 76° E	3·4			4·2	86		·877		6·9		19	11·61	+ 7·39	9·75	8·14	+ 1·61	47·54	45·66	+ 1·88	3·25	Purulia.
		1		1			S	3·0			2·6	89	+ 4	·875	−·011	7·2	+1·4	17	12·00	+ 5·00	13·76	7·36	+ 6·40	44·85	44·32	+ 0·53	3·45	Chaibassa.
5	4	5		3	3	2	N 68° E	4·4	2·3	+ 91	2·9	85	+ 3	·916	+·030	5·9	+0·1	13	9·13	+ 3·87	13·75	6·98	+ 6·77	37·31	42·24	− 4·93	4·72	Gaya.
11	3		3	9	3		S 4° W	8·0			7·1	87		·916		7·6		11	8·94	+ 2·06	17·94	6·46	+11·48	38·98	38·37	+ 0·61	4·02	Dehri.
5	16	1		1	3	1	N 73° E	6·7	2·9	+131	7·5	88	+ 5	·966	+·036	7·9	+1·8	14	9·29	+ 4·71	12·27	6·93	+ 5·34	58·00	42·64	+15·36	1·54	Patna.
5	1	2	1	1			N 85° E	2·1			2·1	87		·951		3·1		12	9·29	+ 2·71	13·31	8·23	+ 5·08	36·68	40·50	− 3·82	2·40	Arrah.
1	19				3	2	N 72° E	4·0			3·8	88		·941		6·2		11	9·03	+ 1·97	12·19	6·93	+ 5·26	36·40	36·26	+ 0·14	4·35	Buxar.
6	6	4	2	1			S 89° E	3·2			2·8	86		·944		7·2		17	9·39	+ 7·61	10·39	8·48	+ 1·91	50·79	43·03	+ 7·76	1·83	Bhagalpur.
1	19	6	1				S 78° E	3·9	3·6	+ 8	3·5	89	+ 3	·957	+·016	6·0	+0·9	11	9·27	+ 1·83	16·14	8·70	+ 7·44	69·24	45·38	+23·86	9·10	Darbhanga.
1	9	7			1		S 74° E	3·3				91		·975		3·9		12	8·94	+ 3·06	10·92	8·17	+ 2·75	59·44	40·36	+19·08	5·47	Muzaffarpur.
10	11	1					N 62° E	6·3			5·5	87		·905		4·4		12	8·97	+ 3·03	8·60	9·62	− 1·02	65·95	45·89	+20·06	4·40	Motihari.
4	12	4					N 84° E	3·8			3·3	88		·950		6·1		13	8·35	+ 4·65	9·40	7·22	+ 2·18	41·03	35·99	+ 5·04	1·85	Chapra.
2	7	2	1	1	4		N 66° E	2·5	3·9	− 36	2·9	85	+ 1	·942	+·033	6·2	+1·0	12	8·40	+ 3·60	14·05	6·03	+ 8·02	44·93	36·40	+ 8·53	4·58	Benares.
7	7	1	1	2	6	3	N 32° E	4·5	5·3	− 15	3·7	82	+ 2	·921	+·032	6·2	+0·7	6	7·40	− 1·40	4·61	5·16	− 0·55	27·03	36·05	− 9·02	1·70	Allahabad.
10	9	2			1	2	N 41° E	1·3	2·1	− 39		85	+ 1	·936	+·031	2·9	−1·6	13	8·60	+ 4·40	6·77	8·08	− 1·31	49·35	45·50	+ 3·85	1·93	Gorakhpur.
5	5	2	1	2	3		S 87° E	1·7	2·8	− 39	1·9	83	+ 2	·915	+·038	4·5	−0·4	7	8·10	− 1·10	3·37	5·39	− 2·02	27·28	35·47	− 8·19	1·45	Lucknow.
1	7	8	1	1	1		S 60° E	1·8			1·7	84	+ 2	·937	+·032	4·8	+0·8	8	7·40	+ 0·60	4·47	6·58	− 2·11	37·48	43·72	− 6·24	1·46	Bahraich.
3	7	2		3	5		S 68° E	2·6				81	+ 1	·897	+·022	3·9	−0·1	5	6·70	− 1·70	2·33	5·14	− 2·81	20·47	32·46	−11·99	2·30	Cawnpore.
2	5	5	2	4	5	2	S 8° E	2·4			2·4	78	0	·865	+·032	4·1	−0·1	6	6·70	− 0·70	6·20	3·74	+ 2·46	10·29	27·78	−17·19	2·54	Mainpuri.

tion, the data for that station are not utilized in calculating the provincial departures from normal.
and 44 are derived, are incomplete.

Table

Abstract of Observations taken at 8 A.M. at 232 Stations

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
				−·015								94·5	+1·1	75·1	+1·5	84·8	+1·3	19·3					35·1
	VI.—Upper Sub-Himalayas.																						
24	Bareilly	568	29·144	−·007	29·678	29·295	29th	29·023	7th	·272	81·0	92·3	+1·8	76·7	+0·9	84·5	+1·4	15·6	97·4	4th	72·1	21st	25·3
	Dehra Dun	2,233	27·523	−·008	29·711	27·658	29th	27·407	7th	·251	74·0	85·6	+1·3	65·2	−0·8	77·4	+0·3	16·4	91·0	4th	64·0	24th	27·0
	Roorkee	899	28·818	−·010	29·690	28·958	29th	28·690	7th	·268	77·6	91·3	0	72·8	−0·5	82·1	−0·3	18·5	98·4	4th	67·2	20th & 24th.	31·2
22	Meerut	738	28·968	−·015	29·671	29·109	29th	28·828	7th	·281	81·0	95·2	+3·4	75·8	+1·2	85·4	+2·3	19·4	103·7	4th	68·3	23rd & 24th.	35·4
26	Delhi	718	28·992	−·013	29·668	29·129	29th	28·850	6th & 7th.	·279	83·3	95·5	+2·5	79·4	+2·4	87·4	+2·5	16·1	104·2	4th & 5th	73·8	26th	30·4
28	Lahore	702	28·983	−·022	29·654	29·127	29th	28·774	12th	·353	81·7	97·6	−1·3	75·9	+3·3	86·8	+1·0	21·7	109·9	4th	68·7	27th & 28th.	41·2
27	Sirsa	662	29·045	−·010	29·670	29·171	29th	28·889	7th	·282	84·0	98·5	−0·4	75·7	+3·0	88·6	+1·3	19·8	107·3	5th	71·1	26th	36·2
	Patiala	*818*	28·886		29·672	29·052	29th	28·743	7th	309	81·0	94·4		74·6		84·6		19·8	103·5	4th	66·7	26th	36·8
29	Ludhiana	812	28·879	−·029	29·661	29·031	29th	28·750	7th	·281	80·6	96·6	+1·7	77·0	+2·2	86·8	+2·0	19·6	106·5	5th	70·7	30th	35·8
	Sialkot	830	28·864	−·016	29·665	29·021	29th	28·713	7th	·308	81·2	96·7	+1·0	77·0	+3·2	86·9	+2·1	19·7	107·7	5th	69·1	27th	38·6
	Ambala	892	28·817	−·010	29·679	28·961	29th	28·690	7th	·274	79·6	95·1	+1·4	74·7	+0·8	84·9	+1·1	20·4	105·0	4th	67·2	15th	37·8
	Rawalpindi	1,674	28·045	−·023	29·693	28·188	29th	27·857	12th	·331	78·3	94·8	+1·2	69·8	+0·9	82·3	+1·1	25·0	107·0	5th	61·6	30th	45·4
	VII.—Indus Valley and North-West Rajputana.			−·012								98·5	+0·2	76·1	+0·2	87·3	+0·2	22·4					35·4
32	Peshawar	1,110	28·611	−·021	29·710	28·748	29th & 30th	28·339	7th	·309	79·7	95·0	−1·0	70·5	+0·4	82·8	−0·3	24·5	105·0	5th	61·0	23rd	41·0
	D. I. Khan	590	29·100	−·020	29·641	29·258	30th	28·920	7th	·338	81·5	99·1	−1·4	74·3	−0·6	86·7	−1·0	24·8	107·7	4th	67·1	29th	40·6
31	Khushab	612	29·082	−·006	29·664	29·252	29th	28·887	12th	·365	83·1	98·5	−1·1	76·3	+0·5	87·4	−0·3	22·2	108·3	4th	67·4	13th	41·9
	Montgomery	558	29·137	−·005	29·661	29·204	29th	28·953	12th	·271	83·8	99·9	−1·8	75·6	−0·5	87·8	−1·2	24·3	107·3	4th	70·0	28th & 29th	37·3
	Multan	420	29·253	−·019	29·637	29·395	30th	29·097	7th	·298	82·2	101·3	+1·0	77·6	0	89·3	+0·5	23·7	106·4	9th	72·5	25th	33·9
47	Jacobabad	186	29·471	−·044	29·618	29·592	24th	29·289	11th	·303	84·2	105·2	+1·7	75·3	−0·7	90·3	+0·5	29·9	110·3	4th	65·9	29th	44·4
	Hyderabad	96	29·645	+·012	29·695	29·766	17th	29·480	10th	·286	81·9	99·0	+1·5	75·8	−0·4	87·4	+0·6	23·2	106·2	30th	71·5	7th	34·7
	Kurrachee	30	29·745	−·005	29·726	29·870	18th	29·567	10th	·303	81·6	90·0	+1·2	77·3	+0·4	83·7	+0·8	12·7	92·4	10th	69·2	30th	23·2
51	Bikaner	*771*	28·947	−·014	29·676	29·060	19th	28·712	11th	·348	84·1	99·6	+1·1	79·6	+0·4	89·6	+0·8	20·0	106·1	4th & 5th.	75·0	27th	31·1
	Pachpadra	*380*	29·377	0	29·714	29·492	19th	29·149	11th	·343	83·1	98·7	+1·5	77·2	+2·0	87·9	+1·8	21·5	106·3	30th	75·0	28th	31·3
	Jodhpur	782	28·974		29·739	29·098	19th	28·691	11th	·407	81·8	97·3		77·3		87·3		20·0	104·2	29th & 30th.	73·3	30th	30·9
	VIII.—East Rajputana, Central India and Gujarat.			−·002								92·9	+2·2	76·3	+1·7	84·6	+1·9	16·5					27·4
50	Jaipur	1,431	28·334	−·009	29·722	28·446	19th	28·176	11th	·270	82·1	97·1	+2·9	76·4	+2·8	86·8	+2·9	20·7	105·2	4th & 9th.	71·1	30th	34·1
	Bharatpur	585	29·106		29·649	29·244	27th	29·006	6th	·238	83·8	97·8		79·0		88·4		18·8	107·4	5th	74·1	25th, 26th & 28th.	33·3
	Kotah	819?	28·900		29·714	29·037	19th	28·703	10th	·334	84·4	96·1		80·4		88·3		15·7	104·0	3rd & 5th	77·1	5 days	26·9
	Sambhar	1,254	28·497	−·002	29·711	28·617	17th	28·308	11th	·309	82·2	97·2	+3·5	77·5	+2·4	87·4	+3·0	19·7	104·5	4th & 5th.	71·4	30th	33·1
	Ajmer	1,611	28·163	−·004	29·732	28·279	19th	27·952	11th	·327	80·7	94·5	+3·7	77·4	+3·8	86·0	+3·8	17·1	102·4	3rd & 5th.	73·1	28th & 29th.	29·3
	Udaipur	1,925	27·869		29·741	27·991	19th	27·654	10th	·337	79·2	90·1		72·6		81·4		17·5	96·5	4th	66·8	30th	29·7
46	Bhuj	395	29·408	+·011	29·757	29·530	19th	29·244	11th	·286	81·0	94·8	+2·7	75·6	+1·0	85·2	+1·9	19·2	98·3	28th & 29th.	72·0	26th	26·3
	Jamnagar	61	29·757		29·763	29·887	19th	29·579	11th	·308	82·5	92·3		75·5		83·9		16·8	95·1	26th & 27th.	71·2	19th	23·9
	Rajkot	429	29·400	+·016	29·781	29·524	19th	29·222	10th	·302	81·7	94·9	+3·5	72·4	0	83·7	+1·8	22·5	99·9	30th	68·8	19th	31·1
	Veraval	*18*	29·828	+·006	29·788	29·957	19th	29·650	10th	·307	81·1	84·4	+0·6	77·7	+1·4	81·1	+1·0	6·7	86·1	23rd	73·3	30th	12·8
	Dwarka	37?	29·792		29·775	29·914	18th & 19th	29·619	11th	·295	81·8	86·8		79·1		83·0		7·7	87·9	11th, 12th & 23rd	77·2	20th	10·7
	Bhavnagar Para.	5b	29·781	P	29·780	29·916	19th	29·591	10th	·325	81·5	94·8	+1·7	75·6	+0·1	85·2	+0·9	19·2	103·6	30th	71·5	30th	32·1
49	Nowgong	757	28·966	−·019	29·682	29·088	19th	28·822	7th	·266	80·3	90·7	+0·3	76·4	+1·4	83·6	+0·9	14·3	100·0	4th	72·0	27th	28·0
	Indore	1,823	27·982	+·009	29·770	28·118	19th	27·762	10th	·355	74·8	85·5	+0·1	70·1	0	77·8	+0·1	15·4	91·1	4th	66·1	20th & 21st.	25·0
	Neemuch	1,630	28·158	0	29·753	28·285	18th	27·917	10th	·368	77·1	89·0	+1·1	72·0	+1·1	80·5	+1·1	17·0	95·0	26th & 28th.	68·7	22nd	26·3

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the return

Note 2.—The data from which divisional means of the figure columns

—continued.

n India, Burma, etc., in September 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September 1905.	Normal rainfall for period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													74	−1	·763	+·006	2·6	−0·3				4·86	4·49	+0·57					VI.—Upper Sub-Himalayas.
		3						E	0·8	3·0	−73	0·8	84	+ 2	·882	+·036	3·9	+0·1	4	6·73	−2·73	4·80	7·01	− 2·21	19·49	43·63	−24·14	1·82	Bareilly.
1	1		2		1	2	1	N 75° W	1·2*	1·1	+ 9		82	− 1	·699	+ 002	4·3	− 0·5	11	10·20	+0·80	9·64	9·74	− 0·10	44·59	80·95	−36·36	3·85	Dehra Dun.
	2		10	1	1		1	S 47° E	2·5*	2·0	+25		83	+ 2	·786	+·001	2·4	−1·2	5	5·70	−0·70	3·57	6·04	− 2·47	14·75	37·87	−23·12	1·77	Roorkee.
		7			1	4		S 71° E	0·8	2·1	− 62	0·8	74	− 2	·796	+·027	3·3	+0·3	4	5·00	−1·00	2·38	5·30	− 2·92	14·30	28·04	−13·74	0·86	Meerut.
3		1	8	3	2	3	7	S 52° W	2·9	3·8	−24	2·6	65	− 4	·739	−·006	3·0	−0·2	3	4·10	−1·10	3·23	3·61	− 0·38	9·55	24·74	−15·19	1·15	Delhi.
1	1	2	6	3	3	4	3	S 13° W	2·3	2·0	+15		78	+11	·835	+·101	2·2	+0·8	3	2·30	+0·70	9·19	1·99	+ 7·20	13·12	16·16	− 3·04	6·61	Lahore.
1			1	1	3	8	1	S 78° W	1·9	3·6	− 47	1·6	63	− 1	·717	−·006	1·8	−0·3	5	3·20	+1·80	4·74	1·74	+ 3·00	7·67	12·25	− 4·58	4·13	Sirsa.
1	2	3	8	2	2	5	4	S 14° E	4·5			4·5	79		·833		2·6		3			2·78			15·03			2·10	Patiala.
	1		4				1	N 45° E	1·2	1·1	+ 9	1·1	72	− 3	·759	+·005	1·5	−1·6	3	3·40	− 0·40	2·15	3·61	− 1·46	10·52	22·86	−12·34	1·35	Ludhiana.
3	5	4	4	2		2	1	N 72° E	2·1	1·6	+31	1·8	69	− 1	·734	−·006	1·8	−0·4	4	3·30	+0·70	7·11	2·83	+ 4·28	18·94	24·64	− 5·70	4·35	Sialkot.
	2	1	9				1	S 50° E	2·7	1·3	+108	2·4	79	− 3	·801	−·001	2·2	−0·5	3	3·90	− 0·90	4·51	4·24	+ 0·27	14·31	26·94	−12·63	2·96	Ambala.
3			1	2	1	1	5	N 55° W	2·7	1·3	+108	2·5	59	− 3	·577	−·088	2·3	+0·4	4	4·20	−0·20	4·26	3·23	+ 1·03	14·68	23·94	− 9·26	3·22	Rawalpindi.
													66	− 1	·733	+·001	1·8	−0·2				1·71	0·76	+0·95					VII.—Indus Valley and North-West Rajputana.
	1					2		N 57° W	0·8	3·1	− 74	0·9	62	− 1	·627	−·006	1·8	+0·7	3	1·40	+1·60	1·52	0·52	+ 1·00	3·63	5·59	− 1·96	0·84	Peshawar.
	6		4			1		N 77° E	1·4	1·7	− 18	1·5	69	+ 1	·748	+·017	1·1	+0·5	1	1·00	0	0·13	0·28	− 0·15	2·90	5·28	− 2·38	0·10	D. I. Khan.
2	12	7	1	2	3	1		N 67° E	7·2			6·9	66	+ 6	·751	+·072	1·5	+0·4	3	1·60	+1·40	5·20	0·54	+ 4·66	9·45	10·29	− 0·84	3·00	Khushab.
	5	1	1	10	10	1		S 11° W	7·1			6·6	55	− 4	·632	−·070	1·3	+0·1	3	1·30	+1·70	4·32	0·87	+ 3·45	7·64	7·75	− 0·11	2·24	Montgomery.
1	3		2	3	12	1		S 32° W	2·2	2·8	− 21	2·0	62	− 3	·701	−·048	1·0	+0·4	1	0·70	+0·30	0·90	0·32	+ 0·58	2·45	5·67	− 3·22	0·90	Multan.
2		2	4	15	3			S 8° E	3·8	3·1	+ 23	3·6	66	− 3	·780	−·003	1·1	+0·5	0	0·50	−0·50	0	0·07	− 0·07	0·46	2·67	− 2·21	0	Jacobabad.
				5	22	2		S 40° W	11·5	12·5	− 8	10·2	70	+ 2	758	+·041	0·5	−1·1	1	0·80	+0·20	0·20	0·41	− 0·21	0·14	6·07	− 5·53	0·20	Hyderabad.
		1			3	21	5	N 87° W	13·3	14·9	− 11	11·7	78	− 3	·839	−·012	4·4	−0·6	0	0·60	−0·60	0	0·51	− 0·51	0·13	6·65	− 6·52	0	Kurrachee.
		2	2	2	11	12	1	S 59° W	9·6	5·6	+71		65	+ 2	·756	+·017	1·5	−0·9	3	1·90	+1·10	1·68	0·94	+ 0·74	2·32	10·03	− 7·71	1·00	Bikaner.
		1	5	13	8	2		S 53° W	11·2	6·1	+84	10·5	70	− 6	·784	−·027??	1·1	−2·4	2	2·50	−0·50	3·79	2·11	+ 1·68	4·51	12·42	− 7·91	3·51	Pachpadra.
	3	1		2	12	9	1	S 65° W	6·6			5·9	63		·686		4·0		4	2·50	+1·50	1·02	1·75	− 0·73	2·71	12·26	− 9·55	0·51	Jodhpur.
													74	−4	·787	−·010	4·4	+0·3				2·33	4·36	−1·90					VIII.—East Rajputana Central India and Gujarat.
1	4	2		1	2	5	11	N 46° W	4·5	5·2	−13		63	−10	·681	−·041	4·7	+1·1	5	4·90	+0·10	2·03	3·56	− 1·53	3·68	24·26	−20·58	0·78	Jaipur.
		2				6		W	4·2			3·8	79		·912		2·4		3			2·75			9·50			1·00	Bharatpur.
2	1				4	10	5	N 77° W	4·9			3·9	60		·704		4·1		6	5·10	+0·90	2·67	5·16	− 2·49	5·95	28·61	−22·66	1·25	Kotah.
2	1		1	1		11	8	N 66° W	9·1	7·2	+26		63	− 6	·694	−·035	4·5	+1·6	4	3·80	+0·20	1·34	2·80	− 1·46	3·66	19·14	−15·48	0·72	Sambhar.
	1			1	3	12	7	N 82° W	9·4	5·0	+88	8·2	68	− 7	·707	−·027	5·5	+2·4	5	4·10	+0·90	3·78	2·33	+ 1·45	6·11	20·09	−13·98	2·05	Ajmer.
					2	13	3	N 88° W	3·6			3·2	73		·730		3·0		2	6·10	−4·10	4·47			17·27			3·02	Udaipur.
					10	10	10	W	13·9	11·3	+23	11·7	78	+ 3	·829	+·043	4·2	−0·2	1	2·00	−1·00	0·72	1·68	− 0·96	6·30	13·71	− 7·41	0·72	Bhuj.
				1	16	12	1	S 62° W	15·3			15·0	71		·797		2·6		0			0·01			6·70			0·01	Jamnagar.
					4	20	5	N 88° W	6·3	8·5	−26	6·2	71	−11	·765	−·046	3·5	−1·3	1	5·10	−4·10	0·31	3·96	− 3·65	16·93	27·13	−10·20	0·16	Rajkot.
			1	1	7	13	6	S 89° W	10·1	8·6	+17	10·1	86	+ 1	·898	+·046	4·8	−0·9	1	4·60	−3·60	0·20	1·99	− 1·79	6·76	16·78	−10·02	0·16	Veraval.
				2	16	11	1	S 61° W	11·4				82		·891		3·2		0			0·06			2·35			0·02	Dwarka.
					12	10	8	S 83° W	10·0			8·4	71	−11	·765	−·091	5·2	−0·2	3	7·80	−4·80	0·70	4·43	− 3·73	11·22	18·70	− 7·48	0·25	Bhavnagar Para.
1	1	5		4		11		S 66° W	1·5	2·4	− 38	1·5	80	− 1	829	+·008	6·2	+1·3	6	7·00	−1·00	3·15	5·24	− 2·09	14·87	41·43	−26·56	1·08	Nowgong.
1					4	22	1	S 88° W	6·4	4·8	+33	5·2	84	− 2	·733	−·015	7·4	+1·1	8	8·80	−0·80	3·32	7·68	− 4·36	29·66	31·18	− 1·52	1·16	Indore.
3	1	1			10	13	1	S 82° W	9·6	10·2	− 6	8·1	79	+ 1	·743	+·002	5·9	+2·5	7	6·50	+0·50	6·57	5·11	+ 1·46	16·12	28·69	−12·57	2·82	Neemuch.

ny station, the data for that station are not utilized in calculating the provincial departures from normal.

* Mean of 29 days.

40, 42 and 44 are derived are incomplete.

Tab

Abstract of Observations taken at 8 A.M. at 232 Stati

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
45	Surat	39	29·803	+·003	29·787	29·925	18th 19th & 20th	29·606	10th	·319	81·1	89·6	+1·1	76·4	+0·9	83·0	+1·0	13·2	95·7	30th	72·0	19th, 20th & 21st.	
	Ahmedabad	163	29·643	?	29·755	29·782	19th	29·441	10th	·341	81·7	94·1	+2·0	77·0	+0·8	85·6	+1·4	17·1	99·2	30th	74·1	19th	
	Deesa	466	29·333	−·002	29·753	29·465	19th	29·140	11th	·325	82·1	96·1	+3·3	75·4	+1·5	85·8	+2·4	20·7	104·6	30th	70·5	30th	
22	Agra	555	29·160	−·019	29·680	29·268	29th	29·016	10th	·252	84·6	96·5	+3·4	80·5	+3·8	88·5	+3·6	16·0	105·0	4th	75·9	29th	
21	Jhansi	858	28·874	−·016	29·687	28·995	19th	28·728	7th	·267	83·1	95·2	+3·5	79·6	+3·8	87·4	+3·7	15·6	105·2	4th	74·1	27th	
	IX.—Deccan.			−·009								87·0	+0·4	71·9	+0·2	79·5	+0·3	15·2					
38	Belgaum	2,539	27·343	+·004	29·834	27·442	18th	27·225	10th	·217	70·6	80·2	+1·3	64·8	−0·5	72·5	+0·4	15·4	91·3	30th	59·8	16th	
	Sholapur	1,590	28·257	−·004	29·803	28·363	18th	28·130	10th	·233	77·3	93·2	+4·8	72·4	+2·9	82·8	+3·4	20·8	98·2	21st & 29th,	68·6	15th	
	Poona	1,840	28·029	+·006	29·832	28·142	18th	27·866	10th	·277	74·0	86·1	+1·7	67·6	−1·0	76·9	+0·4	18·5	94·0	30th	62·4	16th & 19th.	
	Bijapur	*1,948*	27·917	+·002	29·814	28·025	18th	27·802	10th	·223	75·8	90 2	+4·3	69·9	+0·3	80·1	+2·3	20·3	95·4	28th & 29th.	67·2	15th	
40	Malegaon	1,430	28·388	−·006	29·779	28·517	18th	28·199	10th	·318	77·1	88·9	+1·0	?	?	?	?	?	96·9	30th	?		
	Ahmednagar	2,154	27·712	+·009	29·818	27·821	18th	27·554	10th	·267	75·5	88·7	+3·5	67·7	−0·3	78·2	+1·6	21·0	96·9	30th	61·0	16th	
41	Akola	930	28·864	−·006	29·751	29·010	18th	28·697	8th	·313	77·4	87·5	−1·6	72·3	−0·4	79·9	−1·0	15·2	93·9	3rd	68·8	17th & 23rd.	
	Amraoti	1,215	28·562	−·007	29·741	28·710	17th & 18th.	28·382	9th	·328	75·6	86·5	−1·9	72·0	−0·1	79·3	−1·0	14·5	93·2	3rd	68·5	21st	
42	Khandwa	1,044	28·739	−·010	29·749	28·884	19th	28·540	10th	·344	77·2	87·6	−0·5	73·2	0	80·4	−0·3	14·4	94·2	3rd & 4th,	69·6	15th	
	Hoshangabad	1,006	28·772*	−·004	29·747	28·922	17th	28·587	9th	·335	76·8	86·6	−1·5	73·1	−0·2	79·9	−0·9	13·5	97·8	18th	67·7	27th	
	Nagpur	1,025	28·726	−·013	29·714	28·885	17th	28·519	9th	·366	77·1	86·8	−2·5	73·1	−0·7	80·0	−1·6	13·7	94·6	3rd	68·6	26th	
43	Chanda	*634*	29·163	+·016	29·748	29·320	17th	28·965	9th	·355	77·9	87·1	−2·0	73·6	−0·9	80·4	−1·5	13·5	94·7	3rd	69·0	26th	
	Seoni	2,033	27·721	−·023	29·708	27·875	18th	27·526	9th	·349	74·8	84·8	−0·8	71·9	+1·3	78·4	+0·3	12·9	90·8	3rd & 4th.	67·0	26th	
	Jubbulpore	1,327	28·408	−·018	29·699	28·564	17th	28·228	8th	·336	76·7	86·7	−0·7	72·4	−0·4	79·5	−0·6	14·3	92·9	4th	64·2	15th	
	Saugor	1,807	27·939	−·023	29·703	28·090	19th	27·775	9th	·315	76·4	86·4	−0·2	72·0	+0·5	79·2	+0·2	14·4	92·4	4th	68·1	21st	
49	Sutna	1,040	28·667	−·028	29·673	28·790	19th	28·525	5th	·265	79·1	88·4	+0·4	75·6	+1·0	82·0	+0·7	12·8	95·0	3rd & 4th.	71·6	21st & 27th.	
44	Raipur	970	28·755	−·026	29·680	28·924	17th & 18th.	28·557	6th	·367	77·7	86·7	−1·5	74·6	−0·2	80·7	−0·9	12·1	92·6	3rd	68·9	26th	
	Pendra	2,123?	27·694		29·673	27·840	17th	27·533	6th	·307	75·4	84·8		71·4		78·1		13·4	89·3	4th	65·6	26th	
	Sambalpur	486	29·230	−·044	29·666	29·408	17th	28·995	8th	·413	79·6	87·0	−2·3	76·3	−1·0	81·7	−1·7	10·7	91·1	2nd, 20th & 21st.	72·6	26th	
39	Aurangabad	1,905	27·928		29·783	28·043	20th	27·748	10th	·295	75·3	86·4		69·1		77·8		17·3	94·9	27th	64·7	25th	
	Indur	1,260	28·503?		29·718?	28·574	4th	28·387	9th	·187	77·6	86·8		71·5		79·2		15·3	91·8	28th	68·2	8th	
	Bidar	*2,165*	27·696?		29·813?	27·828	18th	27·580	9th	·248	74·6	84·2		70·6		77·4		13·6	89·8	28th & 29th,	65·7	8th	
53	Gulbarga	1,503	28·320	?	29·779	28·446	18th	28·200	10th	·246	76·6	89·8	+2·3	71·8	+1·0	80·8	+1·7	18·0	96·5	29th	69·2	8th & 13th.	
	Raichur	1,326?	28·521	+·002	29·800	28·618	18th	28·403	10th	·215	78·4	92·0	+4·3	73·7	+1·5	82·9	+2·9	18·3	98·1	30th	71·1	16th & 23rd.	
	Hyderabad (Deccan)	1,696	28·126	−·014	29·770	28·240	17th	27·998	9th	·242	76·4	86·7	0	72·4	+1·6	79·6	+0·8	14·3	93·4	30th	67·2	8th	
	Hanumkonda	871	28·903		29·725	29·038	17th	28·700	10th	·338	79·1	87·1		74·6		80·9		12·5	93·5	30th	69·8	8th	
	X.—West Coast.			+·001								84·6	+1·0	75·5	+0·6	80·1	+0·8	9·1					
37	Bombay	37	29·832	−·002	29·809	29·952	18th	29·658	10th	·294	79·8	85·8	+1·3	77·3	+0·8	81·6	+1·1	8·5	88·5	30th	75·5	9th, 13th & 23rd.	
	Ratnagiri	110	29·776	+·013	29·826	29·884	18th	29·644	10th	·240	79·0	85·0	+0·8	75·3	+0·9	80·2	+0·9	9·7	86·8	8th & 30th,	71·9	19th	
	Mormugao	*60*	29·848	+·003	29·843	29·947	18th	29·726	10th	·221	79·3	84·4	+0·9	76·1	+1·0	80·3	+1·0	8·3	86·0	11th & 26th.	73·4	19th	
	Goa	199	29·690	?	29·827	29·794	18th	29·575	10th	·219	79·3	83·5	+0·6	76·7	+1·2	80·1	+1·1	6·8	86·0	24th	73·0	19th	
	Karwar	44	29·868	+·007	29·846	29·964	18th	29·756	10th	·208	77·7	83·9	+1·2	74·8	+0·9	79·3	+1·1	9·1	86·2	25th	71·5	19th & 20th.	
	Cochin	10	29·927	−·004	29·865	29·982	18th	29·885	10th	·097	79·9	87·3	+2·7	75·0	+0·5	81·2	+1·6	12·3	90·3	30th	72·7	22nd	
	Calicut	27	29·904	−·003	29·861	29·967	18th	29·855	10th	·112	77·9	84·3	0	74·2	−0·2	79·3	−0·1	10·1	87·8	26th	71·7	22nd	
	Mangalore	65	29·859	−·007	29·857	29·933	18th	29·787	10th	·146	78·6	83·7	+0·4	74·3	+0·2	79·0	+0·3	9·4	85·7	28th	71·9	21st & 22nd.	
	Trivandrum	198	29·729	−·001	29·858	29·795	17th	29·686	26th	·109	73·4	83·5	+0·6	75·5	+0·2	79·5	+0·4	8·0	86·0	30th	73·0	6th & 7th.	

* Mean of 28 days.

N. B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the return

Note 2.—The data from which divisional means of the figure colum

ontinued.

ndia, Burma, etc., in September, 1905—continued.

Wind Direction.								Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
mber of winds from																												
N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September 1905.	Normal rainfall for period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September 1905.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
		1	7	3	10	1	S 56° W	6·0	9·2	−35	5·6	84	+ 1	·882	+ ·021	4·9	−0·8	4	7·00	− 3·00	1·18	7·01	− 5·83	19·85	41·73	−21·88	0·55	Surat.
				6	11	12	N 82° W	3·7			3·2	75	− 3	·803	− ·011	5·7	−0·1	3	5·80	− 2·80	3·45	4·77	− 1·32	42·19	31·79	+10·40	2·49	Ahmedabad.
		2	2	9	12	4	S 72° W	7·2	8·5	−15		71	− 5	·771	− ·007	2·8	−2·2	2	3·73	− 1·73	1·32	3·98	− 2·66	19·62	23· 3	− 3·71	0·68	Deesa.
2		10		9		9	S 37° W	5·4	4·1	+32	6·4	67	− 7	·781	− ·026	4·½	+0·9	4	4·80	− 0·80	3·04	4·23	− 1·19	8·4	26·.3	−17·95	1·22	Agra.
5	3		1	5	4	8	N 55° W	5·3	3·2	+66	6·5	73	− 2	·829	+ ·027	2·9	−0·1	7	6·80	+ 0·20	5·59	5·89	− 0·30	16·03	8 09	−20·06	2·07	Jhansi.
												80	− 2	·733	− ·015	5·9	−0·3				7·36	7·63	−0·05				IX.—Deccan.	
						7	8	N 59° W	12·7‡	16·7	−24		87	− 2	·655	− ·002	6·5	−1·0	2	9·10	− 7·10	0·47	4·83	− 4·36	23·92	39·89	−15·97	0·12	Belgaum.
1				4	6	18	N 61° W	12·2	9·9	+23	12·1	67	−11	·630	− ·045	6·6	−0·7	2	9·50	− 7·50	1·28	8·77	− 7·49	9·12	24·41	−15·29	0·99	Sholapur.
				2	23	3	N 87° W	12·0	11·4	+ 5		75	− 6	·627	− ·052	6·8	−0·4	1	8·10	− 7·10	0·40	5·00	− 4·60	20·87	21·42	− 0·55	0·14	Poona.
				7	14	7	N 85° W	6·4			6·3	74	−10	·664	− ·036	5·2	−2·1	3	9·70	− 6·70	1·06	7·61	− 6·55	7·67	17·44	− 9·77	0·71	Bijapur.
1				3	18	6	N 79° W	8·3	7·6	+ 9	9·5	74	− 3	·696	− ·013	2·8	−2·8	3	7·80	− 4·80	2·97	6·90	− 3·93	13·19	20·62	− 7·43	1·47	Malegaon.
				3	7	17	N 60° W	7·6			9·3	70	−12	·622	− ·063	4·0	−1·9	4	9·80	− 5·80	1·01	6·98	− 5· 7	9·80	18·13	− 8·33	0·34	Ahmednagar.
				4	8	18	N 67° W	7·9	5·8	+36	7·0	83	+ 2	·772	+ ·011	7·3	+1·5	9	8·40	+ 0·60	5·93	6·52	− ·59	19·01	29·00	− 9·99	1·16	Akola.
1		1		5	18	3	N 88° W	4·5	4·4	+ 2	4·1	84	− 1	·740	− ·038	6·2	+0·2	9	7·30	+ 1·70	8 67	6·26	+ 2·41	24·19	30·03	− 5·84	2·77	Amraoti.
					5	19	N 50° W	7·4?	6·2	+19?	7·0?	79	− 3	·731	− ·025	4·5	−0·7	8	7·70	+ 0·30	6·31	6·58	− 0·27	27·69	28·68	−0·99	3·28	Khandwa.
			3	14	10	3	S 64° W	2·8	2·5	+12	3·0	90	+ 3	·827	+ ·013	6·3	+0·2	10	10·50	− 0·50	15·18	9·66	+ 5·52	49·00	48·49	+ 0·51	4·54	Hoshang-abad.
			1	1	7	12	N 48° W	8·1	6·1	+33	6·4	83	+ 3	·767	− ·025	6·4	0	13	10·30	+ 2·70	17·72	9·04	+ 8·68	49·20	44·00	+ 5·20	6·10	Nagpur.
	1		1	6	13	3	S 87° W	6·3	4·1	+54	5·6	89	+ 9	·863	+ ·053	5·7	−0·4	12	11·30	+ 0·70	16·63	9·48	+ 7·15	38·81	49·88	−11·07	2·66	Chanda.
6	1		2	5	5	5	N 39° W	6·4	3·9	+64	5·4	84	0	·723	− ·045	6·3	+1·8	12	11·90	+ 0·10	11·27	9·51	+ 1·76	42·13	49·72	− 7·59	5·20	Seoni.
2	2	2	2	4	10	6	N 84° W	4·0	3·4	+18	3·5	89	+ 5	·822	+ ·024	6·0	+0·5	10	9·80	+ 0·20	9·99	7·90	+ 2·09	42·15	54·58	−12·13	3·40	Jubbulpore.
3	1	2		2	15	4	N 78° W	7·5	3·3	+127	6·7	82	− 1	·745	− ·018	5·6	+0·1	10	9·70	+ 0·30	7·99	7·31	+ 0·68	24·66	44·84	−20·18	2·67	Saugor.
1	3	3		5	6	2	S 84° W	2·5	6·5	−62	2·3	87	+ 7	·865	+ ·048	8·1	+2·2	11	8·70	+ 2·30	6·62	6·10	+ 0·52	27·19	40·55	−13·36	1·77	Sutna.
1	1		1	13	2	1	S 56° W	5·3	5·9	−10	6·4	88	+ 4	·827	− ·011	6·2	−0·3	15	10·60	+ 4·40	16·33	7·39	+ 8·94	43·50	46·12	− 2·62	5·85	Raipur.
1	1	3	2		1	7	N 14° W	5·7			4·8	85		·758		6·7		13			4·69			30·68			1·17	Pendra.
4	2	4	3	13	3	1	S 25° W	5·3	2·2	+141	5·2	84	+ 2	·859	− ·029	7·2	+1·2	16	11·80	+ 4·20	15·46	8·76	+ 6·70	54·81	62·18	− 7·37	3·47	Sambalpur.
				9	17	3	S 83° W	12·0			11·9	74		·654		5·5		6	9·60	− 3·60	3·54	7·24	− 3·70	11·38	26·30	−14·92	1·20	Aurangabad.
				2		28	N 49° W	4·9			4·1	69		·656		6·6		9	10·30	− 1·30	13·83	8·29	+ 5·54	33·95	35·05	− 1·10	3·10	Indur.
1	2			6	9	7	N 69° W	6·2			5·2	81		·694		4·7		9	11·90	− 2·90	7·85	9·21	− 1·36	24·20	33·14	− 8·94	3·01	Bidar.
1					11	13	N 55° W	9·7			8·5	73	− 7	·670	− ·041	6·0	−0·8	6	11·20	− 5·20	4·90	9·33	− 4·43	23·02	26·26	− 3·24	1·60	Gulbarga.
				26	2		S 45° W	14·5			13·8	70	−10	·685	− ·040	3·9	−2·8	5	9·80	− 4·80	3·34	8·44	− 5·10	21·42	24·33	− 2·91	1·40	Raichur.
	1				19	1	N 88° W	5·4			5·2	77	− 6	·760	+ ·026	5·5	−1·0	6			3·17	6·04	− 2·87	20·93	25·74	− 4·81	1·22	Hyderabad (Deccan).
		3	2	2	8	7	N 88° W	5·4†			4·8	76		·755		7·1		7	10·30	− 3·30	4·68			20·87			1·00	Hanumkonda
												84	− 4	·848	− ·001	5·8	−0·8				6·21	9·20	−2·99				X.—West Coast.	
3	4	4	2	4	8	3	S 59° W	8·1	11·7	−31		85	− 2	·877	− ·003	6·9	−0·4	12	14·00	− 2·00	6·16	11·75	− 5·59	32·34	72·21	−39·87	2·25	Bombay.
7	6	5	2	2	4	1	S 88° E	8·6	8·2	+ 5	8·5	86	− 1	·851	− ·008	6·3	−0·2	10	15·60	− 5·60	8·31	12·52	− 4·21	48·85	102·14	−53·29	2·12	Ratnagiri.
8	1	6	6	6	2		S 30° E	8·1				90	− 1	·889	+ ·004	5·8	0	11			4·21	8·34	− 4·13	61·19	85·01	−23·82	1·02	Mormugao.
6	7	1	1	2	2	2	N 34° E	8·9				84	− 5	·834	− ·026	5·8	−1·6	12			7·38	8·37	− 0·99	54·59	91·24	−36·65	1·63	Goa.
12	1		1	2	7	2	N 3° W	5·0				86	− 4	·844	+ ·021	4·8	−1·3	10	15·10	− 5·10	5·36	12·76	− 7·40	78·63	113·71	−35·08	1·90	Karwar.
9	9	2	1		3	4	N 55° E	7·9				82	− 4	·849	+ ·004	4·8	−1·2	11	14·20	− 3·20	4·91	8·98	− 4·07	64·29	85·04	−20·75	1·13	Cochin.
2	2				1	6	N 8° W	6·0			6·0	87	− 1	·830	− ·002	5·8	−0·5	14	12·20	+ 1·80	10·09	6·13	+ 3·96	90·94	94·37	− 3·43	1·93	Calicut.
5	9	1				2	N 61° E	4·5	2·4	+88		89	− 1	·870	+ ·025	6·5	−1·1	9	16·90	− 7·90	4·15	10·32	− 6·17	121·93	111·49	+10·44	1·55	Mangalore.
					1	16	N 34° W	6·5				69	−15	·777	− ·026	5·8	−1·0	9	7·10	+ 1·90	4·50	3·63	+ 0·87	52·47	36·14	+16·33	1·00	Trivandrum.

y station, the data for that station are not utilized in calculating the provincial departures from normal, 40, 42 and 44 are derived are incomplete.

† Mean of 27 days.
‡ Mean of 22 days.

Tab

Abstract of Observations taken at 8 A.M. at 232 Statio

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
	XI.—South India.			—·005								91·2	+1·6	74·9	+1·0	83·1	+1·3	16·3					2
57	Pamban . .	37	29·843	—·004	29·807	29·936	17th	29·780	6th	·156	83·4	90·6	+1·6	79·9	+1·6	85·3	+1·6	10·7	93·3	27th	78·2	14th & 15th.	1
	Tinnevelly .	168	29·725	+·008	29·822	29·810	17th	29·674	26th	·136	85·7	98·3	+0·5	79·0	+0·4	88·7	+0·5	19·3	101·4	13th & 30th.	75·4	22nd	2
	Madura . .	447	29·437	+·016	29·819	29·529	17th	29·368	10th	·161	81·8	95·3	0	75·4	+0·1	85·4	+0·1	19·9	99·5	12th	72·0	13th	2
	Periyakulam	944	28·912		29·828	29·024	17th	28·870	6th	·154	79·2	94·7		71·7		81·9		23·0	99·1	30th	67·1	28th	3
34	Salem . .	940	28·962	—·006	29·847	29·045	17th	28·879	6th	·166	79·2	92·2	+0·9	73·6	+1·7	82·9	+1·3	18·6	97·7	29th	71·4	9th, 10th & 19th.	2
	Coimbatore .	1,348	28·540	—·001	29·845	28·624	18th	28·455	6th	·169	76·0	89·9	+0·3	70·5	—0·2	80·2	+0·1	19·4	95·4	30th	67·3	22nd	2
35	Mercara . .	3,781	26·214	+·003	26·147	26·275	17th	26·158	6th&7th	·117	65·2	72·4	+0·2	61·5	—0·4	67·0	—0·1	10·9	76·5	18th, 21st & 30th.	59·1	20th, 21st & 27th.	1
36	Chitaldroog .	2,405	27·490	—·005	29·840	27·584	17th	27·387	10th	·197	73·0	85·7	+2·2	68·0	+0·5	76·9	+1·4	17·7	95·1	30th	64·9	20th, 21st & 22nd.	2
	Bangalore .	3,021	26·916	—·003	29·864	26·990	17th, 18th &19th.	26·832	6th	·158	70·3	83·2	+1·3	65·8	+0·5	74·5	+0·9	17·4	87·8	30th	62·8	22nd	2
	Hassan . .	3,091	26·860	+·002	29·873	26·946	17th	26·781	10th	·165	70·8	82·8	+3·0	63·9	—0·3	73·4	+1·4	18·9	90·2	30th	59·3	22nd	3
	Mysore . .	2,518	27·416	0	29·883	27·492	17th	27·342	10th	·150	71·7	84·5	0	65·8	—0·6	75·2	—0·3	18·7	91·0	30th	61·4	22nd	2
56	Negapatam .	31	29·833	—·007	29·795	29·931	17th	29·759	1st&6th	·172	82·3	94·4	+1·9	78·1	+1·6	86·3	+1·8	16·3	97·9	10th&28th	75·0	1st	2
	Cuddalore .	37	29·820	+·001	29·787	29·935	17th	29·734	6th	·201	82·1	94·9	+3·0	77·8	+2·1	86·4	+2·6	17·1	99·2	26th	73·7	16th	2
	Trichinopoly .	255	29·625	+·004	29·813	29·729	17th	29·542	6th	·187	82·0	96·9	+1·4	76·5	+0·8	86·7	+1·1	20·4	101·1	12th	74·4	18th	2
	Madras . .	22	29·814	—·013	29·767	29·936	17th	29·699	6th	·237	83·2	95·6	+2·6	79·1	+2·1	87·4	+2·4	16·5	102·0	27th	75·0	2nd	2
	Vellore . .	707	29·145		29·782	29·250	17th	29·045	6th	·205	81·5	87·4		75·4		81·4		12·0	91·4	19th&30th	71·7	7th	1
55	Nellore . .	61	29·762	+·001	29·752	29·878	17th	29·652	6th	·226	83·8	96·1	+1·5	78·1	+0·4	87·1	+1·0	18·0	101·3	29th	71·1	20th	3
	Masulipatam .	15	29·788	+·002	29·738	29·935	17th	29·611	6th	·324	83·1	92·5	+1·8	78·6	+1·2	85·6	+1·5	13·9	99·2	28th	73·1	8th	2
54	Cuddapah .	433	29·415	—·008	29·785	29·511	17th	29·317	7th	·194	84·7	97·7	+5·2	79·2	+3·4	88·5	+4·3	18·5	103·2	30th	74·8	3rd	2
	Kurnool .	923	28·901	—·019	29·771	29·004	17th	28·804	6th	·200	79·7	92·4	+3·2	75·7	+2·6	84·1	+2·9	16·7	98·2	30th	73·1	5th, 13th & 16th.	2
	Bellary . .	1,475	28·375	—·010	29·801	28·480	18th	28·272	10th	·208	78·0	93·0	+2·4	74·3	+1·6	83·7	+2·0	18·7	99·0	30th	71·2	10th & 22nd.	2
52	Cocanada .	26	29·750	—·012	29·712	29·931	17th	29·568	6th	·363	81·4	88·5	—0·7	78·0	—0·1	83·3	—0·4	10·5	95·1	20th	73·0	15th	1
	Waltair(Vizag.)	*226*	29·518	—·023	29·686	29·713	17th	29·257	24th	·456	80·5	87·1	P	76·8	P	82·0	P	10·3	95·4	22nd	72·9	15th & 26th.	1
	Gopalpur .	72	29·645	—·034	29·658	29·836	17th	29·373	7th	·463	81·8	87·5	—0·8	78·8	+0·5	83·2	—0·2	8·7	95·2	21st&22nd	76·0	2nd	1
	XII.—Hill Stations.																						
48	Pishin . .											85·8		49·8		67·8		36·0	96·4	7th	38·0	30th	4
	Quetta . .	5,502	24·604	+·001	24·564	24·740	30th	24·473	7th	·267	64·1	84·2	— 1·2	47·5	—2·0	65·9	—1·6	36·7	93·1	6th & 7th	34·8	30th	4
	Kalat . .										68·9	83·6	— 1·6	26·2	—13·3	54·9	—7·5	57·4	95·1	5th	15·4	20th	6
	Chaman. .	4,311	25·647	—·001	25·608	25·801	30th	25·498	6th	·303	68·6	87·2	— 4·4	58·8	—3·5	73·0	—4·0	28·4	99·2	4th & 7th.	48·1	30th	4
0	Leh . .	11,503	19·738	+·008	19·706	19·815	17th	19·617	12th	·198	43·4	66·4	— 3·9	40·7	—0·8	53·6	—2·4	25·7	81·2	9th	32·9	25th	4
	Srinagar .	5,204	24·839	—·007	24·810	24·981	24th	24·708	7th	·273	60·1	78·2	— 1·2	54·8	+1·8	66·5	+0·3	23·4	90·8	8th & 9th.	48·2	24th	4
	Gulmarg . .	*8,569*	21·873		21·841	21·957	25th	21·738	12th	·219	54·6	62·5		40·8		51·7		21·7	73·1	7th	31·2	23rd	4
	Sonemarg .	*8,764*	21·870		21·838	21·963	24th	21·752	12th	·211	44·9	64·0		39·7		51·8		24·3	74·9	9th	30·6	24th	4
	Skardu . .	*7,505*	22·840		22·810	22·977	24th	22·692	7th	·285	58·9	72·2		51·0		61·6		21·2	91·9	8th	42·2	13th	4
	Dras . .	*10,059*	20·827		20·795	20·919	24th	20·729	12th	·190	49·2	66·3		38·8		52·6		27·5	84·0	9th	31·1	24th	4
	Gilgit . .	4,890	25·083		25·056	25·226	24th	24·853	7th	·373	68·6	81·9	— 4·8	61·8	—2·7	71·9	—3·8	20·1	101·7	9th	52·1	13th	4
32	Chitral . .	*5,486*									65·3	87·5		57·5		72·5		30·0	98·2	5th	47·0	27th	4
	Killa Drosh .	4,700?									67·4	87·9		64·1		76·0		23·8	98·2	5th	56·1	30th	4
	Para Chinar .	6,000	24·401		24·368	24·513	28th	24·225	12th	·288	69·2	82·2		58·7		70·5		23·5	89·3	6th	51·2	30th	4
	Cherat . .	*4,256*	25·629	—·014	25·597	25·749	29th	25·434	12th	·315	72·5	86·2	+ 0·4	66·2	+0·3	76·2	+0·4	20·0	97·4	4th	57·0	13th	4

N. B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the retur

Note 2.—The data from which divisional means of the figure colum

Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the elevations of which exceed 3,200 feet.

continued.

India, Burma, etc., in September, 1905—continued.

Wind Direction.								Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Station.
Number of winds from							Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected),	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May, to 30th September 1905.	Normal rainfall for period, 1st May, to 30th September.	Departure from normal of period, 1st May to 30th September 1905.	Heaviest rainfall during month.	
N.E.	E.	S.E.	S.	S.W.	W.	N.W.																						
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
												75	−2	·769	−·003	5·8	−0·7				3·11	5.12	−2·01					XI.—South India.
	1	1	5	19	3	1	S 40° W	12·5			13·3	80		·919		3·0		0	2·20	− 2·20	0	1·31	− 1·31	1·03	2·96	− 1·93	0	Pamban.
2	1			6	13	5	N 78° W	6·8			6·5	56	− 4	·694	−·023	3·6	−1·8	3	2·00	+ 1·00	1·49	1·30	+ 0·19	5·15	3·98	+ 1·17	0·77	Tinnevelly.
5			1	1	1	14	N 23° W	5·6	3·4	+ 65	6·4	73	+ 5	·795	+·058	4·7	−0·5	7	6·10	+ 0·90	3·31	4·99	− 1·68	12·27	14·64	− 2·37	1·03	Madura.
	1		2	1	1		S 27° W	3·1			3·4	67		·667		4·0		5	4·50	+ 0·50	3·12	2·57	+ 0·55		8·92		1·14	Periyakulam.
	1		4	10	11		S 62° W	4·7	3·7	+ 27	4·1	77	− 3	·782	+·011	5·9	0	6	8·70	− 2·70	3·83	6·55	− 2·72	19·55	25·48	− 5·93	1·32	Salem.
		1	2	21	6		S 49° W	9·1	6·6	+ 38	8·4	79	− 5	·713	−·035	4·2	−1·1	3	3·20	− 0·20	0·98	1·32	− 0·34	6·50	7·60	− 1·10	0·62	Coimbatore.
				2	11	9	N 56° W	1·8	7·9	− 77	1·7	92	0	·584	+·010	7·0	−1·5	13	18·00	− 5·00	7·49	10·48	− 2·99	89.16	110·32	−21·16	1·54	Mercara.
				10	15	5	S 82° W	9·7			8·4	82	0	·667	+·024	6·6	−1·5	4	6·90	− 2·90	1·33	4·71	− 3·38	10·51	17·72	− 7·22	0·50	Chitaldroog.
				13	15	2	S 73° W	9·0	6·7	+ 34	8·0	84	− 2	·629	−·003	7·5	−0·4	3	9·60	− 6·60	2·46	6·23	− 3·77	21·23	22·92	− 1·69	1·23	Bangalore.
				5	12	10	N 80° W	4·0			3·5	83	+ 1	·625	+·020	7·1	−1·1	3	7·40	− 4·40	1·77	4·68	− 2·91	15·81	22·08	− 6·27	0·79	Hassan.
			1	15	11	3	S 68° W	9·2			9·9	80	− 3	·618	−·017	7·6	+0·1	3	7·70	− 4·70	0·66	5·60	− 4·94	14·26	18·03	− 3·77	0·35	Mysore.
				10	18		S 74° W	8·0	5·2	+ 54	7·0	74	− 1	·818	−·002	4·4	−1·3	3	5·60	− 2·60	2·29	3·45	− 1·16	8·67	12·10	− 3·23	1·24	Negapatam.
		2	9	14	5		S 43° W	4·6			5·7	73	− 9?	·806	−·074?	4·7	−1·3	2	6·60	− 4·60	1·72	6·21	− 4·49	13·70	17·35	− 3·65	1·01	Cuddalore.
			1	8	10	1	S 70° W	5·4	7·1	− 24		68	− 4	·745	−·005	4·7	−1·3	5	5·90	− 0·90	2·00	3·91	− 1·91	8·02	14·01	− 5·99	0·73	Trichinopoly.
		1	7	11	10	1	S 50° W	7·5	6·5	+ 15		76	− 2	·870	+·023	5·8	−0·9	4	10·70	− 6·70	2·77	5·01	− 2·24	8·04	17·42	− 9·44	1·56	Madras.
4	6	7	1	1		2	S 88° E	3·0			3·0	70		·756		4·2		3	8·60	− 5·60	1·43	6·14	− 4·71	21·95	20·67	+ 1·28	0·63	Vellore.
1	1	1	5	3	16	3	S 74° W	6·4				70	− 6	·787	−·062	7·0	+0·2	7	5·60	+ 1·40	5·64	4·35	+ 1·29	11·38	12·81	− 1·43	1·81	Nellore.
		2	2	3	12	7	S 88° W	8·2	6·4	+ 28	7·2	82	−2?	·934	+·027	7·6	+0·6	6	9·40	− 3·40	1·66	5·89	− 4·23	18·99	24·53	− 5·54	0·50	Masulipatam
1				4	13	12	N 75° W					61	−13	·728	−·044	5·9	−1·3	2	8·30	− 6·30	0·76	5·93	− 5·17	15·85	20·95	− 5·10	0·46	Cuddapah.
	1			13	7	8	S 83° W	9·3				71	− 7	·712	−·022	5·5	−1·4	2	9·20	− 7·20	1·27	6·60	− 5·33	22·33	21·80	+ 0·53	0·90	Kurnool.
				3	15	10	N 74° W	9·7	9·3	+ 4	8·5	68	− 2	·668	+·016	6·1	−1·3	2	6·90	− 4·90	1·09	4·62	− 3·53	11·17	12·38	− 1·21	0·81	Bellary.
		2	1	9	11	1	S 64° W	5·6			4·7	86	+ 6	·923	+·063	7·7	+0·3	9	9·00	0	4·81	5·89	− 1·08	16·06	22·92	− 6·86	1·59	Cocanada.
			1	16	10	2	S 67° W	11·0				80	− 1	·827	−·055	8·8	+1·5	11	8·80	+ 2·20	8·02	8·01	+0·01	25·50	24·16	+ 1·84	1·92	Waltair (Vizag.).
	1	1	2	11	3	4	S 87° W	13·7	7·2	+ 90	13·4	83	− 2	·893	−·036	5·8	−0·8	11	9·90	+ 1·10	14·65	7·14	+ 7·51	27·14	31·09	− 3·95	3·54	Gopalpur.
																												XII.—Hill Stations.
																		0	0·10	− 0·10	0	0·01	− 0·01	0·12	0·46	− 0·34	0	Pishin.
							Calm.	0·9	3·5	− 74	0·9	43	− 7	·267	−·063	0·5	+0·3	0	0·20	− 0·20	0	0·13	− 0·13	0	2·32	− 2·32	0	Quetta.
9		2		3		6	N 14° W					32		·236				0	0·10	− 0·10	0	0	0	0	1·65	− 1·65	0	Kalat.
1	1	4	4	8	11	1	S 4° W	7·8			8·6	34	+ 4	·239	−·030	0	−0·2	0	0	0	0	0	0	0	0·28	− 0·28	0	Chaman.
1	4	1	1	1		21	1	N 81° W	2·1			60	+12	·213	+·037	3·4	−0·2	3	0·50	+ 2·50	0·87	0·20	+ 0·67	1·91	1·53	+ 0·38	0·45	Leh.
		4	10	1	1	1	1	S 47° E	3·2			3·0	85	− 2	·447	−·021	2·6	−0·7	6	3·30	+ 2·70	4·44	1·11	+ 3·33	10·34	10·41	− 0·07	2·26	Srinagar.
1	5	3	2		4	1	2	N 37° E	3·1			3·6	72		·311			3·5			8·73			19·54			3·58	Gulmarg.
1	1							N 24° E	2·3			2·1	93		·283			3·7			14·37			38·68			4·96	Sonemarg.
		3	2	1	5	3		S 19° W	3·3			3·3	59		·290			4·0			2·56	0·21	+ 2·35	4·80	2·93	+ 1·87	1·72	Skardu.
							1	N 45° W	4·7			3·8	67		·240			3·0			4·15	0·87	+ 3·28	12·36	5·46	+ 6·90	1·86	Dras.
		1			4	2		S 53° W	2·8			2·5	53	+ 2	·358	+·027	4·2	−0·7	3	1·10	+ 1·90	1·94	0·25	+ 1·69	4·80	2·35	+ 2·45	1·10	Gilgit.
1	2	1		1				N 63° E	6·9			6·1	67		·425		2·3		1			0·16			3·93			0·16	Chitral.
		12	1					S 86° E					57		·390		2·4		3			0·52			2·81			0·20	Killa Drosh.
								Calm.	4·0			3·6	48		·340		4·9		2	5·30	− 3·30	0·74	2·63	− 1·89	8·70	12·46	− 3·76	0·42	Para Chinar.
14				4		1	1	N 9° W	5·4			5·0	59		·464		1·8		3			1·78	1·80	−0·02	6·70	11·83	− 5·13	1·00	Cherat

any station, the data for that station are not utilized in calculating the provincial departures from normal.
s. 40, 42 and 44 are derived are incomplete.

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Abstract of Observations taken at 8 A.M. at 232 Stat

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
29	Murree	6,333	23·822	−·008	23·790	23·947	29th	23·608	12th	·339	64·9	72·7	−1·1	56·4	−2·4	64·6	−1·8	16·3	81·0	5th	43·9	30th
	Kailang	*10,087*	20·944		20·899	20·997	24th 26th & 28th.	20·815	14th	·182	50·6	66·1	−3·1	42·0	−0·1	54·1	−1·6	24·1	78·8	9th	35·8	13th
	Poo *											69·5		52·2†		61·0†		17·3	80·8	3rd & 4th.	44·6	24th
	Simla	7,224	23·092	−·005	23·054	23·192	29th	23·012	12th	·180	60·4	66·6	+0.5	56·9	+0·5	61·8	+0·5	9·7	71·3	5th	53·3	22nd
	Sarain		23·137			23·240	29th	23·048	14th	·192	61·3	69·3		52·4		60·9		16·9	74·3	3rd	46·1	25th & 30th,
	Kalabagh		20·147			20·218	29th	20·077	14th	·141	49·0	54·4		43·5*		48·9*		10·9	63·6	4th	38·1	22nd & 23rd,
	Chakrata	7,022	23·256	−·003	23·216	23·354	29th	23·162	7th	·192	61·7	69·0	+0·3	57·5	+0·5	63·3	+0·4	11·5	74·5	4th	52·8	29th
25	Ranikhet	6,069	24·059	−·003	24·019	24·177	29th	23·960	6th	·217	64·6	72·4	−0·2	60·5	+0·5	66·5	+0·2	11·9	77·5	3rd	55·5	23rd
	Muktesar	7,600	22·811		22·769	22·906	29th	22·719	14th	·187	60·1	68·1		55·9		62·0		12·2	75·1	3rd	51·8	24th
13	Yatung	10,480										60·6		46·5		53·6		14·1	68·1	3rd & 8th.	40·1	25th & 26th.
	Darjeeling	7,376	23·015	−·014	22·970	23·145	29th	22·863	6th	·282	59·9	64·8	+0·7	56·2	+0·7	60·5	+0·7	8·6	71·2	3rd	51·6	30th
8	Shillong**	4,920	25·021		24·973	25·141	3rd	24·940	23rd	·201	68·7	75·1		64·3		65·7		10·8	79·6	4th, 10th & 16th.	57·0	9th
	Cherra Poonjee	4,309	25·659		25·610	25·824	29th	25·517	6th	·307	67·7	74·3		64·3		69·3		10·0	80·2	7th	60·0	16th
50	Mount Abu	3,945	25·977	−·006	25·927	26·074	19th	25·792	11th	·282	69·0	75·7	+0·4	65·4	+0·8	70·6	+0·6	10·3	84·2	30th	60·9	14th
42	Pachmarhi	3,528	26·340	−·023	26·287	26·480	19th	26·148	26th	·332	69·6	76·8	−0·4	66·8	+0·5	71·8	+0·1	10·0	81·6	3rd	62·2	27th
34	Wellington	6,200	24·235	+·003	24·168	24·307	17th & 18th.	24·167	6th	·140	63·7	71·1	−0·2	55·1	−0·7	63·1	−0·5	16·0	75·2	30th	49·2	23rd
	Ootacamund	*7,329*	23·021		22·955	23·099	18th	22·955	6th	·144	54·3	64·2		50·6		57·4		13·6	68·5	23rd & 30th.	44·2	28th
57	Kodaikanal	7,688	22·818		22·753	22·878	17th & 18th.	22·747	6th	·131	57·3	63·7		52·4		56·5		11·3	68·0	29th	50·4	28th
	XIII.—Extra India.																					
	Trincomalee	12	29·874	+·020	29·815	29·993	17th	29·798	6th	·195	79·7	91·3	+0·1	76·7	+0·1	84·0	+0·1	14·6	95·0	13th	72·5	18th
	Colombo	40	29·899	−·011	29·864	29·960	17th	29·838	1st	·122	80·6	86·1	+0·1	76·8	−0·2	81·5	−0·1	9·3	88·5	4th	73·0	6th
	Meshed	3,104									66·8	78·0		52·7	−1·5	65·4		25·3	89·1	5th & 9th.	46·9	17th 27th, 29th 30th.
	Ispahan (b)	*5,817*	24·298§			24·500	30th	24·070	7th	·430	63·7	87·8	−2·6	56·3	+1·2	72·1	−0·7	31·5	96·0	5th	50·3	12th
	Bushire	14	29·733	−·004	29·705	29·937	30th	29·567	5th	·370	85·6	93·7	−0·6	79·1	0	86·4	−0·3	14·6	104·5	12th	69·1	15th
	Bahrein‡	30	29·739			29·913	28th	29·527	6th	·386	87·5	94·8		84·1		89·5		10·7	105·4	3rd	78·9	15th
	Jask	13	29·741	−·007	29·711	29·947	29th	29·589	9th	·358	86·9	94·0	+0·5	80·9	0	87·5	+0·3	13·1	102·2	15th	75·2	16th
	Muscat	20	29·752	−·003	29·723	29·943	30th	29·598	6th	·345	85·7	93·5	+6·3	82·9	−0·5	88·2	+2·9	10·6	100·8	5th & 21st.	77·1	25th
	Baghdad ||||	220	29·651	−·037	29·845	29·826	30th	29·445	1st	·381	79·5	103·7	+2·8	73·3	+2·5	88·5	+2·7	30·4	114·9	1st	65·5	13th
	Busrah										Not available.											
	Aden	94	29·721	−·016	29·717	29·852	30th	29·553	1st	·299	87·3	92·2	−1·4	81·7	−0·5	87·0	−0·9	10·5	95·3	10th & 14th.	77·8	30th
	Perim	201	29·630	+·021	29·764	29·717	20th	29·505	1st	·212	87·8	94·0	−0·8	83·1*	0	88·6*	−0·4	10·9	98·5	10th	80·0	5th
	Kabul		24·232		24·201	24·405	29th	24·106	14th	·299	72·2	90·8	+3·6	52·6	+1·6	71·7	+2·6	38·2	99·6	16th	44·4	28th
	Kashgar	4,255	25·616§			25·860	25th	25·410	7th & 12th.	·450	64·0	83·7	+2·2	57·6	+0·7	70·7	+1·5	26·1	98·7	9th	47·9	28th
	Amini Divi	*13*									82·7	87·1	+2·1	77·7	+0·5	82·4	+1·3	9·4	89·8	14th	75·4	25th
	Minicoy	7	29·950		29·883	30·002	17th	29·893	10th	·109	82·4	86·3	+1·0						89·0	24th		
	Zanzibar	72	30·007	−·058	30·007	30·102	4th	29·932	15th	·170	76·4	83·6	+1·6	73·8	+0·3	78·7	+1·0	9·8	86·5	19th	72·0	4th
	Do. Dunga	*154*	29·965		30·049	30·062	4th	29·886	15th	·176	74·4	83·0		66·9		75·0		16·1	86·7	25th	62·8	12th
	Penang (a)	20	29·915		29·860	29·968	18th	29·857	2nd	·111	80·9	88·1		73·1		80·6		15·0	91·0	1st & 3rd.	71·0	20th
	Singapore (a)	10	29·960		29·891	30·015	16th	29·933	1st	·082	83·9	89·2		74·5		81·9		14·7	92·5	2nd	72·4	16th & 19th.

(a) 9 hours' observations.
(b) Aneroid uncorrected.
* Mean of 29 days.
† ,, of 28 ,,

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of
NOTE 2.—The data from which divisional means of the figure columns Nos.

NOTE 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

§ Aneroid uncorrected.
‖ ,, corrected.
|||| Mean of 23 days.
** All observations are doubtful.
‡ Observations of 29 days.

-concluded.

India, Burma, etc., in September, 1905—concluded.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, Instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September 1905.	Normal rainfall for period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
2		1		1		2		N 45° W	4·7	5·4	− 13	5·1	59	− 6	·367	−·014	2·8	+0·3	7	8·00	−1·00	12·87	5·62	+ 7·25	40·55	37·58	+ 2·97	8·05	Murree.
1	2	2	5	4	7	6	3	S 37° W	0·8				60		·221		4·2*		4			4·28	1·67	+ 2·61	8·58	8·32	+ 0·26	2·50	Kailang.
						1		W									4·6		2			0·50	0·45	+ 0·05	3·52	3·02	+ 0·50	0·21	Poo.
15	2			3		1	1	N 1° W	3·9	1·7	+129	3·7	70	− 6	·371	−·026	3·3	−0·7	5	8·70	−3·70	6·56	5·87	+ 0·69	36·87	51·29	−14·42	3·46	Simla.
1		1		5		3		S 27° W	3·0			2·9	67		·362		3·8		6			9·97			27·82 ‡‡			5·03	Saraiu.
1			8	8	1	3	7	S 21° W	7·3			6·4	69		·245		4·3		7			10·99			37·48			5·77	Kalabagh.
5			1	6				S 24° E	4·6	4·7	− 2	5·5	80	− 3	·448	−·002	4·0	+0·3	7	8·30	−1·30	6·22	6·10	+ 0·12	39·40	56·55	−17·15	13·03	Chakrata.
			2		4	2	3	S 69° W	2·1	1·9	+11	2·4	83	+ 1	·517	+·032	6·0	+1·1	7	8·20	−1·20	2·17	7·00	− 4·83	29·84	43·94	−14·10	0·57	Ranikhet.
												5·8	82		·429		6·9		9			4·93			26·08			1·74	Muktesar.
1	1	8	1	1	2	5	1	S 63° E	6·2																				
																			16	14·43	+1·57	7·11	6·68	+ 0·43	37·61	37·88	− 0·27	1·36	Yatung.
	4	1	7		3	1	6	E	3·9	3·0	+30	3·6	95	+ 1	·492	+·018	8·6	+0·1	16	17·71	−1·71	31·20	18·95	+12·25	137·44	111·83	+25·61	5·88	Darjeeling.
	1	4				1	1	N 66° E	1·4			1·6	93		·652		7·6		21	17·50	+3·50	9·24	13·67	− 4·43	74·09	65·58	+ 8·51	1·40	Shillong.
												3·9	90		·616		7·5		21	18·80	+2·20	64·95	51·49	+13·46	423·44	374·47	+48·97	16·12	Cherra Poonjee.
1	8	3	4	5	3	1		S 68° E	4·4																				
6	1				18	3	2	S 75° W	8·7	7·3	+19	8·8	76	− 4	·529	−·022	4·0	−0·6	6	8·00	−2·00	9·49	9·12	+ 0·37	38·34	59·76	−21·42	7·26	Mount Abu.
4	2			1	3	7	11	N 57° W	8·7	5·6	+55	9·0	84	+ 1	·601	−·026	5·9	−0·7	15	13·80	+1·20	31·35	14·09	+17·26	78·17	71·30	+6·87	7·15	Pachmarhi.
1	1	2	1	3	4	3	1	S 37° W	2·6	3·5	−26		74	+ 3	·443	+·014	6·8	+1·2	11	10·10	+0·90	5·21	5·40	− 0·19	25·46	20·28	+5·18	0·88	Wellington.
1		2		2	1	13	1	S 85° W	6·0			5·6	75		·354		6·2		11	10·10	+0·90	4·65	4·44	+ 0·21	30·85	27·19	+ 3·66	1·30	Ootacamund.
		3	2	5	3	5	12	S 89° W	11·5				78		·366		5·3		13			7·34						1·24	Kodaikanal.
																													XIII.—Extra India.
					27			S 45° W	8·7				83	+ 3	·848	−·017	2·6	−0·4	6			3·60	4·56	− 0·96	10·63	15·14	− 4·51	1·19	Trincomalee.
1			3	2	15	9		S 52° W	9·5	8·7	+ 9		84	+ 6	·882	+0·30	5·9	−0·1	13			8·83	4·82	+ 4·01	28·64	32·90	− 4·26	2·30	Colombo.
													58		·375		0		0			0	0·02	− 0·02				0	Meshed.
	1			1		1		S 42° W	1·8*			2·3*	56		·338		1·4		0			0	0	0				0	Ispahan.
5	4	4	5	3		1	6	N 43° E	8·8	7·7	+14	9·7	71	+ 8	·872	+·046	0·5		0			0	0	0	0·24	0	+ 0·24	0	Bushire.
10	2	1	1	2	2	1	10	N 23° W	5·5††			4·7††	80	− 2	1·052		0		0			0			0			0	Bahrein.
	1	20	1		3	1	3	E	10·7			9·2	71	− 14	·901	−·024	2·5	+1·0	0			0	0	0	0	0·13	−0·13	0	Jask.
1			8	1		1	3	S 36° E	3·1			3·2	63	0	·890	−·040	2·2	+1·2	0			0	0	0	0	0·40	−0·40	0	Muscat.
		3	1				4	N 27° E	2·8**	2·5	+12	3·8**	48	− 5	·490	−·017	2·5	+2·3	0			0·02	0	+ 0·02	0·02	0·33	− 0·31	0·02	Baghdad.
																													Busrah.
1	10	8	4	1	4	1	1	N 81° E	10·2	8·5	+20	8·3	70		·902	−·030	2·2	−1·7	1			0·60	0·13	+ 0·47	1·24	0·50	+0·74	0·60	Aden.
1		15	3	4		4	3	S 75° E	17·4			17·6	72		·949		2·7		0			0·01	0·01	0	0·02	0·84	−0·82	0·01	Perim.
			8	16	2	2		S 5° E					52		·422		0·3	+0·3	0			0	0·03	− 0·03	0·47	1·16	−0·69	0	Kabul.
			1		1		3	N 63° W	1·91			1·7†	56		·333		2·6		0			0	0·43	− 0·43		3·01		0	Kashgar.
2	1				1	10	13	N 60° W					78		·872		5·5		9			3·40	5·54	−2·14		37·73		0·78	Amini Divi.
4					2	12	12	N 63° W	6·8			7·3	78		·862		4·1		7			4·23	5·97	− 1·74		34·12		2·13	Minicoy.
		1	7	14	7	1		S	6·0			5·6	87		·793		6·2		9			2·98	2·03	+ 0·95		18·36	✓	0·95	Zanzibar.
			7	4	1			S 22° E	4·3			4·1	90		·766		6·9		11			3 91						0·76	Do. Dunga.
6	5	7		5			3	N 52° E	10·3								1·7		12			8·05			30·42			1·72	Penang.
			15	11	3	1		S 17° E	4·6								4·7		6			2·89			29·55			0·88	Singapore.

ation, the data for that station are not utilized in calculating the provincial departures from normal.
and 44 are derived are incomplete.

** Mean of 22 days.
†† „ 26 „

‡‡ Since June 1905.

Table II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 65 Stations in India, Burma, etc., in September, 1905.

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Abstract of Observations recorded at 10 A.M. and 4 P.M. a

Meteorological Province.	Station.	Elevation of cistern above mean sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet		
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burma Coast and Bay Islands.	Port Blair	61	29·844	29·762	·082	29·805	+·019	29·797	84·9	77·4†	7·5	87·2	74·0	13·2	82·9	82·6	80·1†	+ 0·4	75·0	78·8	78·2
	Rangoon	57	·808	·706	·102	·760	−·012	·755	84·5	76·3	8·2	87·8	72·7	15·1	81·3	81·4	78·8	− 0·3	74·3	78·0	77·5
	Diamond Island	41	·826	·732	·094	·781	−·002	·757	83·9	76·9	7·0	86·2	73·2	13·0	82·2	82·6	80·2	+ 0·1	73·9	78·0	78·1
	Cocos Island	119	·751	·657	·094	·706		·758	86·2	76·6	9·6	89·4	73·4	16·0	81·7	82·5	80·3		74·3	78·4	78·7
	Akyab	20	·806	·703	·103	·761	−·007	·723	85·5	77·4	8·1	89·9	75·2	14·7	82·0	83·1	81·3	− 0·8		79·7	79·5
Bengal and Orissa.	Chittagong	87	·710	·600	·110	·660	−·021	·695	85·8	76·0	9·8	89·5	72·3	17·2	82·4	82·8	80·3	− 0·7	73·8	78·2	78·7
	Calcutta (Alipore)	21	·713	·610	·103	·663	−·029	·629	88·3	78·2	10·1	93·0	74·6	18·4	84·9	85·3	83·0	+ 0·4	76·5	80·1	80·0
	Saugor Island	25	·710	·607	·103	·655	−·032	·623	88·8	79·7	9·1	91·9	75·1	16·8	85·0	85·8	83·1	+ 0·3	77·7	81·0	80·9
	False Point	21	·707	·609	·098	·654	−·040	·617	87·0	78·7	8·3	93·5	75·1	18·4	84·2	84·8	81·6	− 0·2	76·6	79·8	80·0
Gangetic Plain and Chota Nagpur.	Hazaribagh	2,007	27·712	27·629	·083	27·673	−·040	·614	83·4	72·6	10·8	89·6	65·3	24·3	78·7	80·0	76·9	− 0·5	71·0	73·2	73·3
	Allahabad	309	29·409	29·303	·106	29·358	−·022	·618	91·3	77·1	14·2	97·4	71·5	25·9	86·5	88·4	83·0	0	75·8	79·2	80·0
Upper Sub-Himalayas.	Dehra Dun	2,233	27·540	27·454	·086	27·491	−·017	·660	85·6	69·2	16·4	91·0	64·1	26·9	79·7	81·7	76·3	+ 0·2	66·7	72·4	73·8
	Roorkee	899	28·833	28·731	·102	28·776	−·013	·631	91·2	72·7	18·5	98·5	67·1	31·4	84·7	88·5	80·4	− 0·4	71·4	76·3	76·4
	Meerut	738	·991	·890	·101	·935	−·014	·625	95·0	75·6	19·4	103·7	68·3	35·4	87·6	92·0	83·9	+ 2·2	72·0	76·0	75·8
	Lahore	702	·999	·915	·084	·949	−·023	·604	97·3	76·1	21·2	109·8	68·5	41·3	88·8	95·5	85·7	+ 0·9	72·6	78·7	80·5
	Ludhiana	812	·889	·801	·088	·837	−·035	·602	96·5	76·8	19·7	106·6	70·5	36·1	86·5	95·2	85·4	+ 1·8	71·5	75·5	76·4
Indus Valley and N.-W. Rajputana.	Peshawar	1,110	·628	·524	·104	·568	−·015	·641	94·8	70·5	24·3	105·0	64·0	41·0	86·5	92·5	81·7	− 0·4	64·6	72·5	73·4
	Jacobabad	186	29·475	29·381	·094	29·429	−·044	·570	105·3	75·3	30·0	110·3	65·8	44·5	95·3	102·1	89·3	+ 0·5	70·3	78·8	78·2
	Kurrachee	30	·757	·672	·085	·715	−·002	·695	90·2	77·3	12·9	92·3	69·4	22·9	86·5	86·8	82·8	+ 0·8	73·8	77·9	78·4
East Rajputana, Central India and Gujarat.	Jaipur	1,431	28·343	28·237	·106	28·287	−·017	·646	97·1	76·5	20·6	105·2	71·3	33·9	88·1	96·5	85·3	+ 2·9	69·4	74·5	73·6
	Udaipur	1,925	27·878	27·793	·085	27·834		·681	90·3	72·6	17·7	96·7	66·9	29·8	84·3	87·1	80·8		69·4	74·7	76·4
	Deesa	466	29·338	29·226	·112	29·280	−·003	·690	96·3	75·3	21·0	101·6	70·6	31·0	88·1	94·4	85·1	+ 2·4	72·0	75·7	75·9
	Jamnagar	61	·762	·660	·102	·710		·716	92·4	75·5	16·9	95·1	71·2	23·9	87·6	88·7	82·8		72·1	76·0	76·2
Deccan.	Belgaum	2,539	27·347	27·254	·093	27·301	−·002	·759	80·4	64·8	15·6	91·3	59·8	31·5	75·0	77·2	70·9	+ 0·5	64·5	69·0	79·1
	Sholapur	1,590	28·253	28·117	·136	28·194	−·013	·706	93·3	72·4	20·9	98·2	68·4	29·8	84·0	90·6	80·7	+ 3·4	67·8	71·7	72·2
	Akola	930	·871	·761	·110	·820	0	·693	87·5	72·4	15·1	91·0	68·8	25·2	81·4	84·9	78·8	− 0·9	70·4	75·4	75·9
	Buldana	2,132	27·695	27·594	·101	27·645	−·019	·708	82·7	69·3	13·4	87·4	66·7	20·7	76·9	80·3	74·3	− 0·2	67·1	71·5	72·1
	Khandwa	1,044	28·748	28·640	·108	28·698	−·010	·693	87·5	73·2	14·3	94·2	69·6	24·6	81·1	86·7	79·4	− 0·3	70·3	73·8	74·9
	Nagpur	1,025	·734	·630	·104	·686	−·004	·663	86·7	73·1	13·6	94·8	68·6	26·2	80·6	83·4	78·8	− 1·6	71·2	74·5	75·1
	Do. (Sanitary Commr.'s Office)	1,013	·740	·633	·107	·691		·659	86·4	73·3	13·1	93·8	68·3	25·5	81·3	83·6	78·7		71·4	75·2	75·8
	Hyderabad (Deccan)	1,690	·131	·023	·108	·084	−·001	·706	86·8	72·5	14·3	93·2	66·5	26·7	81·4	84·4	78·3	+ 0·9	69·6	73·6	74·0
West Coast.	Bombay	37	29·839	29·754	·085	29·795	+·004	·772	85·8	77·3	8·5	88·3	75·5	12·8	81·8	82·9	80·5	+ 1·1	74·8	77·5	76·9
	Karwar	44	·879	·788	·091	·835	+·007	·814	83·8	74·8	9·0	86·1	71·3	14·8	80·8	82·2	78·2	+ 1·0	72·7	76·2	76·7

† Mean of 28 days.

‡ Mean of 18 days.

tions in India, Burma, etc., in September, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind Direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.	Meteorological Province.
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
				+																				%	%						
·928	·910	·899	—·006	89	83	82	87	−2	7·0	7·5	7·3	−0·5				1	3	7	25	20	4	S 57° W	S 54° W	73	73	315*	228	11·69	2·17	Port Blair	Burma Coast and Bay Islands.
·921	·897	·896	—·014	91	86	84	90	−2	8·6	8·2	8·4	+0·2	5	1	1	1	15	17	6	10	4	S 10° W	S 24° W	47	51	63*	84	22·35	4·60	Rangoon	
·907	·906	·879	−·006	86	82	81	85	−4	7·6	7·9	7·8	+0·3		1			5	9	29	5	11	S 51° W	S 45° W	65	54	235*	190	15·36	2·73	Diamond Island,	
·932	·934	·903	+·002	89	86	84	87	0	8·0	8·3	8·2	+0·6											S 42° W		68			13·62	3·02	Cocos Island,	
·986	·965				90	85			6·1	5·1	5·6	−1·4			7		17	26	3		7	S 18° E	S 3° E	53	42	126*	72	29·55	3·66	Akyab	
·912	·937	·896	—·033	90	82	83	88	0	6·6	5·7	6·2	−0·9	2	1	5	2	20	15	8	3	4	S 17° E	S 21° E	48	37	137*	106	23·38	5·86	Chittagong,	Bengal and Orissa.
·965	·955	·944	−·008	92	80	79	85	−1	7·3	8·2	7·8	−0·1		1	1	13	12	14	12	2	5	S 18° E	S 9° W	45	46	130*	98	11·20	2·66	Calcutta (Alipore),	
1·002	·989	·983	+·004	31	83	80	88	+1	7·8	8·2	8·0	+0·2		1	2	7	17	14	10	5	4	S 11° E	S 3° W	47	48	370	264	12·72	3·11	Saugor Island,	
·951	·953	·943	−·002	91	82	80	87	+1	8·1	8·2	8·2	+1·1			4	9	6	11	17	9	4	S 20° W	S 18° W	38	36	242*	204	10·15	1·10	False Point.	
·755	·740	·763	—·003	99	77	73	87	+1	8·6	8·4	8·5	+0·1		12	3	13	7	8	3	5	9	N 50° E	S 46° E	15	8	191*	178	14·43	3·48	Hazaribagh	Gangetic Plain and Chota Nagpur.
·901	·915	·914	+·033	94	71	69	82	+1	5·8	6·1	6·0	+0·5	1	9	10	17	2	2	4	7	8	N 33° E	N 15° W	31	13	88*	142	4·61	1·70	Allahabad	
·709	·741	·713	+·001	87	70	69	80	−2	4·4	4·6	4·5	−0·3	5	3		5	10	7	10	14	4	S 38° W	N 76° W	33	20	24	24	9·64	3·85	Dehra Dun,	Upper Sub-Himalayas.
·795	·750	·788	+·006	94	67	57	78	+2	3·0	2·4	2·7	−0·9	16	2	2	3	17	3	3		14	S 51° E	S 15° W	10	7	53	46	3·57	1·77	Roorkee	
·750	·686	·746	—·034	84	58	47	68	−6	3·0	3·0	3·0	−0·3	24		3	11	1		1	17	3	N 66° W	N 54° W	12	20	19*	43	2·38	0·86	Meerut	
·848	·840	·827	+·109	85	64	52	70	+9	2·2	1·6	1·9	0	10	7	2	5	4	9	2	16	5	S 84° W	N 46° E	20	59	55	50	9·19	6·61	Lahore	
·751	·670	·725	—·037	77	59	42	63	−6	1·2	1·5	1·4	−1·6	14			1	8			20	17	N 76° W	N 44° W	43	13	21*	34	2·15	1·35	Ludhiana	
·638	·599	·604	−·006	72	51	40	57	0	1·5	3·0	2·3	+0·5	30	7	11	3		1	1	3	4	N 15° E	N 36° E	27	49	20*	67	1·52	0·84	Peshawar	Indus Valley and N.-W. Rajputana.
·762	·643	·708	—·009	77	46	32	55	−1	0·7	1·1	0·9	+0·2	18			5	9	24	3	1		S 14° E	S 33° E	57	44	97*	70	0	0	Jacobabad,	
·843	·862	·815	−·010	84	67	68	77	−3	3·6	3·7	3·7	0						3	24	31	2	S 69° W	S 66° W	88	87	313*	350	0	0	Kurrachee,	
·684	·573	·649	—·043	70	52	38	58	−11	4·8	5·7	5·3	+0·8	1	5	8	4	1	1	4	12	24	N 12° W	N 42° W	53	43	105	101	2·03	0·78	Jaipur	East Rajputana, Central India and Gujarat.
·749	·784	·752		85	64	62	73		3·3	4·5	3·9		15	5	1				8	21	10	N 78° W		57		72*		4·47	3·02	Udaipur	
·724	·647	·719	—·018	85	55	41	64	−4	3·3	2·5	2·9	−2·0		2	1	1	1	2	23	19	9	S 76° W	S 72° W	70	53	180†	199	1·32	0·68	Deesa	
·745	·743	·756		85	57	55	68		3·5	2·0	2·8								9	33	18	N 83° W		87		361*		0·01	0·01	Jamnagar	
·637	·647	·639	−·016	98	74	70	83	−5	7·0	6·9	7·0	−0·5	1	3	2	1				17	17	N 58° W	S 78° W	53	74	298‡	377	0·47	0·12	Belgaum	Deccan.
·625	·566	·613	−·054	79	54	41	60	−12	6·5	8·6	7·6	−0·4		5	2			1	9	12	31	N 62° W	N 69° W	74	65	296*	202	1·28	0·99	Sholapur	
·795	·765	·781	+·022	91	73	64	80	+3	6·9	7·4	7·2	+0·7		4					2	11	43	N 52° W	N 60° W	90	68	164*	156	5·93	1·16	Akola	
·707	·691	·691	+·004	89	76	67	81	0	5·4	5·7	5·6	−1·1	4	3					3	23	27	N 66° W	N 48° W	82	64	212*	194	9·60	1·98	Buldana	
·746	·721	·744	−·017	86	71	57	75	−3	4·2	4·5	4·4	−1·5	6	4	1					10	39	N 49° W	N 63° W	82	67	343*	154	6·31	3·28	Khandwa	
·781	·773	·785	−·004	90	75	69	82	+3	6·3	7·2	6·8	−0·5		13	3	1		3	7	16	17	N 57° W	N 52° W	59	36	152*	127	17·72	6·10	Nagpur	
·804	·801	·805		91	76	70	83		6·2	7·0	6·6		29				5		15		11	S 67° W		27		28*		18·94	5·60	Do. (Sanitary Commr.'s Office),	
·731	·711	·727	—·028	86	68	61	75	−6	5·6	7·9	6·8	+0·2	15							41	4	N 86° W	N 75° W	73	53	122*	134	3·17	1·22	Hyderabad (Deccan).	
·893	·849	·864	−·008	88	82	75	83	−3	6·7	6·3	6·5	−0·4		3	2	5	3	6	6	25	10	S 88° W	N 84° W	47	52	191	259	6·16	2·25	Bombay	West Coast.
·844	·818	·831	+·007	91	80	77	85	−3	3·1	4·1	3·6	−2·2		1	2				8	26	23	N 74° W	N 78° W	80	77	120	70	5·36	1·90	Karwar	

* Corrected.

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Abstract of Observations recorded at 10 A.M. and 4 P.M. at

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level, in feet.	Pressure.						Temperature of Air.										Temperature, Wet-b			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal	Mean reduced to S. L. and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum	Mean 10 hours.	Mean 16 hours.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
South India.	Periyakulam	944	28·938	28·800	·138	28·887		29·754	94·7	71·7	23·0	99·1	67·1	32·0	85·9	90·2	82·1		68·8	73·0	73·4	
	Salem	940	·960	·827	·133	·906	—·009	·774	92·3	73·6	18·7	97·9	71·4	26·5	84·1	89·6	80·9	+1·4	71·3	75·8	77·8	
	Chitaldroog	2,405	27·491	27·380	·111	27·445	—·003	·758	85·9	68·1	17·8	95·1	64·9	30·2	77·8	82·2	75·2	+1·5	66·6	70·8	73·5	
	Bangalore	3,021	26·918	26·802	·116	26·868	—·006	·763	83·4	65·7	17·7	87·6	62·8	24·8	75·8	81·3	72·8	+1·0	64·8	69·0	70·1	
	Hassan	3,091	·864	·768	·096	·824	+·011	·794	83·1	64·1	19·0	90·2	59·3	30·9	76·8	77·6	71·8	+1·6	63·1	68·9	69·7	
	Mysore	2,518	27·414	27·299	·115	27·365	—·006	·788	84·7	65·8	18·9	91·6	61·6	30·0	77·9	81·3	73·5	−0·2	64·9	68·8	69·7	
	Madras	22	29·815	29·699	·122	29·765	—·012	·715	95·3	79·1	16·2	101·8	74·8	27·0	89·0	90·1	85·9	+2·0	75·5	79·3	80·3	
	Bellary	1,475	28·379	28·245	·134	28·321	−·024	·721	93·1	74·2	18·9	99·0	71·2	27·8	84·0	89·9	82·2	+2·0	68·5	73·2	74·4	
	Waltair	*226*	29·527	29·426	·101	29·480	—·021	·645	87·1	76·8	10·3	95·6	72·9	22·7	83·7	83·7	80·9	−1·6	73·2	76·5	76·7	
Hill Station, Baluchistan.	Quetta	5,502	24·615	24·535	·080	24·567	+·008	24·527	84·0	47·5	36·5	93·2	35·0	58·2	75·6	80·6	65·4	−1·7	42·9	54·3	55·4	
Hill Stations, Northern India.	Leh	11,503	19·736	19·629	·107	19·685	+·002	19·653	66·4	40·7	25·7	81·2	32·9	48·3	56·7	64·1	51·4	−2·3	36·9	44·7	48·7	
	Srinagar	5,204	24·846	24·764	·082	24·804	+·001	24·775	78·2	54·7	23·5	90·8	48·0	42·8	66·2	75·6	64·2	+0·2	52·4	61·9	69·7	
	Sarain		23·145	23·090	·055	23·111			69·1	52·4	16·7	74·3	46·1	28·2	65·6	63·6	60·4			56·4	57·4	
	Kalabagh		20·169	20·126	·043	20·148			54·4	43·6‡	10·8	63·6	38·1	25·5	51·4	51·0	49·0‡			46·4	47·3	
	Simla (Ridge)	7,224	23·111	23·060	·051	23·078	−·009	23·039	66·6	56·9	9·7	71·3	53·3	18·0	62·4	63·6	61·4	+ 0·5	52·4	56·1	58·4	
	Chakrata	7,022	·271	·225	·046	·242	+·002	·202	69·0	57·5	11·6	74·5	52·8	21·7	65·5	64·2	62·9	+ 0·4	54·7	60·9	60·9	
	Ranikhet	6,069	24·079	24·007	·072	24·035	—·008	·995	72·3	60·4	11·9	77·7	55·6	22·1	67·8	69·6	66·0	+ 0·1	58·1	62·7	63·6	
	Muktesar	7,600	22·628	22·768	·060	22·790		22·748	68·0	55·9	12·1	75·1	51·8	23·3	62·7	64·4	61·6		52·8	58·8	60·1	
	Katmandu	4,388	25·576	25·479	·097	25·525	+·002§	25·479	81·4	66·8	14·6	87·4	61·8	25·6	76·2	76·3	73·7	+0·5§	66·3	70·0	70·3	
	Darjeeling	7,376	23·015	22·978	·037	22·994	—·010	22·948	64·3	56·3	8·0	71·4	51·1	20·3	62·2	63·0	59·9	+0·5	56·0	60·9	62·1	
Hill Stations, C. India.	Mount Abu	3,945	25·993	25·930	·063	25·961	—·007	25·912	76·0	65·3	10·7	84·2	60·8	23·4	72·0	74·0	70·2	+0·6	61·8	64·6	65·9	
	Pachmarhi	3,526	26·352	26·276	·076	26·314	−·024	26·261	76·8	66·9	9·9	81·4	62·3	19·1	72·0	74·1	71·5	+0·1	64·6	68·1	69·6	
	Chikalda	3,642	·248	·165	·083	·207	−·023	·151	74·0	64·6	9·4	78·2	58·0	20·2	69·7	72·7	68·9	−0·8	64·0	67·8	63·6	
Hill Stations, S. India.	Kodaikanal	7,688	22·829	22·758	·071	22·792		22·728	63·8	52·4	11·4	69·0	50·4	18·6	60·5	58·5	58·1		48·8	55·6	56·2	
	Ootacamund	*7,382*	23·030	·963	·067	·794		·930	61·5	50·6	13·9	68·6	44·2	24·4	61·4	59·8	57·2		48·4	55·2	55·5	
	Dodabetta	8,539?	22·043	21·984	·059	22·011		21·947	57·7	48·9	8·8	62·5	45·6	16·9	56·0	54·0	52·9			51·8	51·8	
Extra India.	Aden	94	29·735	29·615	·120	29·669	—·013	29·693	92·1	81·4	10·7	95·1	77·7	17·4	89·4	91·1	86·1	—1·1	76·5	81·1	79·6	
	Perim	201	·637	·524	·113	·575	+·024	·705	93·9	83·1‡	10·8	98·5	80·0	18·5	90·8	91·4	87·8‡	−0·5	76·9	80·7	81·5	
	Minicoy	7	·954	·895	·059	·931		·864	86·3			89·0			84·0	83·8				77·6	77·3	
	Zanzibar	72	30·022	·910	·112	·972	—·054	·971	83·7	73·8	9·9	86·5	72·0	14·5		82·9	78·1	+1·1	70·9		75·0	
	Port Victoria (Seychelles).	15	·004	·915	·089	·968	—·012§	·907	82·7	76·6	6·1	84·3	72·2	12·1	80·8	81·4	78·4	+0·7§	71·9	75·5	75·6	
	Mauritius (Pamplemousses).	181				·956	−·048	30·086				81·2	53·2	28·0			70·1	+0·5				

N. B.—Elevations in italics indicate barometrical determinations. § Departures from *old* normals

‡ Mean of 29 days. NOTE.—The barometric readings are not reduced to sea-level in the case

I—*concluded.*

Stations in India, Burma, etc., in September, 1905—concluded.

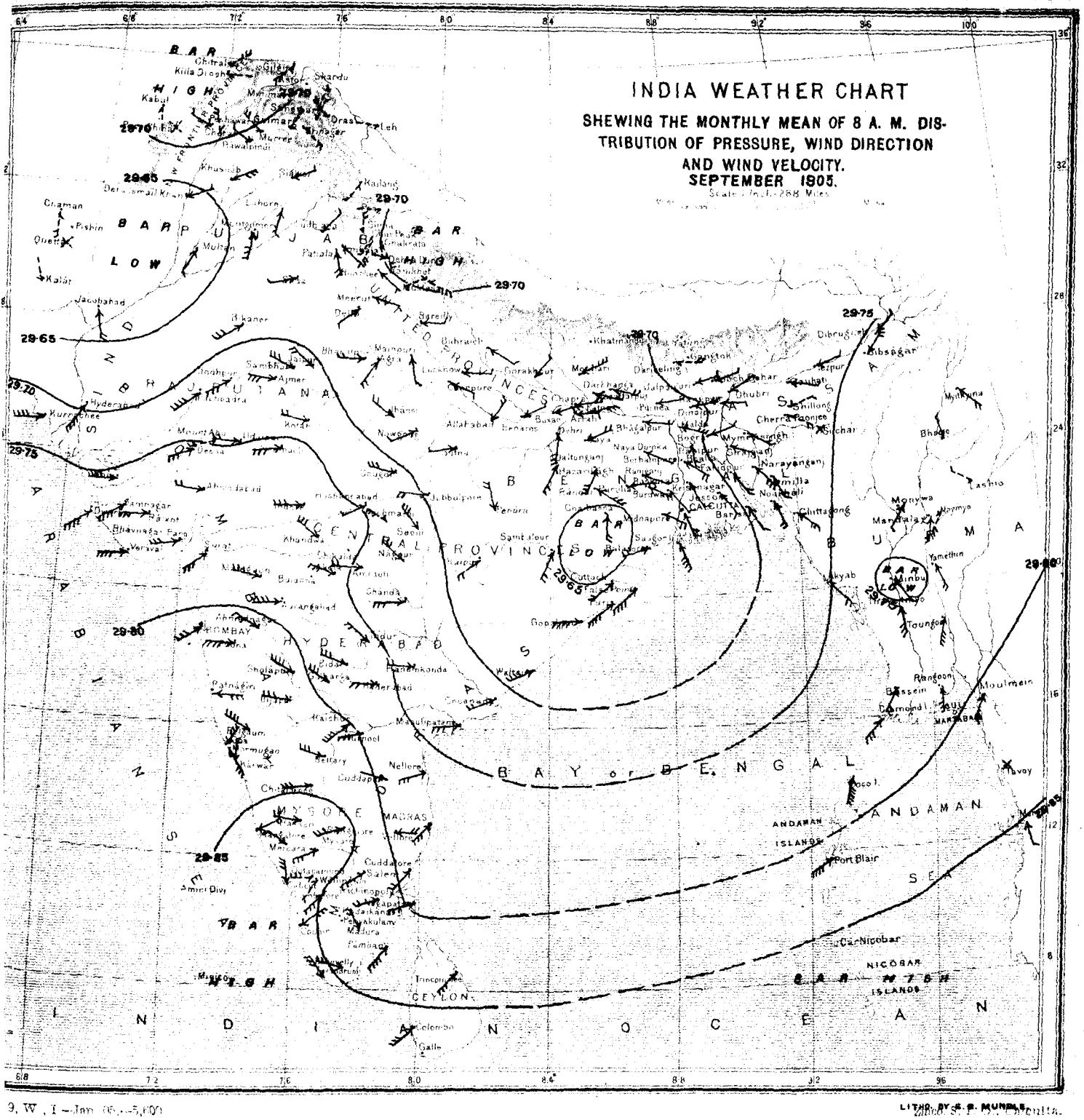
Vapour Tension.					Humidity.					Cloud.				Wind direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.	Meteorological Province.
From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																									%	%						
·668	·648	·598	·639		86	52	43	58		3·9	6·5	5·2		17	14	3	3	2	6	5	7	3	N 39° W		15		84*		3·12	1·14	Periyakulam	South India.
·734	·786	·805	·786	+·022	89	67	58	74	− 2	5·4	8·0	6·7	+0·7	11	2				12	9	24	2	S 65° W	S 66° W	59	67	102*	82	3·83	1·32	Salem	
·636	·671	·725	·689	+·056	92	70	66	79	+ 4	6·2	6·9	6·6	−1·1					1	1	9	27	22	N 81° W	N 89° W	82	75	204*	211	1·33	0·50	Chitaldroog	
·603	·634	·606	·626	+·003	95	71	57	77	− 3	6·7	6·4	6·6		1	1	1		1	5	14	31	6	S 77° W	S 84° W	75	83	191*	168	2·46	1·23	Bangalore	
·568	·616	·639	·620	+·009	94	67	68	79	− 2	7·1	7·7	7·4	−0·8	6						9	27	18	N 82° W	N 81° W	78	74	84*	84	1·77	0·79	Hassan	
·607	·593	·585	·607	−·023	95	62	56	74	− 3	7·6	8·3	8·0	−0·2		1	2	2	2	3	19	25	6	S 73° W	S 89° W	67	68	237*	240	0·66	0·35	Mysore	
·635	·874	·903	·993	+·045	84	64	65	72	− 5	5·2	6·3	5·8	−0·5				5	12	7	9	20	7	S 47° W	S 36° W	40	53	177	144	2·77	1·56	Madras	
·629	·683	·660	·669	+·015	74	58	48	63	− 2	5·5	7·1	6·3	−1·6	5	2					9	24	20	N 78° W	N 75° W	77	73	205*	221	1·09	0·81	Bellary	
·773	·822	·825	·818	−·055	84	72	72	78	+ 3	8·6	8·8	8·7	+2·1		1		2		13	39	3	2	S 38° W	S 40° W	82	52	122		8·02	1·92	Waltair	
·35	·207	·181	·210	−·042	71	23	17	39	− 1	0·5	0·7	0·6	+0·1	34	6			1		1	9	9	N 55° W	N 60° W	32	40	24*	53	0	0	Quetta	Hill Stations, Baluchistan.
·91	·201	·219	·207	+·032	74	44	37	55	+11	3·4	4·7	4·1	−0·2			2			2	10	44	2	S 83° W	S 66° W	87	42	51	46	0·87	0·45	Leh	Hill Stations, Northern India.
·72	·516	·580	·493	−·005	86	79	75	80†	0	2·2	4·2	3·2	−0·1	9	6	2	1	6	3	4	7	22	N 56° W	N 33° W	36	17	74*	79	4·44	2·26	Srinagar	
	·365	·413				58	70			3·8	4·3	4·2		15	3	1	2		16	17	5	1	S 33° W		47		70*		9·97	5·03	Sarain	
	·278	·299				72	79			5·4	6·4	5·9		14	2		2	14	10	1	3	14	S 11° W		15		171*		10·99	5·77	Kalabagh	
53	·389	·439	·396	−·038	75	69	74	75	− 5	3·7	5·3	4·5	−1·3	16	24	3			7	1	2	7	N 13° W	N 8° E	40	35	94*	98	6·56	3·46	Simla	
06	·489	·505	·469	0	85	78	83	84	− 2	4·6	6·7	5·7	−0·5	14	2	1		3	39	1			S 3° E	S 63° W	65	36	137*	144	6·22	3·03	(Ridge). Chakrata	
57	·520	·532	·508	+·002	88	76	73	81	− 1	6·3	6·0	6·2	+0·2	30		1	1	1		15	12		S 62° W	S 59° W	38	38	55*	58	2·17	0·57	Ranikhet	
72	·460	·478	·439		83	80	79	83		6·5	7·4	7·0		21		1	5	3	2	8	19	1	S 64° W		32		137*		4·93	1·74	Muktesar	
17	·669	·679	·667	+·034	98	74	75	84	+ 3	6·0	7·0	6·5	+0·2	6	5	5	11	2	2	6	14	9	N 50° W	N 87° W	18	11	13	17	10·25	1·74	Katmandu	
19	·523	·554	·511	+·031	98	93	95	97	+ 1	7·3	7·9	7·6	−0·7	24	1	5	1	13	1	3	1	11	E	S 85° E	5	39	87*	89	31·20	5·88	Darjeeling	
14	·523	·548	·540	−·019	83	68	67	77	− 4	3·6	4·7	4·2	−1·3		9	2		1	5	30	8	5	S 67° W	S 66° W	55	40	211*	190	9·49	7·26	Mount Abu	Hill Stations, C. India.
18	·643	·672	·656	+·017	94	79	80	88	+ 2	5·6	5·6	5·6	−1·6	4	3	3	2			9	19	20	N 70° W	N 60° W	63	44	239*	149	31·35	7·15	Pachmarhi	
17	·660	·688	·660	+·017	97	91	86	95	+ 3	7·6	7·2	7·4	0	5	25	5				1	1	23	N 18° W	N 21° W	78	62	205*	242	18·48	4·66	Chikalda	
1	·397	·432	·372		84	76	88	81		6·7	8·6	7·7			4	5	4	9	12	2	7	15	S 75° W		8		274		7·31	1·24	Kodaikanal‖	Hill Stations, S. India.
0	·374	·398	·356		86	69	77	77		6·8	8·2	7·5		7	8	5	1	5	4	5	21	4	N 80° W		33		130*		4·65	1·30	Ootacamund	
	·345	·360				77	86			7·7	9·3	8·5		4	7	6	3	5	3	1	20	11	N 56° W		35		351		5·12	0·70	Dodabetta	
8	·949	·851	·898	+·039	79	69	58	70	+ 4	1·2	0·5	0·9	−1·5			7	9	21	5	14	3	1	S 32° E	S 24° E	48	53	** 202*	230	0·60	0·60	Aden	Extra India.
6‡	·919	·941	·917	+·008	74‡	64	64	68	+ 1	0·5	2·6	1·6	−1·2§		2	2	5	24	12	3	5	7	S 27° E	N 23° E	42	25	¶ 423*	288	0·01	0·01	Perim	
	·862	·854				74	74			3·7	5·3	4·5			9					3	20	28	N 57° E		84		175*		4·23	2·13	Minicoy	
1		·768			87		68				4·0				4	2	3	8	11	2			S 35° E	S 6° E	50	62	133*	134	2·98	0·95	Zanzibar	
8	·816	·812	·792	+·025	79	77	76	79	− 1	5·9	6·3	6·1	+0·5§	1		1	5	45	7	1			S 44° E	S 39° E	89	89	272	292	12·72	4·15	Port Victoria (Seychelles).	
			·564	+·042				76	+ 4			5·9	+0·3										S 87° E	S 72° E			183	288	2·02	0·82	Mauritius (Pamplemouses).	

† Mean of three previous columns. • Corrected. ‖ Wind variable 2.

¶ Mean of 29½ days. ** Mean of 28½ days.

‡ For plateau stations, the elevations of which exceed 3,200 feet.

G. I. C P. O.—No. 550 Meteo.—24·3·06.—385.—

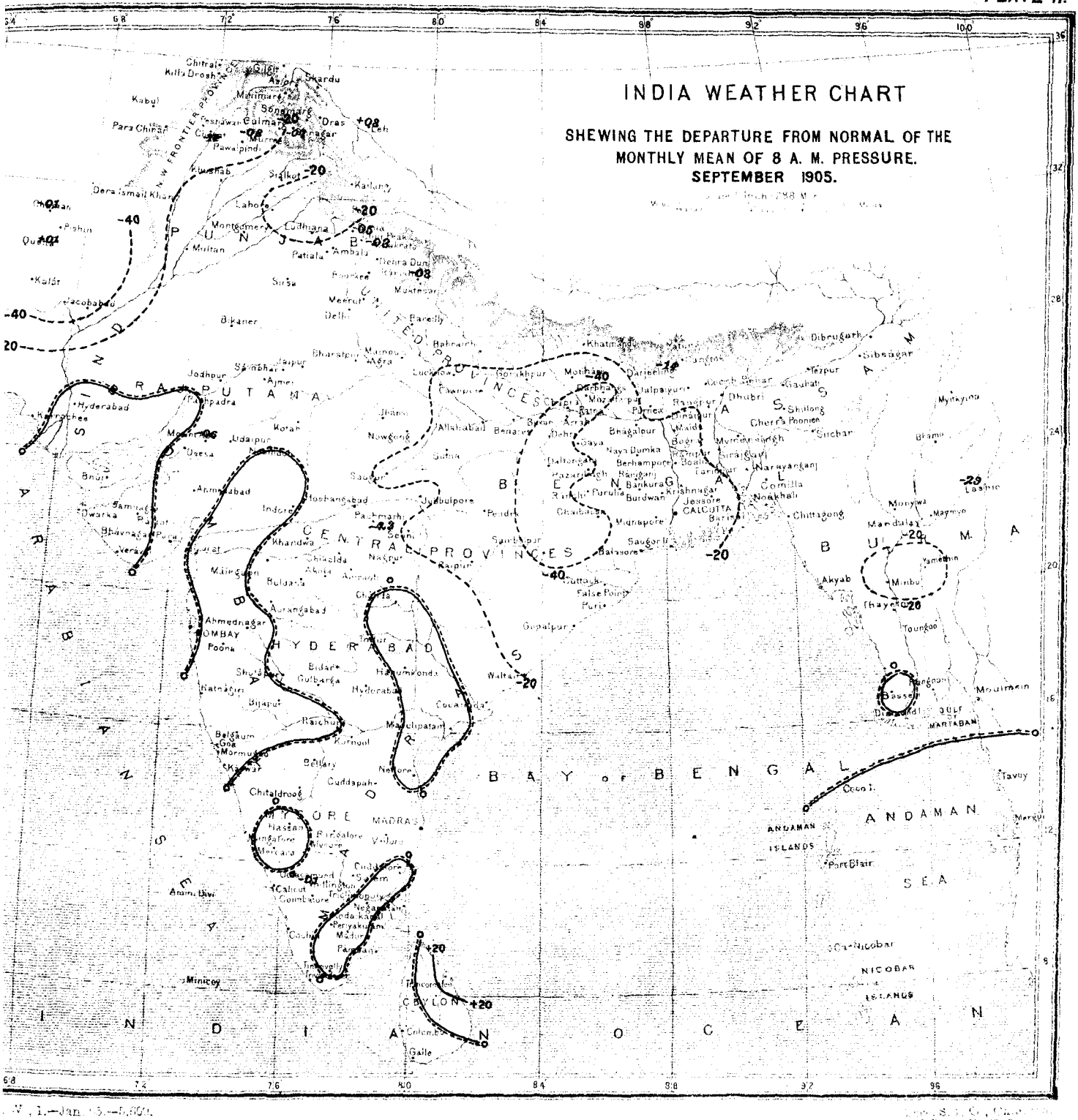


9, W., I.—Jan. 06.—5,000. LITHO. BY S. P. MUNSHI, Calcutta.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of Lambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are indicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the month is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added to the wind arrow.					
,,	,, 2 to 5	,,	,,	,,	...	two	feathers	,,	,,	,,	,,
,,	,, 5 to 10	,,	,,	,,	...	three	,,	,,	,,	,,	,,
,,	,, 10 to 20	,,	,,	,,	...	four	,,	,,	,,	,,	,,
	over 20	,,	,,	,,	...	five	,,	,,	,,	,,	,,



The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal nounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020' or two hundredths of an inch, &c. ontinuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted nes that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuus and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative partures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

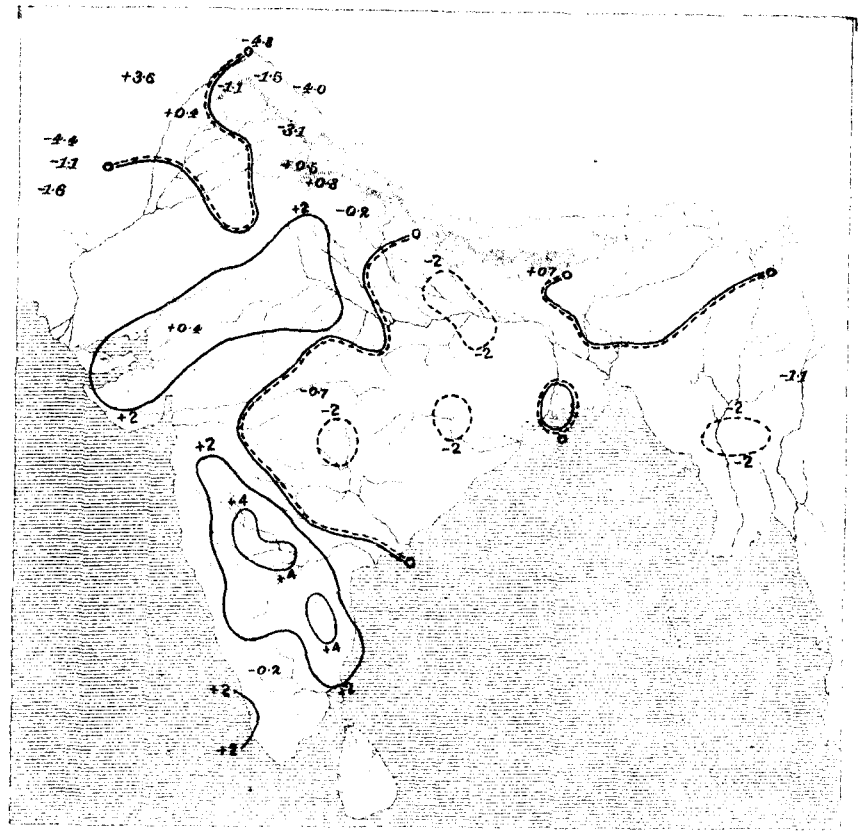
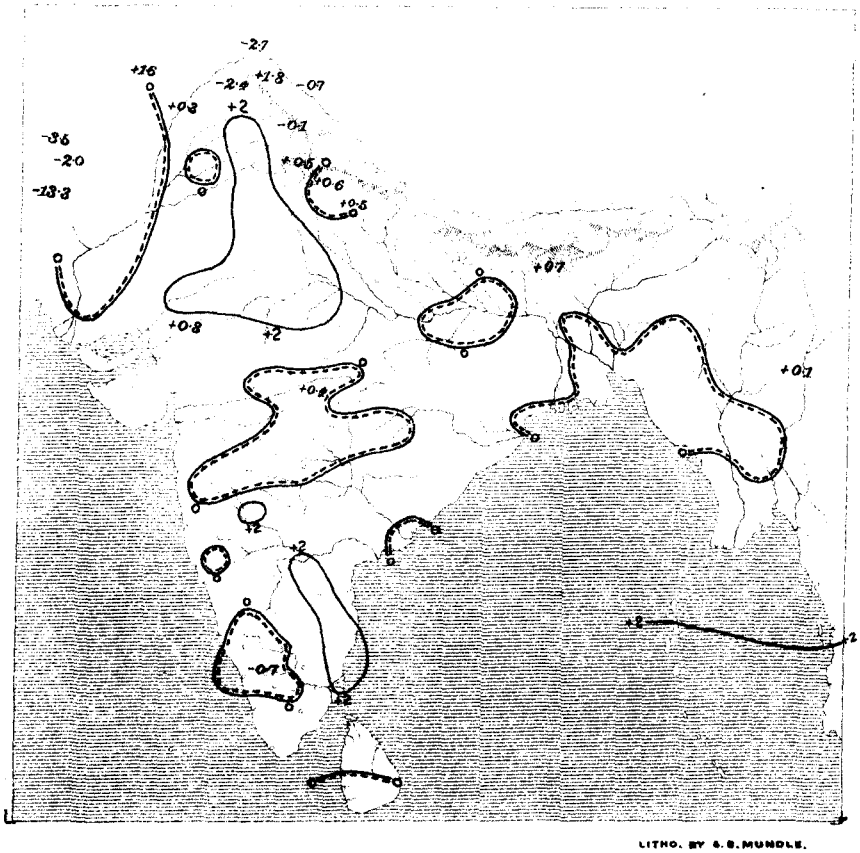


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY G.B.MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

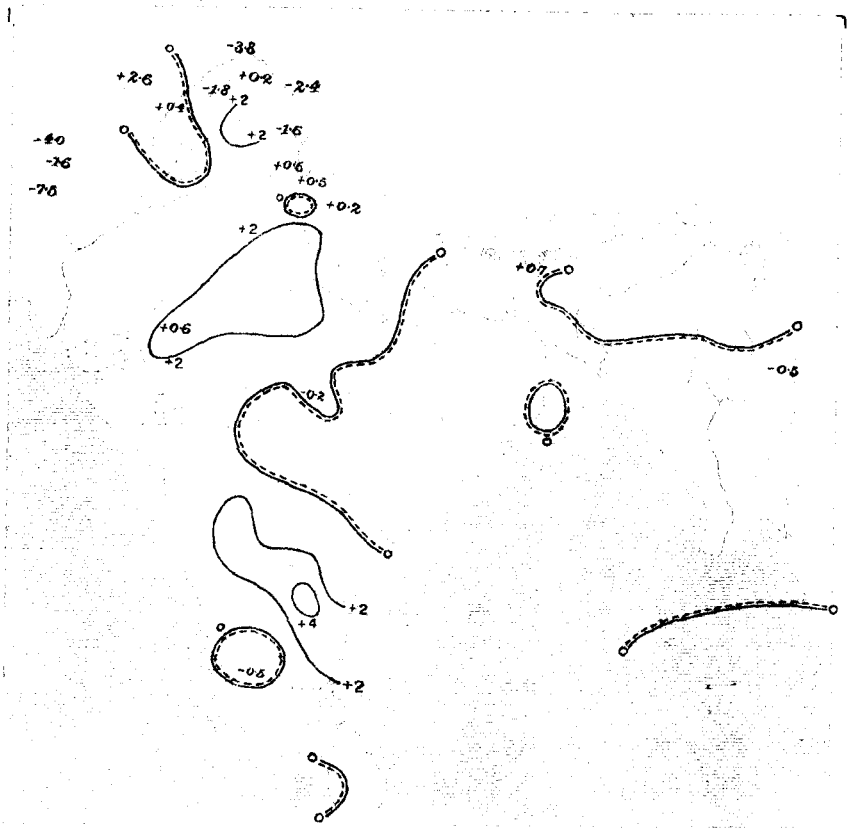
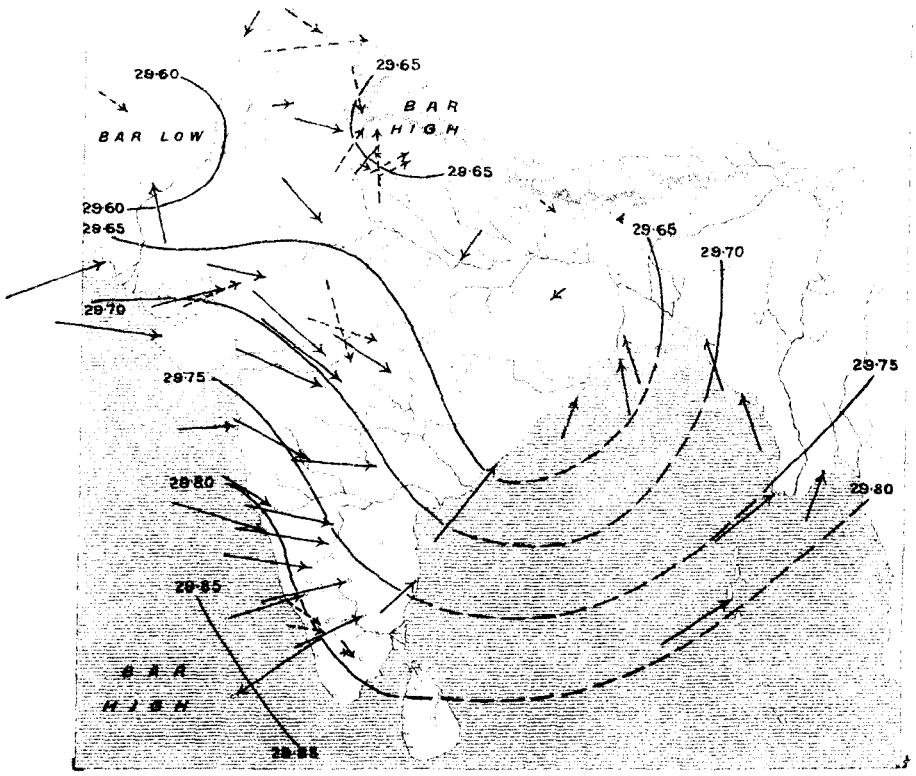


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 A. M.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 A. M.

LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF CLOUD
AMOUNT AT 8 A. M.

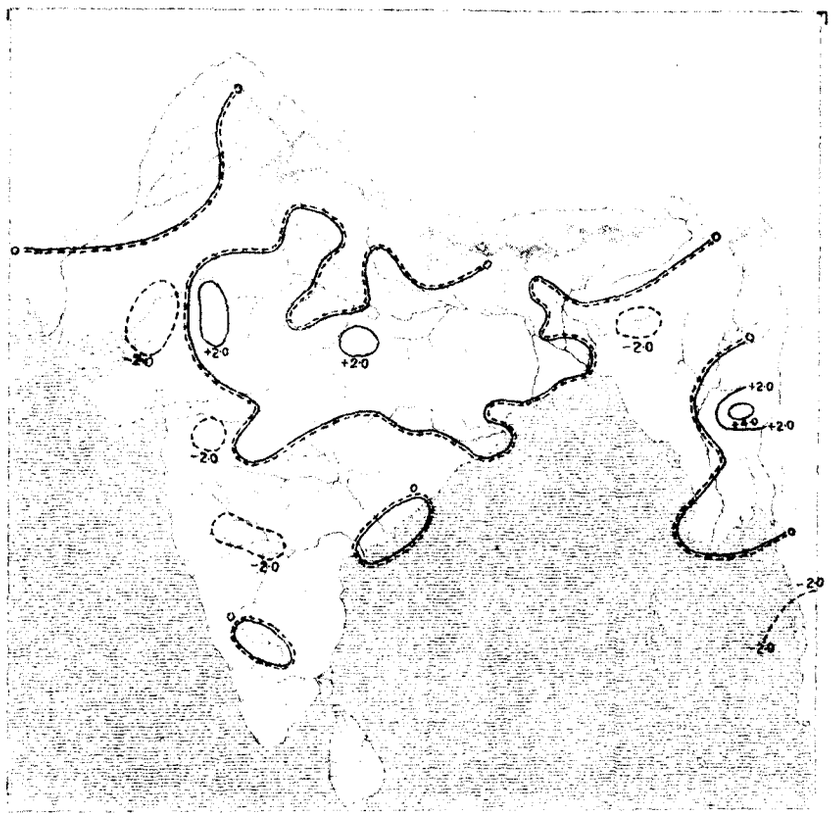
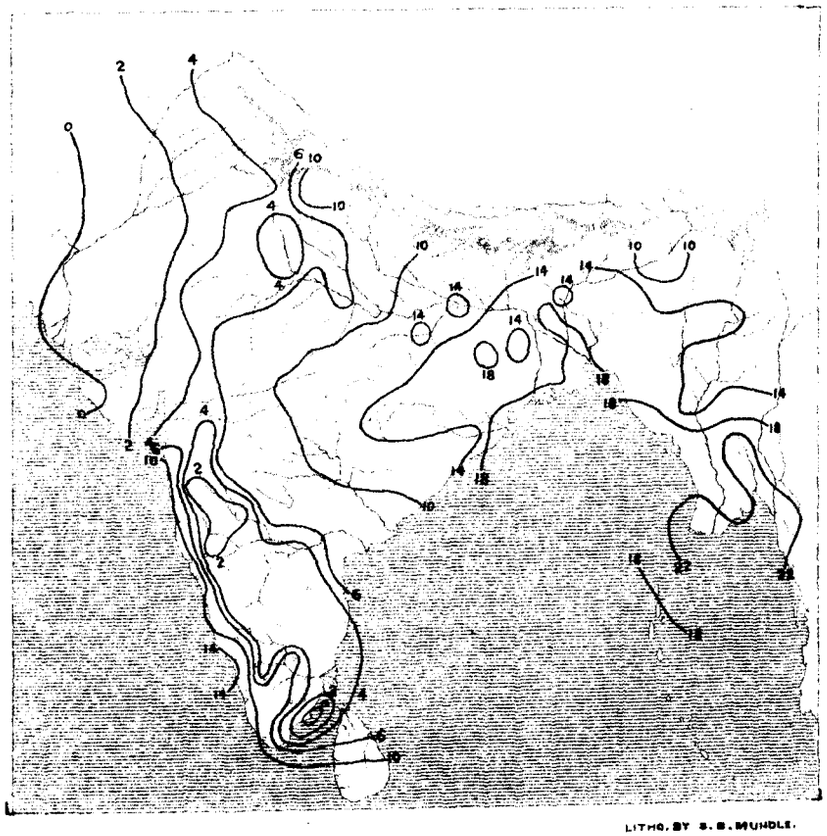


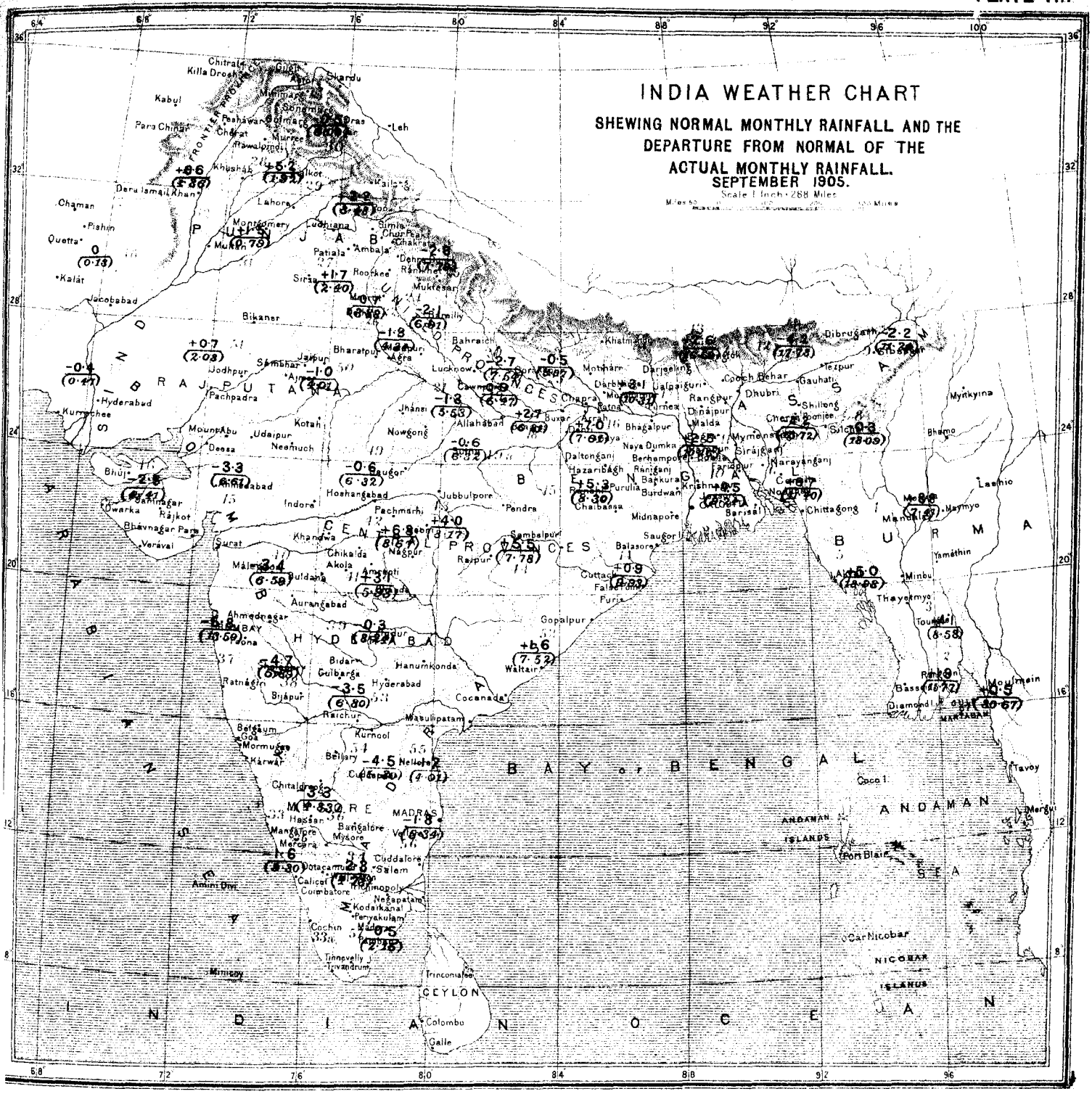
CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE
MONTH ON WHICH RAINFALL EQUALLED OR
EXCEEDED 0·10 INCH.



LITHO. BY S. B. MUNDLE.

No. 9, W., I.—Jan. 05.—5,600.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S.B.MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above these give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained by referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province
33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW.

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, OCTOBER, 1905.

INTRODUCTION.

THIS review of the weather in India during the month of October 1905, is based on observations taken daily at 8 A.M. at 230 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 64 stations. In the rainfall summary the rainfall data of the meteorological observatories and of the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the preparation of the review, are utilized, and brief notes on Solar and Magnetic disturbances are supplied by the observatories.

Summary of the chief features of the weather in India during the month of October, 1905.

October is pre-eminently a month of transition, during which the south-west monsoon winds begin to retreat from the north of the Bay, and cold-weather conditions begin to establish themselves over northern India. The direction of movement of the cyclonic storms of the month is affected by these changes, and there is generally a marked difference in the trajectories of the storms of October and those of the three preceding months of the rains. At the same time, cold weather storms, advancing from the westward, ordinarily begin to appear in north-west India, and the first falls of snow ordinarily take place over the higher peaks of the north-west Himalayas during this month.

During the first four days of the month under review the weather was very quiet and there was little rain beyond light showers in the north-east. In consequence the mean temperature, except in parts of Assam and Bengal, was generally above the normal, the excess having been greatest and about 5° over Rajputana and the neighbouring parts of the United Provinces and over the Bombay Deccan and Khandesh.

On the 5th rain commenced over the southern half of the Peninsula and fairly heavy daily rain continued over that region from the 5th to the 21st, when, owing to the formation of a depression over the Bay, and the consequent diversion of the moist currents from the south of the Penin-

sula to the depression area, the fall somewhat abruptly ceased. In consequence of the above rainfall the mean temperature of the Peninsula was generally lower than usual. The following gives comparative data of the Peninsular divisions for each alternate day from the 5th to the 21st:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of								
	5th October.	7th October.	9th October.	11th October.	13th October.	15th October.	17th October.	19th October.	21st October.
	°	°	°	°	°	°	°	°	°
Central Provinces	−0·1	−1·3	−1·9	−1·6	+0·4	−0·8	−1·7	+1·0	+0·5
Berar	+0·8	−0·2	−0·8	−3·0	+1·6	+0·1	−1·6	+4·3	+2·5
West Coast	+3·1	+2·3	+1·9	+0·6	−0·5	+0·9	+0·7	−1·3	−0·8
Bombay Deccan	+4·9	+3·2	+3·4	+2·8	+3·8	+1·5	+1·9	+0·3	+0·5
Mysore	+3·1	+0·4	+1·3	+1·3	−3·7	−0·5	−0·5	−1·1	−1·1
Madras Coast	+0·1	−1·8	−2·1	−0·5	−3·5	−1·5	−0·4	+1·7	+2·6
Madras Deccan	+1·4	+0·5	+1·6	+2·6	−2·1	−0·7	+0·3	+0·3	+0·4
South India	+1·4	−3·7	−4·6	−2·3	−5·7	−3·0	−0·5	+0·9	+2·1

During this period temperature was unsteady and varied by only small amounts from the normal over northern India. On the 11th, 12th and 13th there was some snow and rain over Kashmir and light rain over the Punjab. In consequence a decided fall of temperature took place in the north-west and in some divisions the mean was reduced to below the normal. The following gives comparative data of north-west India for the period October 10th to 14th:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	10th October.	11th October.	12th October.	13th October.	14th October.
	°	°	°	°	°
United Provinces of Agra and Oudh.	−0·5	+0·4	+1·3	+1·2	+0·6
Punjab	+1·0	+2·5	+0·1	−0·8	−0·9
North-west Frontier Province	+1·2	+3·4	−0·2	−2·3	−2.3
Baluchistan	+2·0	+0·6	+1·8	+3·1	−0·5
Sind	+1·4	+1·6	+0·7	−0·1	+2·4

On the 14th and 15th a rapid rise of temperature took place in Sind and these high temperatures spread eastward over Gujarat, Rajputana and Central India. The following gives comparative data for the 14th to 21st:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of							
	14th October.	15th October.	16th October.	17th October.	18th October.	19th October.	20th October.	21st October.
	°	°	°	°	°	°	°	°
Sind	+2·4	+3·0	+2·7	+1·6	−1·1	+0·5	+1·3	+2·6
Gujarat	+4·5	+4·0	+5·2	+3·4	+3·9	+3·0	+2·9	+2·8
Rajputana	+1·1	−0·8	+1·8	+3·6	−0·4	+0·3	+0·6	+0·9
Central India	+1·9	+1·2	0	0	+1·8	+0·8	−0·2	−1·0

On the 21st a large shallow low pressure area overlay the Bay of Bengal and rain was falling over Burma, Deltaic Bengal, Orissa and the Circars. The low pressure area gradually concentrated and on the 23rd a depression was shown off the coast near Vizagapatam. This depression advanced north-north-eastward and north-eastward up the coast, entered Bengal on the 25th and then passed eastward through Upper Burma and Cachar during the 26th. The storm occasioned a considerable fall of rain in the north-east and the temperature over Burma, Assam and Bengal was somewhat lower than usual. This is shown below:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					
	21st October.	22nd October.	23rd October.	24th October.	25th October.	26th October.
	°	°	°	°	°	°
Burma	−1·6	−1·4	−1·2	−0·3	0	+0·3
Assam	+1·3	+1·3	+1·9	−1·5	−2·8	−3·0
Bengal	+1·8	+2·0	+0·7	−0·2	+0·3	−0·3
Orissa	+0·3	+0·2	−3·3	−1·8	−1·2	+1·2

During this period the mean temperature was very excessive in the north-west. The following gives data:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					
	21st October.	22nd October.	23rd October.	24th October.	25th October.	26th October.
	°	°	°	°	°	°
United Provinces of Agra and Oudh	−0·7	−0·1	+0·8	+0·9	+1·3	+2·6
Punjab	+0·7	+1·2	+2·2	+2·3	+2·6	+3·5
North-west Frontier Province	−0·3	+0·5	+0·9	+1·1	+2·2	+3·5
Baluchistan	+5·5	+5·3	+6·0	+6·7	+5·8	+7·4
Sind	+2·7	+3·8	+3·3	+6·3	+5·6	+5·9
Rajputana	+0·9	+2·1	+3·5	+4·1	+6·7	+8·9
Gujarat	+2·8	+2·6	+2·3	+2·1	+2·6	+2·3

From the 27th to the end of the month the weather was practically rainless throughout the country and the mean temperature was generally above the normal—more especially in the north-west. The following gives

comparative data of temperature of all divisions for these five days :—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	27th October.	28th October.	29th October.	30th October.	31st October.
	°	°	°	°	°
Burma	+0·7	+0·1	−0·2	+0·1	−0·5
Assam	−1·9	−0·4	−0·5	+0·3	+1·8
Bengal	+0·4	+0·8	+0·8	+0·8	+2·3
Orissa	+1·0	+1·2	+1·6	+0·2	+0·1
Bihar	+0·9	+1·1	+1·6	+1·8	+1·7
Chota Nagpur	+1·5	+2·6	+2·2	+1·4	+0·8
United Provinces of Agra and Oudh.	+2·3	+2·7	+3·5	+3·1	+2·1
Punjab	+4·5	+3·0	+3·5	+3·0	+3·0
North-west Frontier Province.	+4·7	+1·8	+0·9	+1·8	+1·8
Baluchistan	+1·7	−0·9	−3·1	−1·9	+2·8
Sind	+7·1	+1·1	+3·0	+0·1	+1·5
Rajputana	+9·5	+8·3	+6·5	+4·6	+5·2
Gujarat	+3·3	+2·9	+2·3	+0·7	+1·2
Central India	+5·3	+5·5	+4·8	+4·1	+3·2
Central Provinces	+1·3	+2·2	+2·7	+2·5	+1·8
Berar	+1·6	+1·7	+0·8	+2·9	+2·5
West Coast	+0·5	+0·2	0	−0·1	+0·3
Bombay Deccan	+1·5	+1·1	+1·5	+1·6	+1·9
Mysore	−0·2	0	+1·1	+1·4	+0·6
Madras Coast	+1·5	+1·6	+2·2	+2·2	+0·7
Madras Deccan	−3·9	−0·8	+0·4	+0·8	+1·1
South India	+3·2	+3·7	+2·4	+2·1	+1·8

Solar and Magnetic disturbances.

The following notes regarding solar, seismic and magnetic disturbances recorded during the month of October have been received from the observatories :—

Kodaikanal Observatory, South India :—Solar Observations—October 1905.

Considering the season of the year and the early setting in of the rains from the north-east a large amount of work was possible during the month. There were only four days on which no observations were made, four others on which prominences could not be observed, and seven others on which either the observations were incomplete or were made in a poor sky.

Spots :—The main features of the month were the comparatively small number of new groups and the appearance of two groups of the largest size. The number of new groups observed was only 16, or just half the number recorded in July and the mean daily number was only 3·3 against 5·1 in August. The inequality in distribution between the two hemispheres, which was so marked in August and September, continued, twice as many groups appearing in the northern as in the southern hemisphere. The northern belts also included all the larger groups. The limits of the spot belts were also narrower than usual, all the spots lying between latitudes +17° and −19°. There were no returns of old groups, but 679 was in approximately the same position as one seen three times before, but which filled up on the visible disc when some distance from the limb.

The feature of the month was undoubtedly the two large groups Nos. 674 and 676 which, for some days, were visible together and which were both large enough to be easily seen without a telescope. These spots were very different in character. No. 674, which came round the limb on the 14th, consisted of a great number of comparatively small umbrae more or less connected by penumbra. Its greatest length was about 130,000 miles and its greatest breadth about half as much. It covered a larger area than the great spot of January—March, but it contained no single patch of umbra as large as the chief umbra of that spot. The changes in the group, from day to day, were not conspicuous, but spectroscopically it was a very disturbed spot: C was constantly reversed and displaced over large areas and D3 was frequently seen dark. The most disturbed region was a point near the western end of the group where there was no visible spot. No. 676, which appeared at the east limb on the 22nd, was a spot of quite different type. It consisted essentially of one very large spot with a few small attendants. When seen near the centre of the disc the main spot consisted of a large, almost rectangular, umbra about 30,000 miles long and 9,000 miles broad, surrounded by a penumbra which had a width only about twice as great as that of the umbra. This spot also showed considerable disturbances, but they were not so violent as in 674. Groups 670 and 672 both formed on the visible disc; they both consisted of a number of small spots and the former was very disturbed.

Prominences :—The daily number of prominences was rather lower than usual, especially towards the end of the month. Prominences exceeding 100″ in height were seen on four days, one on the 17th, two on the 23rd, one on the 29th, and one on the 30th. The last two are rather remarkable as they were apparently different parts of one enormous prominence. It reached a height of 165″ on the 29th and was still 140″ high on the 30th. On the 27th and 28th there were lower prominences visible at almost exactly the same latitude. As the latitude was only 25° the distance between two points on the sun appearing at the limb on successive days is about 90,500 miles. The disturbance therefore must have covered an area equal to that of a sunspot of the very largest size. Three disturbed prominences were observed during the month. One, a metallic prominence, at position angle 300° on the 9th, another at position angle 110° on the 26th, and a group of prominences associated with spot group 676. The last

was visible on the 20th, 21st, and 22nd. On the 20th it was specially bright and rapidly changing in form. The whole prominence, from top to bottom, showed a displacement of the C. and F. lines in both direction. The greatest displacement noted in F. was 1·5λ to red and 2·0λ to violet. D3 showed a displacement of 0·5λ to violet.

In spite of the existence of the large spot there was no large magnetic disturbance during the month. There was a moderate disturbance on the 6th coincident in time with the outburst of No. 672 on the central meridian.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay:—Note on the Colaba Magnetic Record.

During the month the traces showed 12 calm days, 18 days of small and 1 day of moderate disturbances.

The selected quiet days of the month were the 3rd, 10th, 12th, 23rd and 30th.

The mean observed values of the several elements, as also the ranges and summed-ranges of the Horizontal Force and Declination for the month were as follows:—

Declination	0° 12′ 15″ East.
Horizontal Force	·37402 C. G. S. Unit.
Dip	21°59′·3
Horizontal Force range	·00052 C. G. S. Unit.
Horizontal Force Summed range	·00318 „ „
Declination range	3′·69
Declination Summed range	12′·81

NOTE.—Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.

Three small seismic disturbances were recorded during the month on the 19th, 21st and 22nd.

MAGNETIC DISTURBANCES.

October 1905.		October 1905.		October 1905.	
1	S.	11	S.	21	C.
2	C.	12	C.	22	S.
3	C.	13	S.	23	C.
4	C.	14	S.	24	S.
5	S.	15	S.	25	C.
6	S.	16	C.	26	S.
7	S.	17	S.	27	C.
8	S.	18	S.	28	M.
9	S.	19	S.	29	S.
10	C.	20	S.	30	C.
				31	C.

The magnitudes of the disturbances are determined from Horizontal Force traces. C=calm; S=small; M=moderate, G=great, V. G.=very great. Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Government Observatory, Bombay.

Alipore Observatory, Calcutta:—List of displacements recorded by the Seismograph at the Alipore Observatory in October 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Amplitude in maximum. M. M.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M.	
21st . .	11-17·4	11-19·6	11-33·7	11-48·9	0·75	0-31·5	Sensibility 1 m. m. = 0″·38 of tilt.
22nd . .	9-5·8	9-16·5	9-27·7	9-55·1	1·50	0-49·3	Ditto.

The local times of the commencement:—

Date.	H. M.
October 21st	17-10·7
„ 22nd	14-59·1

J. A. CUNNINGHAM,
Offg. Assistant Meteorological Reporter to the Government of India.

List of earthquakes recorded by the Omori-Ewing Seismograph at the Simla Observatory during October 1905.

Date.	Beginning of P. T.	End of P. T.	Beginning of L. W. G. M. T.	Maxima, G. M. T.	End approximately G. M. T.	Duration approximately.	Maximum amplitude in M. M.	REMARKS.
			H. M.	H. M.	H. M.	H. M.	H. M.	
7th .	...	...	14 59·8	14 59·9	15 0·7	0 0·9	0 ·08	Local.
14th .	...	...	...	0 42·9	...	0 0·2	0 ·03	„
17th .	...	...	17 9·6	17 9·8	17 10·6	0 1·0	0 ·16	„
20th .	...	...	14 0·5?	14 0·8	14 1·8	0 1·3	0 ·15	„
23rd .	...	...	17 49·8	10 50	10 50·2	0 0·4	0 ·04	„
24th .	...	...	...	19 48·5	...	0 0·2	0 ·05	„
30th .	...	...	5 41·2	5 41·3	5 41·5	0 0·3	0 ·1	„

J. PATTERSON,
Deputy Meteorologist.

Royal Alfred Observatory, Mauritius:—Groups of sunspots and faculae were observed on all days of the month except the 22nd when the weather was cloudy and

rainy. Single spots were also recorded on the 1st, and from the 14th to the 20th. The groups were recorded as follows:—

One group was observed on the		16th to the 21st.
Two groups were	„ „ „	14th, 15th, 23rd, 24th, and 26th.
Three	„ „ „ „ „	12th, 13th, 25th, and 28th to 31st.
Four	„ „ „ „ „	1st, 2nd, and 11th.
Five	„ „ „ „ „	3rd, and 5th to 10th.
Six	„ „ „ „ „	4th.

MAGNETIC DISTURBANCES.

Day.	Hours.	Magnetic Disturbances C. G. S.
4	10—17	Smooth wave in Horizontal Force (+ ·00032.)
6	13¼—16	Decrease of Horizontal Force (·00080.)
6 to 7	17 to 12	Increase of Horizontal Force (·00103.)
„	13½—19½	Decrease of Horizontal Force (·00047.)
13	9—18½	Wave in Horizontal Force (+ ·00050) with small superposed fluctuations.
13	18½—23	Loss of Register.
14	1¼—2	Increase of Horizontal Force (·00020.)
14	17—21	Small fluctuations in Horizontal Force.
15	13·29 m	Sudden increase of Horizontal Force (·00008) and decrease of westerly declination (1'·0.)
16 & 17		Loss of Horizontal Force Register.
17	0—19	Occasional small fluctuations in Horizontal Force.
19—25		Loss of Horizontal Force Register.
28 to 29	3 to 3	Large fluctuation (?)
30		Accentuated variations in Horizontal Force (Range ·00040.)

T. F. CLAXTON,
Director.

Weather in Indian Monsoon region.

The weather is frequently more or less disturbed over the Indian Seas during the month of October and both the Bay of Bengal and the Arabian Sea were disturbed in October 1905 by slight cyclonic storms, but in other parts of the monsoon area quiet weather is ordinarily experienced and this was the case during the month under review. The following were the departures from normal in the South-east Trades region:—

October 1905.	Mauritius.	Zanzibar.	Seychelles.
	"	"	"
Departure from normal of mean pressure.	—·016	—·030	+·006
Actual mean wind direction	S 78° E	S 65° E	S 45° E
Normal mean wind direction	S 78° E	S 67° E	S 39° E
Actual mean wind velocity (miles per diem).	223	114	202
Normal mean wind velocity (miles per diem).	264	120	187
Rainfall departure	+0·82	+2·71	—4·81

The preceding data show that both at Mauritius and Zanzibar the mean pressure of the month was slightly below the normal while at the Seychelles it was normal. The winds blew from the usual direction at Mauritius but were more easterly than usual at the remaining stations while the velocity was normal or in slight defect. The rainfall was less than usual at the Seychelles. The following extracts from the logs of steamers show the weather experienced over the Arabian Sea, &c.:—

The mail steamer *Oriental* left Aden on the 1st and experienced first south-easterly winds and calms and there after to arrival at Bombay on the morning of the 6th fresh to light north-east winds and fine weather.

The mail steamer *Persia* left Aden on the 12th and experienced up to Long. 63° E. moderate to light north-easterly winds and fine weather; thence to Long. 69° E. moderate to fresh easterly winds, overcast sky, and heavy rain squalls with low barometer; thence to arrival at Bombay on the morning of the 17th moderate to light south-easterly and easterly winds and passing clouds.

The mail steamer *Peninsular* left Aden on the 16th and experienced from Long. 54° E. to Long. 61° E. moderate to light north-westerly and north-easterly winds and moderate north-east swell; thence to Long. 67° E. fresh north-easterly winds, cloudy skies, and rainsqualls; thence to Long. 69°E. fresh south-easterly winds, cloudy weather, rainsqualls and a moderate sea and low barometer; thence to arrival at Bombay on the morning of the 20th fresh south-easterly winds, cloudy weather and considerable southerly swell.

The transport *Sicilia* experienced, after passing Aden, disturbed cyclonic weather on the 17th in the Arabian Sea and thence to arrival in Bombay on the 19th unsettled, squally weather with rain.

The R. I. M. S. *Dalhousie* on her voyage from Aden to Bombay encountered the outskirts of the disturbed area. "On the 25th in Lat. 13° 55′ N. and Long. 50° 5′ E. she met with a confused swell; on the 26th in Lat. 14°51′ N. and Long. 53°52′ E. the swell increased from north-east indicating that there was or had been a disturbance on or to the northward of the course to Bombay; at sunset on the 26th the appearance of the clouds further indicated that there were strong winds about. At 7·30 P.M. in Lat. 15°5′ N. and Long. 54°55′ E. a bank of clouds rose stretching from north to east-north-east. At 8 P.M. very vivid forked lightning and thunder were experienced in the north east,

but the barometer kept steady and the swell increased; the wind was light from west to south-west and the sky overcast with broken rain clouds. Continuous and most vivid lightning prevailed up to 10-30 P.M. after which the lightning and thunder decreased and the latter was more distant, all indications that the storm was travelling in a north-easterly direction and was at the first about 150 to 200 miles distant, *i.e.*, in the locality of the Kuria Muria Islands. At 11-30 P.M. the lightning and thunder ceased and a steady light wind set in from south-south-east" At the beginning of the month light variable winds and calms were experienced, but after the 10th most of the steamers experienced disturbed weather due to the cyclonic storms mentioned in the barometric depressions section.

Depressions and Cyclonic storms.

Barometric pressure was generally fairly uniform and higher than usual from the 1st to the 9th, but on the latter date a brisk fall of pressure occurred and a shallow depression appeared over the Indus Valley. On the 10th, 11th and 12th the centre of this depression lay near Jacobabad. Steepish barometric gradients prevailed on the northern side of the disturbance and some rain fell over the north-west Himalayas and the neighbouring plains. After the 11th disturbed conditions appeared in the extreme south, a shallow and ill-defined depression passing across the south of the Peninsula between the 11th and 13th occasioning a considerable amount of rain over that area.

On the 14th the barometer was falling everywhere and a fresh depression appeared off the south Madras Coast. This depression also appeared to cross the south of the Peninsula.

In the meantime a low pressure area had appeared over the Arabian Sea and the weather was more or less disturbed over that region from the 10th to the 26th. On the 10th rain and a feeble cyclonic circulation of the winds were reported from about Lat. 12°N. and Long. 60°E. These disturbed conditions lasted till the 12th when the barometer apparently rose and normal conditions were re-established. On the 15th, however, pressure again gave way and the marine observations of the 16th showed southerly and south-easterly winds off the west coast of India, easterly winds in Lat. 17° N and Long. 68° E.; northerly winds in Lat. 14° N. and Long. 62° E. and north-westerly winds between Lats. 8° and 12° N. and Longs. 60° and 64° E. so that there was apparently a centre of disturbance in about Lat. 13° N. and Long. 68° E. Rainy, squally weather prevailed over the whole of the centre and east of the sea. The reports of the 17th showed that the area of disturbed conditions had moved slightly to the westward or to the north of west so that while pressure had been steady over and near the west coast of India there had been a fall of the barometer over the centre of the sea. The cyclonic circulation was more distinct and the north-east winds to the north of the disturbance in Lat. 16° N. and Long. 62° E. were between 4 and 6 in force. Rain, thunder and squalls were reported from the centre of the sea and the centre of the disturbance apparently lay in Lat. 14° N. and Long. 64° E. The reports of the 18th apparently showed that the centre had moved exceedingly slowly and lay in about Lat. 15° N. and Long. 63° E. North-north-easterly winds of forces 4 and 5 prevailed over the centre of the sea and south-westerly winds over the south of the sea. This storm apparently filled up during the day without reaching land as the marine reports of the 19th gave no evidence of its continued existence, while, on the other hand, the observations showed that a fresh area of disturbed weather had appeared in about Lat. 16° N. and Long. 68° E. South-east winds were reported on board the *Gordon Castle* in Lat. 16°34′ N. and Long. 70°21′ E; north-east and north-north-east winds on board the *Wildenfels*, the *Imperatrix*, the *Peninsular* and the *Merton Hall*, all in about Lat. 17° N. and a north-west wind on board the *City of Madras* in Lat. 16°9′ N. and Long. 59°56′ E. while over the south of the sea south-westerly winds of forces 4 to 6 prevailed generally. The weather was overcast, squally and rainy over the south, centre and east of the sea. On the 20th the barometer was rising on the Bombay coast and the depression over the Arabian Sea had begun to move westward. The centre at 8 A.M. apparently lay in about Lat. 16° N. and Long. 67° E. The winds reported were cyclonic from about Long. 56° E. to the coast of India, the forces varying between 4 and 7. The sea was rough and rain squalls prevailed very generally. On the 21st the position of the centre was apparently defined by the following vessels:—the *City of Madras* in Lat. 17°57′N. and Long. 68°4′E. with a south-east wind of force 6 and a rough sea; the *Circassia* in Lat. 18°3′ N. and Long. 67°36′ E. with an east wind of force 6 and heavy rain and wind squalls; and the *Mohammadi* in Lat. 16°11′N. and Long. 63°26′E. with a north-north-west wind of force 5 and frequent rain squalls. The centre was hence probably in Lat. 16°30′N and Long. 66° E. On the following morning, the 22nd, the centre was probably close to the *Mohammadi* which lay in Lat. 16°53′N. and Long. 65°58′ E. and reported a north-north-west wind of force 7 and a high confused sea. The observations recorded on this day on board this vessel were as follows:—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer as corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
22nd October.		° ′	° ′	″			
4 A.M.	S.S. Mohammadi			·674	WNW	6 to 7	Heavy squalls with rain.
5 ,,	,,			·73			
6 ,,	,,			·72			
7 ,,	,,			·70			
8 ,,	,,	16·53	65·58	·69	NNW	7	High confused sea.
9 ,,	,,			·68			
10 ,,	,,			·68	WNW		
11 ,,	,,			·63			
Noon.	,,	17·00	66·22	·58	SW	7	High confused sea.

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer as corrected.	Wind. Direction	Wind. Force.	Weather.
22nd October.	S.S. Mohammadi.						
1 P.M.	,,			29·57			
2 ,,	,,			·55	SSW	8	Furious squalls.
3 ,,	,,			·57			
4 ,,	,,			·59	S by W	8	Confused sea.
5 ,,	,,			·61			
6 ,,	,,			·63			
7 ,,	,,			29·64	SSW	9	Heavy sea.
8 ,,	,,			·66			
9 ,,	,,			·68			
10 ,,	,,			·69			
11 ,,	,,			·71			
Mid.-nt.	,,			·73	S	S to 5	Clear.

The lowest pressures were thus reported at 2 P.M. when the wind was south-south-west blowing with furious squalls The centre apparently passed at 10 A.M., when the wind shifted from west-north-west to south-west. The *Wildenfels* in Lat. 16°17′N. and Long. 61°38′E. further to the westward experienced heavy northerly squalls all the afternoon.

The marine reports of the 23rd and 24th showed apparently that the storm remained stationary over the centre of the sea during these two days. The vessels nearest the centre on these days were:—on the 23rd the *Mohammadi* in Lat. 17°43′N. and Long. 69°E. with a south-east wind; the *Wildenfels* in Lat. 16°47′ N. and Long. 65°39′E. with a north-north-west wind of force 6 and heavy squalls of wind and rain and on the 24th the *City of Venice* in Lat. 17°9′N. and Long. 64°55′E. with an east wind of force 6 and continuous heavy rain and the *Reichstag* in Lat. 17°21′N. and Long. 63°18′E. with a north-north-west wind of force 6 and a high sea. For the 25th there was very little information, but apparently at 8 A.M., the position of the storm was practically unchanged. During the 25th the storm apparently moved west-north-westward to the neighbourhood of the Kuria Muria Islands. The R. I. M. S. *Dalhousie* on her voyage from Aden to Bombay reports as follows:—On the 25th October in Lat. 13°55′N. and Long. 50°5′E. a confused swell was met with; on the 26th October in Lat. 14°51′N. and Long. 53°52′E. the swell increased from north-east indicating that there was or had been a disturbance to the northward. At sunset the appearance of the clouds indicated that there were strong winds about. At 7-30 P. M. in Lat. 15°5′N. and Long. 54°55′E. a bank of clouds rose stretching from north to north-east. At 8 P.M. very vivid forked lightning and thunder in the north-east, and swell slightly increased, winds light from west and south-west and sky overcast with broken rain clouds. Continuous and most vivid lightning up to 10 P.M., after which lightning and thunder decreased and the latter more distant, all indications that the storm was travelling in a north-easterly direction and was at the first about 150 to 200 miles distant, *i.e.*, in the locality of the Kuria Muria Islands.

While this was in progress over the Arabian Sea pressure had become very uniform over the Bay of Bengal and on the 20th a depression had formed over the centre of the Bay, the winds being light but cyclonic at the coast stations. During the 21st and 22nd the disturbed conditions concentrated and on the 23rd, a storm was shown off the Madras coast. The storm had drifted up the coast to Orissa by the morning of the 24th, was shown over Deltaic Bengal by the morning of the 25th; in east Bengal on the morning of the 26th and had broken up by the morning of the 27th.

During the last four days of the month the weather remained quiet over the Indian area.

Pressure.

The mean 8 A.M. pressure for October 1905 of the whole Indian area was approximately normal, the mean departure from average having been only —·003″. From August 1904 to August 1905 the Indian pressure was normal or above normal, but during September and October of the year under review a period of lower pressures than usual appeared to be setting in.

The actual distribution of pressure, on the mean of the month, is shown in Pl. I. Pressure was relatively low over the east, centre and north of the Bay, relatively high over the Central India plateau and part of the Central Provinces and in the extreme north of India and was very uniform elsewhere. The general distribution of pressure was thus approximately normal and the departures from the average were small except in the Upper Indus Valley, the Upper Assam Valley and locally at Lucknow and Cawnpore where pressure was in slight defect. The following gives the departures of 0·020″ or more:—

Station.	Departure from normal of mean 8 A.M. pressure of October 1905.
	″
Peshawar	—·020
D. I. Khan	—·020
Sibsagar	—·020
Lucknow	—·025
Cawnpore	—·020

Relatively to the general condition pressure, on the mean of the month, was slightly lower than usual over the North-west Frontier Province, the north and east Punjab, the United Provinces, the east of Central India, Bengal, Assam, the greater part of Burma, part of Bombay, and part of the south-west and south of the Peninsula and was higher than usual elsewhere. The anomalies amounted to ± ·015″ at the following stations:—

STATION.	Positive anomalies.	STATION.	Negative anomalies.
	″		″
Masulipatam	+·021	Lucknow	—·022
Indore	+·017	Cawnpore	—·017
Bikaner	+·016	Peshawar	—·017
Nagpur	+·016	D. I. Khan	—·017
Chanda	+·016	Sibsagar	—·017
Trincomalee	+·015	Multan	—·016
		Patna	—·016
		Yamethin	—·016
		Darbhanga	—·015
		Dinajpur	—·015

At the hill stations the departures from normal were small and unimportant. Except in Burma the vertical pressure gradients were slighter than usual, but the departures from normal were very small. The following gives data for eleven pairs of stations:—

HILL STATION.	Departure from normal pressure, October 1905.	PLAIN STATION.	Departure from normal pressure, October 1905.	Departure of pressure difference, October 1905.
	″		″	″
Quetta	+·004	Jacobabad	+·004	0
Leh	+·014	Lahore	—·012	—·026
Simla	+·003	Ludhiana	—·010	—·013
Murree	+·005	Peshawar	—·020	—·025
Chakrata	+·003	Roorkee	—·007	—·010
Ranikhet	+·001	Bareilly	—·011	—·012
Darjeeling	—·007	Dhubri	—·013	—·006
Mount Abu	+·002	Deesa	+·001	—·001
Pachmarhi	+·009	Khandwa	+·005	—·004
Lashio	—·024	Bhamo	+·009	+·033
Wellington	—·001	Coimbatore	—·003	—·002

In the South-east Trades region the departures of mean pressure from normal were irregular. The following is a summary of the chief features of the pressure distribution of October 1905.

(1) The mean 8 A.M. pressure of the whole Indian area was approximately normal.

(2) The departures from normal at the various stations were small and unimportant.

(3) The mean pressure departures from normal were even smaller on the hills than on the plains.

(4) And the departures of pressure difference from normal were exceedingly small.

(5) In the South-east Trades region pressure departed irregularly from the average.

Temperature.

The considerable failure of the rains which had characterised the monsoon of 1905 had left temperature in excess over a large part of the country and this excess continued generally during the month of October.

The mean maximum temperature of the month exceeded the normal except over parts of Assam, Bengal, Burma and the coasts of the Peninsula where there was some defect. The deficiency was generally small, but exceeded 2° at the stations for which comparative data are given below:—

PROVINCE OR DIVISION.	STATION.	MEAN MAXIMUM TEMPERATURE. Actual, October 1905.	Normal, October.	Departure from normal October 1905.
		°	°	°
ASSAM	Silchar	86·1	88·7	—2·6
BURMA	Yamethin	89·3	92·5	—3·2
BURMA	Bhamo	85·5	88·5	—3·0
BURMA	Minbu	89·1	91·3	—2·2

In all other places the mean maximum temperature exceeded the average—more particularly over the United Provinces, Rajputana, Central India, Gujarat, the west of the Central Provinces, the Deccan and the Indus Valley where at the following stations the departures from normal were more than +3° :—

STATION.	MEAN MAXIMUM TEMPERATURE. Actual, October 1905.	Normal, October.	Departure from normal October 1905.
	°	°	°
Malegaon	95·2	90·6	+4·6
Ahmednagar	92·6	88·1	+4·5
Deesa	101·2	96·9	+4·3
Kurrachee	95·9	91·6	+4·3
Rajkot	99·3	95·3	+4·0
Jhansi	96·8	92·9	+3·9
Cawnpore	95·3	91·5	+3·8

Station.	Mean maximum temperature. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	°	°	°
Sutna	91·5	87·9	+3·6
Surat	96·6	93·0	+3·6
Sambhar	96·8	93·3	+3·5
Poona	92·0	88·5	+3·5
Ajmer	95·4	92·0	+3·4
Indore	91·3	87·9	+3·4
Meerut	93·9	90·5	+3·4
Neemuch	93·7	90·4	+3·3
Nowgong	93·6	90·3	+3·3
Sholapur	93·2	89·9	+3·3
Jacobabad	101·9	98·6	+3·3
Jaipur	97·4	94·3	+3·1

At most of the hill stations the mean maximum temperature of the month also exceeded the average, but, except at Kabul, the departures from normal were generally smaller than at the stations on the plains. The following shows the stations at which the departure was +2° or more :—

Hill Station.	Mean maximum temperature. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	°	°	°
Kabul	81·4	75·2	+6·2
Kalat	78·4	73·7	+4·7
Chakrata	68·5	66·2	+2·3
Quetta	76·8	74·6	+2·2

The highest day temperatures of the month were generally recorded during the first or last weeks and the following table shows the highest readings registered in the different divisions during the month together with the highest readings previously recorded at the stations mentioned :—

Province or Division.	Station.	Highest maximum temperature recorded in October 1905.	Date on which recorded.	Highest maximum temperature recorded in October previous to 1905.	Year in which recorded.
		°		°	
Burma	Mandalay	96·5	5th	100·5	1892
Assam	Silchar	92·0	17th	97·6	1900
Bengal	Saugor Island	92·4	13th	92·2	1885
Orissa	Cuttack	94·4	5th	101·8	1886
Bihar	Gaya	92·9	4th	100·0	1887
Chota Nagpur	Chaibassa	93·9	4th	95·9	1896&1904
U. P. of Agra & Oudh.	Jhansi	100·3	27th & 28th.	108·0	1871
Punjab	Multan	102·4	2nd & 5th	106·4	1901
N.-W. F. Province.	D. I. Khan	97·2	3rd & 4th	105·5	1881
Sind	Jacobabad	107·4	1st	109·3	1903
Rajputana	Pachpadra	105·9	1st	109·5	1895&1896
Central India	Nowgong	97·5	27th & 28th.	100·0	1895&1896
West Coast	Ratnagiri	95·3	9th	99·1	1888
Bombay Deccan	Malegaon	98·9	3rd	104·3	1899
Mysore	Chitaldroog	93·1	1st	92·6	1902
Gujarat	Deesa	104·1	4 days	108·1	1899
Central Provinces.	Khandwa	96·7	27th & 28th.	105·2	1899
Berar	Akola	97·4	27th	104·2	1899
Madras Coast	Nellore	97·3	29th	102·8	1900
Madras Deccan	Cuddapah	101·7	1st	102·2	1895, 1899 & 1904.
South India	Tinnevelly	100·3	1st	102·4	1884, 1897, 1899 & 1900.

The preceding table shows that in the case of Bengal and Mysore the maximum temperature recorded in October 1905 was higher than had previously been registered in those divisions.

The absolutely highest temperature was as usual recorded in the Sind desert where Jacobabad registered a maximum of 107°·4 on the 1st October.

The departures of the mean minimum temperature of the month exhibited a somewhat different distribution from that of the departures of the mean maximum temperature. There was a broad band covering the greater part of the United Provinces, the Central Provinces and the east and south of the Peninsula where the mean minimum temperature was below the average. The largest depar-

tures from normal (−2°·0) were recorded at the following stations :—

Province.	Station.	Mean minimum temperature. Actual, October 1905.	Normal October.	Departure from normal, October 1905.
		°	°	°
United Provinces.	Allahabad	64·1	67·6	−3·5
	Benares	64·8	68·3	−3·5
	Lucknow	63·4	65·5	−2·1
Central Provinces.	Jubbulpore	61·2	64·0	−2·8
	Hoshangabad	64·1	66·9	−2·8
	Khandwa	63·7	66·3	−2·6
	Chanda	66·0	68·5	−2·5
	Akola	64·0	66·2	−2·2
	Nagpur	66·4	68·4	−2·0

In all other parts of the country the mean minimum temperature exceeded the normal and the excess was considerable (+2° or more) over the submontane Punjab, Rajputana, the Kathiawar coast and parts of Burma. The following gives data :—

Province.	Station.	Mean minimum temperature. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
		°	°	°
Punjab Submontane.	Sialkot	65·4	61·9	+3·5
	Lahore	61·5	59·1	+2·4
Rajputana	Ajmer	69·5	63·2	+6·3
United Provinces.	Jhansi	72·4	69·1	+3·3
Rajputana.	Sambhar	66·4	63·6	+2·8
	Jaipur	66·6	64·0	+2·6
	Pachpadra	67·0	64·9	+2·1
Kathiawar Coast.	Veraval	75·4	72·3	+3·1
	Surat	73·4	70·8	+2·6
	Bhuj	73·3	70·9	+2·4
Burma	Mandalay	77·0	74·8	+2·2
	Mergui	74·1	72·1	+2·0

At most of the hill stations the mean minimum temperature exceeded the normal.

The departures of the mean temperature of the month from normal exhibited a slight excess over nearly the whole Indian area. The departures were however only considerable (+2° or more) at the stations for which data are given below :—

Station.	Mean Temperature. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	°	°	°
Ajmer	82·5	77·6	+4·9
Jhansi	84·6	81·0	+3·6
Sambhar	81·6	78·4	+3·2
Sialkot	80·2	77·1	+3·1
Surat	85·0	81·9	+3·1
Ahmednagar	79·4	76·3	+3·1
Jaipur	82·0	79·1	+2·9
Rajkot	84·5	81·7	+2·8
Deesa	84·6	81·9	+2·7
Kurrachee	83·8	81·2	+2·6
Sholapur	81·5	79·0	+2·5
Poona	79·7	77·5	+2·2
Agra	82·6	80·4	+2·2
Bhuj	83·7	83·5	+2·2

With the exception of Lashio, Murree and Pachmarh the mean temperature was in excess at all the hill stations.

The following gives comparative data of mean temperature for the extra-Indian stations.

Station.	Mean Temperatur. Actual, October, 1905.	Normal, October.	Departure from normal, October 1905.
	°	°	°
Trincomalee	82·5	82·0	+0·5
Colombo	80·2	80·6	−0·4
Kabul	61·5	58·4	+3·1
Kashgar	57·8	55·4	+2·4
Ispahan	64·1	60·9	+3·2
Bushire	80·0	79·5	+0·5
Jask	82·4	83·1	−0·7
Muscat	86·9	83·5	+3·4
Baghdad	81·5	77·6	+3·9
Aden	82·4	82·4	0
Perim	84·8	84·2	+0·6
Zanzibar	78·8	77·7	+1·1
Seychelles	79·1	77·7	+1·4
Mauritius	72·8	72·1	+0·7

The above shows that the mean temperature was higher than usual except at Colombo, Jask and Aden.

The following summarises the chief departures of the temperature conditions of the month from the normal:—

(1) The mean maximum temperature generally exceeded the normal except over Burma and part of north-east India.

(2) The excess was greatest over the United Provinces, Rajputana, Central India, Gujarat, the Deccan and the Indus Valley.

(3) The mean minimum temperature exceeded the normal except within a broad band running from the United Provinces through the Central Provinces to the east and south of the Peninsula.

(4) The mean minimum temperature was in considerable defect over the east of the United and the Central Provinces and in large excess over Rajputana.

(5) The mean temperature of the month was in excess of the normal over the greater part of the country and the excess was considerable over the submontane Punjab, Rajputana, Lower Sind and Gujarat and the Deccan.

The following table gives temperature departure data of the month for the eleven Meteorological Provinces:—

Meteorological Province.	Departure from normal of		
	Mean maximum temperature, October 1905.	Mean minimum temperature, October 1905.	Mean temperature, October 1905.
	°	°	°
Burma Coast and Bay Islands	−0·4	+1·0	+0·3
Burma Inland	−1·6	+1·2	−0·2
Assam	−0·8	−0·5	−0·7
Bengal and Orissa	+0·1	+0·7	+0·4
Gangetic Plain and Chota Nagpur	+1·3	−0·9	+0·2
Upper Sub-Himalayas	+1·6	+0·6	+1·1
Indus Valley and North-West Rajputana	+1·5	+0·3	+1·2
East Rajputana, Central India and Gujarat.	+2·9	+1·7	+2·3
Deccan	+1·9	−0·6	+0·6
West Coast	+0·3	+0·8	+0·6
South India	+0·8	0	+0·4

The following table gives comparative temperature data for the month for the 57 meteorological provinces or divisions of India:—

Province.	Division.	Actual temperature.					Departure from normal of month of		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	87·2	75·5	81·4	11·7	18·6	−0·5	+1·1	−1·6
	Lower Burma (Deltaic)	80·9	70·7	81·8	10·2	16·6	−0·3	+0·9	−1·2
	Central do.	90·3	75·7	83·0	14·6	22·4	−0·1	+1·2	−1·3
	Upper do.	88·4	74·3	81·4	14·2	23·7	−2·0	+1·3	−3·3
	Arakan	87·2	77·2	82·2	10·0	17·7	−0·0	+0·5	−1·1
Bengal and Assam	Eastern Bengal	86·9	74·8	80·8	12·1	22·2	+0·1	+1·1	−1·0
	Assam (Surma)	86·1	72·7	79·4	13·4	23·7	−2·6	+0·4	−3·0
	Do. (Hills)	72·3	57·3	64·8	15·1	20·9	...	...	...
	Do. (Brahmaputra)	85·5	70·5	78·0	15·0	24·9	+0·1	−1·0	+1·1
	Deltaic Bengal	87·7	75·2	81·5	12·6	22·7	−0·1	+0·7	−0·8
	Central do.	88·2	73·5	80·9	14·7	23·8	+0·2	+0·9	−0·7
	North do.	87·4	71·7	79·5	15·7	24·1	+0·5	+0·2	+0·3
	Bengal Hills	58·7	43·6	51·2	15·2	24·6	+1·2	−0·2	+1·4
	Orissa	88·2	74·8	81·5	13·4	24·5	−0·2	+0·1	−0·3
	Chota Nagpur	87·4	67·4	77·4	20·0	30·5	+1·0	0	+1·0
	South Bihar	89·4	70·8	80·2	18·6	27·7	+0·3	−0·1	+0·4
	North do.	88·3	71·8	80·1	16·4	24·8	+0·3	+0·5	−0·2
United Provinces of Agra and Oudh	United Provinces (East)	92·5	64·5	78·5	28·1	37·8	+2·3	−3·5	+5·8
	South Oudh	94·1	63·4	78·8	30·7	44·6	+2·9	−2·1	+5·0
	North do.	91·3	60·5	78·9	24·8	33·7	+1·2	−0·7	+1·9
	United Provinces (Central)	95·4	67·0	81·2	28·3	38·2	+2·9	+0·5	+2·4
	Do. do. (West)	94·8	65·6	80·2	29·2	38·2	+2·9	+0·6	+2·3
	Do. do. (East Submontane)	87·7	69·5	78·6	18·2	24·7	−1·0	−0·5	−0·5
	Do. do. (West Submontane)	89·0	60·4	74·7	28·5	38·0	+2·1	−1·5	+3·6
	Do. do (Hills)	68·4	52·1	60·3	10·3	22·9	+1·5	+0·6	+0·9
Punjab	Punjab (South-East)	93·9	69·2	81·6	24·7	36·3	+1·8	+1·3	+0·5
	Do. (South)	94·9	62·8	78·8	32·1	38·1	+0·4	+1·1	−0·7
	Do. (Central)	94·2	61·5	77·9	32·7	42·3	−0·9	+2·4	−3·3
	Do. (Submontane)	93·1	61·6	77·4	31·5	42·4	+1·7	+1·3	+0·4
	Do. (Hills)	65·4	41·5	53·5	23·9	36·5	+0·7	+0·7	0
	Do. (West)	96·3	63·9	80·2	32·4	44·4	+1·0	+1·1	−0·1

Province.	Division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Departure from normal of month Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
N.-W. F. Province	North-west Frontier Province	91·3	59·4	75·4	31·9	44·6	+0·1	+0·5	— 0·4
Bombay and Malabar Coast Districts (Madras).	Malabar	85·5	74·9	80·2	10·6	19·3	+0·3	+0·2	+ 0·1
	Madras (South Central)	89·8	70·8	80·3	19·0	34·0	+0·8	—0·1	+ 0·9
	Coorg	77·0	61·5	69·3	15·5	25·9	+1·2	—0·7	+ 1·9
	Mysore	83·9	65·9	74·9	18·1	31·1	+1·1	—0·2	+ 1·3
	Konkan	86·8	76·2	81·6	10·6	19·6	+0·3	+1·2	— 0·9
	Bombay Deccan	90·0	68·0	79·0	22·1	35·5	+2·6	+1·1	+ 1·5
	Hyderabad (North)	89·9	68·4	79·1	21·5	31·0	...	...	...
	Khandesh	92·6	66·2	79·4	26·4	37·9	+4·5	+1·6	+ 2·9
Central Provinces and Berar.	Berar	92·9	65·9	79·4	27·1	38·9	+2·7	—2·2	+ 4·9
	Central Provinces (West)	91·5	64·7	78·1	26·7	37·8	+1·2	—2·5	+ 3·7
	Do. do. (Central)	89·3	64·5	76·9	24·8	35·2	+1·4	—1·1	+ 2·5
	Do. do. (East)	88·1	67·8	78·0	20·3	30·2	+0·5	—0·8	+ 1·3
Bombay (North)	Gujarat	98·8	71·4	85·1	27·4	35·6	+3·2	+1·5	+ 1·7
	Kathiawar and Cutch	95·0	73·6	84·3	21·4	33·2	+1·9	+1·8	+ 0·1
	Sind	99·2	68·1	83·7	30·0	45·6	+3·1	+0·3	+ 2·8
	Baluchistan Hills	77·9	41·5	59·8	36·4	50·9	+2·3	+2·0	+ 0·3
Rajputana and Central India.	Central India	92·5	63·9	78·2	28·7	38·6	+3·4	—0·9	+ 4·3
	Rajputana (East)	96·2	68·1	82·2	28·2	38·0	+3·3	+3·9	— 0·6
	Do. (West)	98·7	69·6	84·1	29·1	41·5	+1·4	+1·3	+ 0·1
Madras	East Coast (North)	88·4	75·5	81·9	12·9	23·3	+0·7	+0·3	+ 0·4
	Hyderabad (South)	90·5	70·0	80·3	20·5	33·4	+1·4	—0·1	+ 1·5
	Madras (Central)	92·1	71·3	81·7	20·8	35·9	+1·2	+0·2	+ 1·0
	East Coast (Central)	90·9	75·2	83·1	15·7	27·1	+0·8	—0·8	+ 1·6
	Do. (South)	88·3	74·5	81·4	13·7	26·8	+0·5	+0·3	+ 0·2
	Madras (South)	90·8	75·0	82·8	15·9	26·3	+0·4	+0·2	+ 0·2

The data of the preceding table show that the highest mean maximum temperature was recorded during October over Sind (99°·2) and Gujarat (98°·8) while the highest mean temperature was registered over Gujarat and Kathiawar. The mean temperature was as usual uniform over the Indian plains, the means ranging from 74°·7 in the west submontane division of the United Provinces to 85°·1 in Gujarat. The mean daily range of temperature was generally less than usual over Burma and north-east India and generally greater than usual elsewhere.

In the following paragraphs is given a brief account of the more important changes of temperature during the month:—

During the first two days of the month rain was generally confined to the north-east of India and it was only in that area that there was any important depression of temperature. The following gives data for Assam and Bengal:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of 1st Oct.	2nd Oct.
	°	°
Assam	—0·4	—2·9
Bengal	—0·8	—1·1
Bihar	—5·3	—2·3
Chota Nagpur	—1·9	—1·1

Very high temperatures were recorded at this time at some stations in Rajputana and the Bombay Deccan of which the more important were as follows:—

Date.	Station.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°
1st Oct. 1905.	Ajmer	+6·6
	Bijapur	+7·0
	Poona	+4·3
	Ahmednagar	+4·5
2nd Oct. 1905.	Ajmer	+6·7
	Sholapur	+7·1
	Poona	+5·1
	Ahmednagar	+5·9

During the 3rd, 4th and 5th there was very little rain in any part of India and the mean temperature, except on the Sind and Kathiawar coasts and in part of north-east India, was generally above the normal. On the 6th fairly general and in places heavy rain set in over the southern half of the Peninsula and continued more or less steadily until the 15th. This rainfall reduced temperature in this region to below the normal, as is shown by the following

comparative data for the Madras districts for each alternate day from the 5th to the 15th :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	5th October.	7th October.	9th October.	11th October.	13th October.	15th October.
	°	°	°	°	°	°
Madras Coast . .	+0·1	—1·8	—2·1	—0·5	—3·5	—1·5
Madras Deccan . .	+1·4	+0·5	+1·6	+2·6	—1·2	—0·7
Mysore . . .	+3·1	+0·4	+1·3	+1·3	—3·7	—0·5
South India . . .	+1·4	—3·7	—4·6	—2·3	—5·7	—3·0

The effect of the rainfall was most marked in the day temperatures which were more than 8° below the normal at the following places on the following dates :—

DATE.	STATION.	MAXIMUM TEMPERATURE.		
		Actual, of date.	Normal, of date.	Departure from normal, of date.
		°	°	°
7TH OCTOBER 1905.	Tinnevelly . .	83·2	96·0	—12·8
	Madura . . .	84·3	93·7	—9·4
	Cuddalore . . .	80·1	89·5	—9·4
	Trichinopoly . .	84·1	93·4	—9·3
8TH „ „	Tinnevelly . .	84·2	95·8	—11·6
9TH „ „	Madura . . .	81·2	93·3	—12·1
	Cuddalore . . .	81·1	89·3	—8·2
11TH „ „	Tinnevelly . .	85·2	95·0	—9·8
12TH „ „	Tinnevelly . . .	85·2	94·7	—9·5
13TH „ „	Trichinopoly . .	79·1	91·9	—12·8
	Salem . . .	77·7	90·3	—12·6
	Nellore . . .	80·3	92·3	—12·0
	Cuddapah . . .	81·2	92·6	—11·4
	Cuddalore . . .	77·6	88·9	—11·3
	Coimbatore . .	78·4	88·9	—10·5
	Mysore . . .	74·0	84·4	—10·4
	Madura . . .	82·3	92·2	— 9·9
	Tinnevelly . .	85·2	94·4	— 9·2
	Bangalore . .	72·7	81·7	— 9·0
	Madras . . .	81·5	89·8	— 8·3
14TH „ „	Cuddapah . .	79·2	92·5	—13·3
	Nellore . . .	79·3	92·0	—12·7
	Kurnool . . .	79·2	91·5	—12·3
	Madras . . .	79·5	89·5	—10·0
15TH „ „	Trichinopoly . .	83·1	91·3	— 8·2

During these eleven days the mean temperature was high over the Bombay Presidency, as is shown by the following comparative data for each alternate day from the 5th to the 15th for the Bombay divisions :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	5th October.	7th October.	9th October.	11th October.	13th October.	15th October.
	°	°	°	°	°	°
Sind	—1·3	+3·1	+1·4	+1·6	—0·1	+3·0
Gujarat . .	+0·5	+3·0	+2·3	+1·3	+2·8	+4·0
West Coast . .	+3·1	+2·3	+1·9	+0·6	—0·5	+0·9
Bombay Deccan . .	+4·9	+3·2	+3·4	+2·8	+3·8	1·5

On the 11th and 12th disturbed weather with rain, hail and snow occurred over the Kashmir Himalayas and was followed by a fall of temperature over the North-west Frontier Province, the Punjab and Rajputana. This is shown below :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	11th October.	12th October.	13th October.	14th October.	15th October.
	°	°	°	°	°
N.-W. Frontier Province . .	+3·4	—0·2	—2·3	—2·3	—1·4
Punjab	+2·5	+0·1	—0·8	—0·9	—0·6
Rajputana	+4·1	+3·5	+2·1	+1·1	—0·8

Between the 16th and the 21st rain fell over the south and west of the Peninsula, Burma and parts of north-east India. The mean temperature was consequently unsteady and on some days lower than usual over those areas, but the most marked feature of the temperature conditions of this period was the excess prevailing over Sind, Gujarat, Rajputana and Central India. The following gives comparative data for these divisions for the above six days :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	16th October.	17th October.	18th October.	19th October.	20th October.	21st October
	°	°	°	°	°	°
Sind	+2·7	+1·6	—1·1	+0·5	+1·3	+2·7
Gujarat . .	+5·2	+3·4	+3·9	+3·0	+2·9	+2·8
Rajputana . . .	+1·8	+3·6	—0·4	+0·3	+0·6	+0·9
Central India . .	0	0	+1·8	+0·8	—0·2	—1·0

The day temperatures were remarkably high at Kurrachee, where a north to north-east wind prevailed, during this period. This is shown below:—

Date.	Station.	Maximum temperature.		
		Actual, of date.	Normal, of date.	Departure from normal, of date.
		°	°	°
16th October 1905	Kurrachee	104·4	92·2	+12·2
17th „	„	102·4	92·3	+10·1
18th „	„	101·9	92·3	+ 9·6
19th „	„	101·9	92·3	+ 9·6
20th „	„	102·4	92·3	+10·1
21st „	„	102·9	92·2	+10·7

Between the 22nd and the 27th a depression appeared over the Bay and passed north-eastward into Bengal where it occasioned a good deal of rain. Temperature was consequently reduced to below the normal over north-east India while at the same time northerly winds set in over the central parts of the country and apparently reduced temperature to below the normal over that area. The following gives data for the divisions in these two regions:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					
	22nd October.	23rd October.	24th October.	25th October.	26th October.	27th October.
	°	°	°	°	°	°
Burma	−1·4	−1·2	−0·8	0	+0·3	+0·7
Assam	+1·3	+1·9	−1·5	−2·8	−3·0	−1·9
Bengal	+2·0	+0·7	−0·2	+0·3	−0·3	+0·4
Orissa	+0·2	−3·3	−1·8	−1·2	+1·2	+1·0
Central India	−0·7	−0·4	0	+1·5	+3·2	+5·3
Central Provinces	−0·8	−0·8	−1·3	−1·0	−0·3	+1·3
Berar	+1·7	−1·7	−1·8	−1·7	−0·6	+1·6

On the 27th rain ceased practically all over the country and temperature rose fairly generally. In consequence the excess, which already existed in the north-west, was still further increased and was very large during the last week of the month. The following gives comparative data of mean temperature for all divisions of north-west India for each alternate day from the 21st to the 31st:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of					31st Octob
	21st October.	23rd October.	25th October.	27th October.	29th October.	
	°	°	°	°	°	°
United Provinces of Agra and Oudh.	−0·7	+0·8	+1·3	+2·3	+3·5	+2
Punjab	+0·7	+2·2	+2·6	+4·5	+3·5	+3
North-west Frontier Province	−0·3	+0·9	+2·2	+4·7	+0·9	+1
Baluchistan	+5·5	+6·0	+5·8	+1·7	−3·1	+2
Sind	+2·7	+3·3	+5·6	+7·1	+3·0	+1
Rajputana	+0·9	+3·5	+6·7	+9·5	+6·5	+5
Gujarat	+2·8	+2·3	+2·6	+3·3	+2·3	+1
Central India	−1·0	−0·4	+1·5	+5·3	+4·8	+3

The excess was principally due to high day temperatures which were more than 9° above the normal at the following places on the following dates:—

Date.	Station.	Maximum temperature.		
		Actual, of date.	Normal, of date.	Departure from normal, of date
		°	°	°
21st October 1905	Kurrachee	102·9	92·2	+10·7
22nd „ „	Do.	101·9	92·1	+9·8
24th „ „	Do.	102·9	91·9	+11·0
25th „ „	Jacobabad	105·4	95·4	+10·0
„ „ „	Hyderabad	105·1	96·0	+ 9·1
26th „ „	Jacobabad	105·4	95·0	+10·4
„ „ „	Hyderabad	105·6	95·6	+10·0
27th „ „	Hyderabad	105·6	95·3	+10·3
„ „ „	Jacobabad	104·9	94·6	+10·3

In Rajputana, however, on some occasions the nigh were excessively hot and on the following dates the nigh temperature was more than 10° in excess of the average:—

Date.	Station.	Minimum temperature.		
		Actual, of date.	Normal, of date.	Departu from normal, of date
		°	°	°
26th October 1905	Ajmer	73·6	58·3	+15·3
	Sambhar	71·0	58·6	+12·4
27th October 1905	Ajmer	77·6	57·8	+19·8
	Sambhar	70·0	58·3	+11·7
28th October 1905	Ajmer	72·1	57·3	+14·8
	Sambhar	69·0	58·0	+11·0
29th October 1905	Ajmer	71·1	55·3	+14·3
31st October 1905	Do.	67·1	55·8	+11·3

Winds.

The winds were, on the whole, somewhat stronger than usual over the east of the Bay, but the mean directions varied irregularly from the average. Thus at Port Blair the direction was more westerly and at Diamond Island more easterly than the normal while at Akyab the mean direction was north-easterly instead of east-south-easterly. This is shown below :—

Station.	Mean wind direction.	
	Actual, October 1905.	Normal, October.
	°	°
Port Blair	S 48 W	S 1 W
Diamond Island	S 81 E	S 57 E
Akyab	N 43 E	S 66 E

In Deltaic Bengal the mean wind direction was much more westerly and at False Point more northerly than usual. In some places the velocity exceeded the average but the steadiness was, as usual in October, very low. The following gives data :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	October Actual, 1905.	Normal, October.	Actual percentage, October 1905.	Normal percentage, October.	Departure from normal, October 1905.	Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	°	°						
Chittagong	N 33 W	N 12 W	16	13	+3	80	67	+13
Calcutta	N 68 W	N 18 W	16	11	+5	60	67	− 7
Saugor Island	N 51 W	N 9 W	16	14	+2	201	178	+23
False Point	N 25 E	N 51 E	21	24	−3	141	144	− 3

In the Gangetic Plain the mean wind was west-south-westerly instead of north-westerly and both the steadiness and velocity were below the average.

In the upper Sub-Himalayas the mean winds were unusually westerly and the steadiness, except in the case of Roorkee, exceeded the average. The following gives data :—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, October 1905.	Normal, October.	Actual percentage, October 1905	Normal percentage, October.	Departure from normal, October 1905.
	°	°			
Dehra Dun	S 65 W	N 42 W	40	19	+21
Roorkee	N 89 W	S 6 E	5	7	− 2
Lahore	N 68 W	N 9 W	32	11	+21
Ludhiana	N 69 W	N 41 W	58	22	+36

At the stations in the lower portion of the Indus Valley the mean wind direction was more westerly than usual while at Peshawar the direction was more northerly than the average. In east Rajputana the wind's direction was slightly more westerly than the average and the steadiness much greater than usual while in Gujarat the direction was nearly southerly instead of the normal east-north-east. This is shown below :—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, October 1905.	Normal, October.	Actual percentage, October 1905.	Normal percentage, October.	Departure from normal, October 1905.
	°	°			
Peshawar	N 23 E	N 54 E	16	27	−11
Jacobabad	S 44 W	S 17 E	34	7	+27
Kurrachee	S 76 W	S 69 W	51	64	−13
Jaipur	N 38 W	N 27 W	68	38	+30
Deesa	S 18 E	N 78 E	28	12	+16

The following gives data of the mean movement and steadiness of the wind over northern India, Burma and the Bay Islands :—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, October 1905.	Normal percentage, October.	Departure from normal, October 1905.	Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
Bay Islands	27	26	+ 1	183	151	+32
Burma	14	19	− 5	116	103	+13
Bengal	16	13	+ 3	114	104	+10
Chota Nagpur	37	24	+13	106	125	−19

PROVINCE OR DIVISION.	MEAN STEADINESS. Actual percentage, October 1905.	Normal percentage, October.	Departure from normal, October 1905.	MEAN WIND VELOCITY IN MILES PER DIEM. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
Orissa	21	24	— 3	141	144	— 3
United Provinces of Agra and Oudh.	19	15	+ 4	36	45	— 9
Punjab	45	17	+28	25	32	— 7
North-west Frontier Province.	16	27	-11	13	55	—42
Rajputana	68	38	+30	68	74	— 6
Sind	43	36	+ 7	121	138	—17
Gujarat	28	12	+16	142	158	—16

The preceding data show that on the whole the steadiness of the winds was greater than usual but that the velocity was low.

Over the Deccan the mean wind direction varied between north-north-east and east-north-east generally, but at Belgaum there was a south-east wind on the mean of the month. On the whole, there was more easting than usual in the wind's direction in this region and the velocity was generally lower than the normal. The following gives data for the stations:—

STATION.	MEAN WIND DIRECTION. Actual, October 1905.	Normal, October.	MEAN WIND VELOCITY IN MILES PER DIEM. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	°	°			
Belgaum	S 40 E	N 51 E	194	230	—36
Sholapur	N 84 E	N 57 E	224	197	+27
Akola	N 40 E	N 18 E	70	84	—14
Buldana	N 44 E	N 24 E	110	125	—15
Khandwa	N 27 E	N 24 E	?	74	
Nagpur	N 41 E	N 39 E	86	94	— 8
Hyderabad (Dn.)	N 65 E	S 81 E	68	94	—26

Along the west coast increased westing was recorded in the wind's direction—more so at Bombay than at Karwar. The wind was lighter and less steady than usual at Bombay and stronger and more steady at Karwar. This is shown below:—

STATION.	MEAN WIND DIRECTION. Actual, October 1905.	Normal, October.	MEAN STEADINESS. Actual percentage, October 1905.	Normal percentage, October.	Departure from normal, October 1905.	MEAN WIND VELOCITY IN MILES PER DIEM. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	°	°						
Bombay	N 25 W	N 9 E	23	32	-- 9	182	218	—36
Karwar	N 79 W	N 75 W	74	66	+ 8	107	60	+47

In south India the mean wind directions generally varied between east-north-east and east-south-east while the velocity and steadiness varied irregularly from the average. This is shown below:—

STATION.	MEAN WIND DIRECTION. Actual, October 1905.	Normal, October.	MEAN STEADINESS. Actual percentage, October 1905.	Normal percentage, October.	Departure from normal, October 1905.	MEAN WIND VELOCITY IN MILES PER DIEM. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	°	°						
Salem	S 60 W	S 51 W	14	26	—12	70	60	+10
Chitaldroog	N 66 E	N 39 E	26	15	+11	129	134	— 5
Bangalore	N 34 E	N	11	8	+ 3	150	113	+37
Hassan	S 76 E	N 48 E	21	42	—21	60	60	0
Mysore	S 73 E	N 63 E	13	12	+ 1	179	175	+ 4
Madras	N 51 E	N 54 E	21	20	+ 1	110	115	— 5
Bellary	N 62 E	N 40 E	26	13	+13	95	103	— 8
Waltair	N 89 E	N 82 E	45	10	+35	96	—	—

The following gives comparative data of the mean air movement and steadiness for the Peninsular divisions:—

PROVINCE OR DIVISION.	MEAN STEADINESS. Actual percentage, October 1905.	Normal percentage, October.	Departure from normal, October 1905.	MEAN WIND VELOCITY IN MILES PER DIEM. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
Central Provinces	63	50	+13	86	94	— 8
Berar	46	40	+ 6	90	105	—15
Bombay Deccan	25	21	+ 4	209	214	— 5
Madras Deccan	22	23	— 1	82	99	—17
West Coast	49	49	0	145	139	+ 6
Mysore	18	19	— 1	130	121	+ 9
Madras Coast	21	20	+ 1	110	115	— 5
South India	14	26	—12	70	60	+10

The above shows very irregular departures from the normal conditions.

At the Himalayan hill stations the wind directions were very irregular, but the steadiness generally exceeded the average. At Mount Abu the mean wind direction was west-south-westerly and the steadiness very low while at Pachmarhi and Chikalda, as at the stations in the Deccan, the mean direction was north-easterly.

At Aden and Perim the mean wind direction was more southerly than usual and the velocity was low. This is shown below:—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual, October 1905.	Normal, October.	Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	o	o			
Aden	S 53 E	S 78 E	180	307	—127
Perim	S 25 E	S 85 E	404	444	—40

At Mauritius the mean wind direction was exactly normal, but both at Zanzibar and the Seychelles the wind was more easterly than usual. The velocity was below the average at Mauritius and about normal at the other stations. The following gives data:—

Station.	Mean wind direction.		Mean wind velocity in miles per diem.		
	Actual, October 1905.	Normal, October.	Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	o	o			
Mauritius	S 78 E	S 78 E	223	264	—41
Zanzibar	S 65 E	S 6 E	114	120	—6
Seychelles	S 45 E	S 39 E	202	187	+15

The winds, as is usual in October, were variable in direction and the principal features were the increased westing in the wind's direction along the west coast and over a large part of northern India and the increased easting over the Deccan. The South-east Trades were also more easterly than the average at Zanzibar and the Seychelles.

Humidity and Cloud.

The absolute humidity departures from normal show that, on the mean of the month, there was a large deficiency of moisture over the central parts of the country and a slight deficiency in surrounding regions while there was an excess over Burma, north-east India, the south and west coasts of the Peninsula and the greater part of north-west India. The principal departures, exceeding ·050″, were as follows:—

Station.	Positive departures from normal of absolute humidity.	Station.	Negative departures from normal of absolute humidity.
	″		″
Lahore	+·114	Malegaon	—·142
Hyderabad (Sind)	+·106	Nowgong	—·137
Cuttack	+·094	Saugor	—·114
Chanda	+·093	Cawnpore	—·110
Surat	+·088	Agra	—·106
Thayetmyo	+·083	Neemuch	—·102
Narayanganj	+·072	Seoni	—·101
Veraval	+·072	Jaipur	—·087
Bikaner	+·067	Ajmer	—·084

Station.	Positive departures from normal of absolute humidity.	Station.	Negative departures from normal of absolute humidity.
	″		″
Darbhanga	+·059	Ahmednagar	—·082
Burdwan	+·059	Rajkot	—·075
Madura	+·057	Montgomery	—·071
Toungoo	+·054	Allahabad	—·071
Calcutta	+·054	Amraoti	—·070
Jhansi	+·051	Indore	—·069
		Lucknow	—·069
		Ambala	—·064
		Waltair	—·064
		Kurrachee	—·061

The departures of mean relative humidity from the normal exhibited a similar distribution. The mean relative humidity was in considerable to large defect over Rajputana Central India and parts of the United Provinces, the Central Provinces, the Deccan, Kathiawar and Sind. At

the following stations the departures from normal amounted to —10 or more :—

STATION.	RELATIVE HUMIDITY. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	%	%	
Malegaon	43	63	—20
Saugor	43	60	—17
Rajkot	51	67	- 16
Jaipur	35	50	- 15
Agra	42	57	—15
Ahmednagar	55	68	- 13
Cawnpore	54	66	- 12
Indore	51	62	—11
Seoni	55	66	—11
Kurrachee	60	70	—10

On the other hand, the mean relative humidity was in excess over Burma, Assam, Lower Bengal, Orissa, the east of the Central Provinces, the Madras coast, the south-west and west of the Peninsula, the western desert and a considerable part of the Punjab. The excess departures were generally smaller than those of deficiency and exceeded 5 only at the following stations :—

STATION.	RELATIVE HUMIDITY. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	%	%	
Lahore	74	57	+17
Chanda	84	72	+12
Hyderabad (Sind)	60	53	+ 7
Bikaner	53	47	+ 6
Madras	89	83	+ 6
Cuttack	85	79	+ 6

The mean relative humidity of the month was less than 50% and more than 90% at the following stations which hence outline the regions of least and greatest dampness on the mean of the month :—

STATION.	Relative humidity exceeding 90%.	STATION.	Relati humid less th 50%
Monywa	98	Deesa	4
Sibsagar	96	Pachpadra	4
Bassein	94	Khushab	4
Akyab	93	Delhi	4
Toungoo	93	Sambhar	4
Bhamo	92	Malegaon	4
Dibrugarh	92	Saugor	4
Sirajganj	92	Agra	4
Silchar	91	Aurangabad	4
		Ajmer	4
		Montgomery	3
		Neemuch	3
		Jaipur	3
		Jodhpur	3
		Kotah	3

The driest areas were hence Rajputana, and parts of t Punjab and Central India and within these areas t following low humidities were recorded :—

STATION.	Date.	Hour.	Lowest humidit recorded during Octobe 1905.
			%
Kotah	26th	8 hours.	15
Neemuch	24th	„	16
Jodhpur	19th	„	17
Kurrachee	18th	„	17
Jodhpur	17th	„	18
Do.	20th	„	20
Do.	21st	„	20
Do.	22nd	„	20
Do.	24th	„	21
Kurrachee	19th	„	21
Do.	25th	„	21
Kotah	25th	„	21
Jodhpur	16th	„	22
Do.	25th	„	22

The mean relative humidity of the month exceeded th normal in Baluchistan, but was less than usual at the h

stations in India. The departures from normal amounted to 5 or more at the following places :—

Hill Station.	Relative humidity. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	%	%	
Chaman	40	31	+ 9
Ranikhet	54	67	−13
Leh	41	53	−12
Mount Abu	36	44	− 8
Darjeeling	83	89	− 6
Simla	44	49	− 5
Chakrata	55	60	− 5

At Aden the mean daily absolute humidity was in excess and the mean daily relative humidity exactly normal while at Perim both were below the average. This is shown below :—

Station.	Absolute humidity. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.	Relative humidity. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	"	"	"	%	%	
Aden	.789	·762	+ ·027	69	69	0
Perim	·822	·845	− ·023	68	71	−3

In the South-east Trades region the mean daily absolute humidity exceeded the average while the mean relative humidity varied irregularly from the normal. The following gives data :—

Station.	Absolute humidity. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.	Relative humidity. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
	"	"	"	%	%	
Seychelles	·826	·794	+ ·032	79	81	−2
Mauritius	·580	·552	+ ·028	72	70	+2

Summarising the mean humidity conditions of the month the data show :—

(1) That both the absolute and relative humidities of the month at 8 A.M. were in considerable to large defect of the normal over the central parts of India.

(2) That both were in excess over Burma, part of north-east India, the coasts of the Peninsula, the western desert and a large part of the Punjab.

(3) That the driest area was Rajputana where the relative humidity was as low as 15 at Kotah on the 26th October.

(4) That at the Himalayan hill stations the mean 8 A.M. relative humidity was below the normal.

(5) That in the Gulf of Aden and in the South-east Trades region the departures from normal were irregular.

The following table gives the mean comparative data of the absolute and relative humidities for the month. :—

Meteorological Province.	Mean absolute humidity. Average actual, October 1905.	Departure from normal, October 1905.	Mean relative humidity. Average actual, October 1905.	Departure from normal, October 1905.
	"	"	%	
Burma Coast and Bay Islands	·899	—·004	84	− 3
Bengal and Orissa	·846	+ ·007	82	− 1
Gangetic Plain and Chota Nagpur	·505	—·083	59	− 8
Upper Sub-Himalayas	·448	—·014	58	− 2
Indus Valley and North-West Rajputana.	·483	—·014	49	− 6
East Rajputana, Central India and Gujarat.	·355	—·070	39	−10
Deccan	·512	—·054	57	− 7
West Coast	·858	+ ·017	82	− 2
South India	·692	+ ·003	75	0

The mean 8 A.M. cloud amount exceeded the normal over Assam, East Bengal, Upper Burma, the coast of the Gulf of Martaban, the Bombay coast, north Bombay and parts of Rajputana, Central India and the Central Provinces. Within these areas the excess amounted to more than 1·0 at the following stations :—

Station.	Mean cloud amount. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
Kurrachee	3·7	1·2	+2·5
Sutna	3·9	1·6	+2·3
Bhavnagar Para	3·5	1·5	+2·0
Neemuch	2·7	1·1	+1·6
Bhamo	5·7	4·1	+1·6
Mandalay	5·7	4·1	+1·6

STATION.	MEAN CLOUD AMOUNT. Actual, October, 1905.	Normal October.	Departure from normal, October 1905.
Moulmein	6·5	5·0	+1·5
Karwar	5·5	4·0	+1·5
Mormugao	5·3	4·0	+1·3
Bombay	4·7	3·4	+1·3
Indore	2·6	1·4	+1·2
Calcutta	4·6	3·4	+1·2
Dhubri	5·0	3·8	+1·2
Sibsagar	8·4	7·2	+1.2
Goa	5·1	4·0	+1·1
Veraval	3·4	2·3	+1·1

In practically all other parts of the Indian region the sky, on the mean of the month, was clearer than usual, the departure from normal amounting to 1·5 or more at the following considerable number of stations :—

STATION.	MEAN CLOUD AMOUNT. Actual, October 1905.	Normal, October.	Departure from normal October 1905.
Gopalpur	2·1	4·5	—2·4
Akyab	3·6	5·9	—2·3
Tavoy	2·7	4·8	—2·1
Bellary	3·8	5·7	—1·9
Trichinopoly	4·5	6·3	—1·8
Purnea	0·8	2·6	—1·8
Hazaribagh	1·8	3·5	—1·7
Gaya	1·4	3·0	—1·6
Darbhanga	0·4	2·0	—1·6
Chaibassa	1·7	3·2	—1·5
Cocanada	3·3	4·8	—1·5
Sholapur	2·9	4·4	—1·5

The deficiency in the cloud amount was greatest around the northern half of the Bay where the weather, during October 1905, was less disturbed than is ordinarily the case.

At most of the hill stations the sky at 8 A.M. was slightly clearer of cloud than usual, but at Lashio and Mount Abu there was some excess.

The mean 8 A.M. cloud amount of the month was less tha 0·5 and more than 6·0 at the following stations whic consequently outline the regions of least and greates cloudiness on the mean of the month :—

STATION.	Mean cloud amount exceeding 6·0.	STATION.	Mean cloud amount les than 0·5.
Sibsagar	8·4	Darbhanga	0·4
Yamethin	7·2	Bareilly	0·4
Hassan	7·2	D. I. Khan	0·4
Mysore	6·7	Khushab	0·4
Myitkyina	6·7	Jacobabad	0·4
Silchar	6·6	Arrah	0·3
Trivandrum	6·5	Muzzaffarpur	0·3
Moulmein	6·5	Sirsa	0·3
Negapatam	6·3	Ludhiana	0·3
Rangoon	6·3	Ambala	0·3
Bassein	6·2	Montgomery	0·3
		Patiala	0·2
		Sialkot	0·2
		Meerut	0·1
		Multan	0·1
		Pachpadra	0·1
		Dehra Dun	0
		Roorkee	0
		Delhi	0

At Aden and Perim the mean daily cloud amount was considerably less than usual, as is shown below :—

STATION.	MEAN CLOUD AMOUNT. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
Aden	0·4	1·7	—1·3
Perim	0·4	1·2	—0·8

In the South-east Trades region also the sky was clearer than usual though at Mauritius the departure was small. The following gives data :—

STATION.	MEAN CLOUD AMOUNT. Actual, October 1905.	Normal, October.	Departure from normal, October 1905.
Seychelles	5·2	6·2	—1·0
Mauritius	5·4	5·7	—0·3

Summarising the above data the observations show that:—

(1) The mean 8 A.M. cloud amount was in excess of the normal along the Bombay coast and over a large part of north-western and central India. It was also in excess over a large part of Burma and of north-east India.

(2) The sky was clearer than usual in practically all other parts of the Indian region.

(3) The deficiency in the cloud amount was greatest around the north of the Bay where the weather in October 1905, was less disturbed than usual.

The following table gives mean comparative data of the cloud amount for the nine meteorological divisions:—

Meteorological Province.	Mean cloud amount.	
	Average actual, October 1905.	Departure from normal, October 1905.
Burma Coast and Bay Islands	5·9	+0·2
Bengal and Orissa	5·1	+0·2
Gangetic Plain and Chota Nagpur	2·2	—1·2
Upper Sub-Himalayas	0·5	—0·6
Indus Valley and North-west Rajputana	1·5	+0·6
East Rajputana, Central India and Gujarat	1·4	—0·3
Deccan	3·1	—0·9
West Coast	3·2	—0·6
South India	5·4	—0·9

Rainfall.

The rainfall of the month of October is ordinarily small over upper India including the west of the United Provinces, the Punjab, the North-west Frontier Province, Rajputana and Sind, but moderate to heavy rain is usually received over Burma, Assam, Bengal and the greater part of the Peninsula either from storms which have formed over the Bay or from the retreating monsoon current. The total rainfall of the month under review was in excess of the normal over parts of Burma, Assam, Bengal and the southern half of the Peninsula and was in defect elsewhere. The actual distribution of rain, as shown by the meteorological observatories is given on Pl. VII. There was a little rain over the north-west Himalayas and at the stations at the foot of the hills, but with these exceptions there was no rain throughout the month to the north or west of a line running from a little to the north of Bombay to Raipur and thence northward to Lucknow. To the south and east of this line rain was general and the total fall amounted to 22·32″ at Cochin, to 24·07″ at Cuddalore, to 18·56″ at False Point, to 21·56″ at Myitkyina and to 16·18″ at Mergui.

The chief periods of rain were:—

The 5th to the 15th when rain fell over the south of the Peninsula.

The 9th and 10th when showers occurred over parts of Burma and of north-east India.

The 16th to the 21st when there was a good deal of scattered rain over the Peninsula, Burma and north-east India and

The 22nd to the 26th when there was a good deal of rain over Burma and north-east India from a storm in the Bay.

The following table gives comparative rainfall data for the 57 meteorological divisions of India.

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, October, 1905.	Average *normal*, October,	Average actual, October, 1905.	Average *normal*, October,	Departure from normal October, 1905.
				Inches.	Inches.	Inches.
Burma	Tenasserim	13·2	12·2	11·03	9·95	+1·08
	Lower Burma (Deltaic)	10·4	9·9	6·57	6·26	+0·31
	Central do.	6·1	7·5	3·71	4·60	—0·89
	Upper do.	7·7	6·1	7·04	4·44	+2·60
	Arakan	9·8	9·0	6·11	8·76	—2·65
Bengal and Assam	Eastern Bengal	9·0	5·9	9·79	6·02	+3·77
	Assam (Surma)	12·9	6·8	19·12	6·57	+12·55
	Do. (Hills)	11·8	8·4	15·37	7·52	+7·85
	Do. (Brahmaputra)	5·0	6·0	3·04	4·57	—1·53
	Deltaic Bengal	6·7	5·3	6·45	4·51	+1·94
	Central do.	3·0	4·1	2·35	3·48	—1·13
	North do.	3·6	4·4	3·36	4·68	—1·32
	Bengal Hills	3·4	5·0	6·40	4·00	+2·40
	Orissa	4·2	6·1	2·92	5·68	—2·76
	Chota Nagpur	1·4	3·7	0·83	2·81	—1·98
	Bihar (South)	0·5	2·8	0·17	2·50	—2·33
	Do. (North)	1·0	2·7	0·67	2·69	—2·02

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, October, 1905.	Average normal, October.	Average actual, October, 1905.	Average normal, October.	Departure from normal, October, 1905.
				Inches.	Inches.	Inches.
United Provinces of Agra and Oudh.	United Provinces (East)	0·5	2·1	0·29	2·39	—2·10
	Oudh (South)	0·1	1·5	0·09	1·65	—1·56
	Do. (North)	0	1·5	0	1·78	—1·78
	United Provinces (Central)	0·1	1·1	0·03	1·06	—1·03
	Do. (West)	0	0·5	0·01	0·38	—0·37
	Do. (East Submontane,)	0·6	2·1	0·36	2·94	—2·58
	Do. (West Do.)	0	0·7	0	0·75	—0·75
	Do. (Hills)	0	1·3	0	1·36	—1·36
Punjab	Punjab (South-East)	0	0·4	0	0·22	—0·22
	Do. (South)	0·1	0·3	0·03	0·17	—0·14
	Do. (Central)	0·4	0·5	0·14	0·27	—0·13
	Do. (Submontane)	0·2	0·6	0·06	0·37	—0·31
	Do. (Hills)	0·1	1·1	0·02	0·74	—0·72
	Do. (West)	0·9	0·2	0·02	0·07	—0·05
North-west Frontier Province.	North-west Frontier Province	0·5	0·7	0·15	0·30	—0·15
Bombay and Malabar Coast Districts (Madras).	Malabar	14·5	11·7	14·19	9·34	+4·85
	Travancore	14·2	...	13·58	...	...
	Madras (South Central)	10·3	8·6	6·85	6·24	+0·61
	Coorg	12·8	...	9·01	...	...
	Mysore	8·9	8·1	5·51	5·50	+0·01
	Konkan	4·8	6·1	3·66	4·49	—0·83
	Bombay Deccan	5·8	6·3	3·49	4·42	—0·93
	Hyderabad (North)	...	...	...	...	...
	Khandesh	0·9	3·0	0·49	1·92	—1·43
Central Provinces and Berar.	Berar	0·5	2·5	0·27	1·85	—1·58
	Central Provinces (West)	0·2	2·5	0·06	1·78	—1·72
	Do. do. (Central)	0·5	2·3	0·21	1·71	—1·50
	Do. do. (East)	0·8	2·8	0·52	2·05	—1·54
Bombay (North).	Gujarat	0·2	1·4	0·10	1·04	—0·94
	Kathiawar and Cutch	0·1	0·7	0·01	0·58	—0·57
	Sind	0	0	0	0·02	—0·02
	Baluchistan Hills	0·1	0·2	0·02	0·06	—0·04
Rajputana and Central India.	Central India (East)	0	1·2	0	0·98	—0·98
	Rajputana (East), Central India (West)	0	0·3	0	0·20	—0·20
	Rajputana (West)	0	0·1	0	0·07	—0·07
Madras	East Coast (North)	4·0	7·2	2·50	7·02	—4·52
	Hyderabad (South)	...	...	...	...	...
	Madras (Central)	7·1	6·3	4·86	4·86	0
	East Coast (Central)	9·1	8·2	12·81	9·02	+3·79
	East Coast (South)	11·3	9·4	13·19	9·50	+3·69
	Madras (South)	9·6	8·6	8·18	6·80	+1·38

The preceding data show that the total rainfall of the month was in excess of the normal in 13 divisions, normal in two divisions and in defect in 39 divisions. The excess amounted to more than 40% in the divisions for which comparative data are given below:—

Division.	Rainfall.			
	Average actual, October 1905.	Average normal, October.	Departure from normal, October 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Upper Burma	7·04	4·44	+2·60	+59
Eastern Bengal	9·79	6·02	+3·77	+63

Division.	Rainfall.			
	Average actual, October 1905.	Average normal, October.	Departure from normal, October 1905.	Percentage departure from normal.
	Inches.	Inches	Inches.	
Assam Surma	19·12	6·57	+12·55	+191
Assam Hills	15·37	7·52	+7·85	+104
Deltaic Bengal	6·45	4·51	+1·94	+43
Bengal Hills	6·40	4·00	+2·40	+60
Malabar	14·19	9·34	+4·85	+52
East Coast Central	12·81	9·02	+3·79	+42

The deficiency was greatest and amounted to over 90% in the following divisions:—

Division.	Rainfall. Average actual, October 1905.	Average normal, October.	Departure from normal, October 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
South Bihar	0·17	2·50	−2·33	−93
South Oudh	0·09	1·65	−1·56	−95
North „	0	1·78	−1·78	−100
United Provinces, Central	0·03	1·06	−1·03	−97
„ „ West	0·01	0·38	−0·37	−97
„ „ „ Submontane	0	0·75	−0·75	−100
„ „ Hills	0	1·36	−1·36	−100
South-east Punjab	0	0·22	−0·22	−100
Punjab Hills	0·02	0·74	−0·72	−97
Central Provinces, West	0·06	1·78	−1·72	−97
Kathiawar and Cutch	0·01	0·58	−0·57	−98
Sind	0	0·02	−0·02	−100
Central India, East	0	0·98	−0·98	−100
Rajputana, East, Central India, West. West Rajputana	0	0·20	−0·20	−100
	0	0·07	−0·07	−100

The departure of the general rainfall of the whole country (excluding the hill divisions) from normal, as determined from the fifth figure column of the table on pages 299 and 300 was—0·16.

In Tenasserim showers occurred throughout the month, but the total rainfall was about the normal. In Lower, Central and Upper Burma there were showers during the first ten days of the month and general rain between the 18th and the 26th from the storm which formed over the Bay during that interval. The heaviest rain was in Upper Burma where the actual rainfall was over 50% in excess of the average. Falls exceeding 4″ in 24 hours were recorded at the following places during the month:—

District.	Station.	Date	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Upper Chindwin	Kindat	17th October 1905	4·03
Myingyan	Taungtha	19th „ „	4·39
Sagaing	Tada-u	20th „ „	6·69
Kyaukse	Paleik	„ „ „	6·25
Sagaing	Sagaing	„ „ „	6·25
Mandalay	Madaya	„ „ „	5·57
Mandalay	Amarapura	„ „ „	4·33
Myingyan	Natogyi	20th October 1905	4·24
Sandoway	Taungup	„ „ „	4·18
Upper Chindwin	Maing King	22nd „ „	5·50
Pakokku	Minza	24th „ „	5·15
Ruby Mines	Tagaung	25th „ „	5·40
Katha	Katha	„ „ „	5·18
Myitkyina	Myitkyina	„ „ „	4·53
Katha	Mohuyin	27th „ „	4·26
Mergui	Maliwun	28th „ „	6·87
Amherst	Amherst	30th „ „	5·10
Do.	Moulmein	„ „ „	4·10
Toungoo	Thaudaung	31st „ „	4·25

In the Surma Valley of Assam there were two bursts of rain, *viz.*, between the 1st and the 4th and the 17th and 27th. The actual fall of the month was nearly three times as heavy as usual and the following amounts exceeding 7″ in 24 hours were recorded during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Sylhet	Sunamganj	2nd October 1905	7·77
Do.	Lala Khal	„ „ „	7·52
Do.	Sylhet	24th „ „	8·32
Do.	Maulvi Bazar	„ „ „	7·54
Do.	Lala Khal	„ „ „	7·23

In the Assam Valley there were showers between the 1st and 3rd, the 9th and 11th, and 23rd and 27th. There was much less rain than in the Surma valley and the total fall was less than usual. The only heavy falls exceeding 3″ in 24 hours were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Goalpara	Kachugaon	1st October 1905	5·83
Garo Hills	Tura	„ „ „	4·55
Goalpara	Marnai	„ „ „	4·20
Do	Dhubri	„ „ „	3·64
Lakhimpur	Pathalipam	2nd „ „	3·07
Nowgong	Lumding	24th „ „	6·05
Sibsagar	Dimapur	25th „ „	6·85

On the Assam Hills the total rainfall of the month was twice as heavy as usual; very heavy falls took place on the first three and last four days of the month but at other times the weather was fine with a few passing showers. At Cherra Poonjee the total fall for the month was as much as 50·90″ the normal fall being only 13·97″. The following falls exceeding 10″ in 24 hours were recorded at the hill stations during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Khasi and Jaintia Hills	Wahjain . .	1st October 1905	13·25
Do.	Cherra Poonjee, Mr Shadwell's House.	,, ,, ,,	11·06
Do.	Cherra Poonjee Police Station.	,, ,, ,,	10·40
Do.	Cherra Poonjee, Mr. Shadwell's House.	2nd ,, ,,	10·95
Do.	Cherra Poonjee Police Station.	,, ,, ,,	10·30
Do.	Cherra Poonjee Welsh Mission House.	,, ,, ,,	10·30
Do.	Cherra Poonjee, Mr. Shadwell's House.	25th ,, ,,	15·52
Do.	Cherra Poonjee Police Station.	,, ,, ,,	15·00
Do.	Cherra Poonjee Welsh Mission House.	,, ,, ,,	14·47
Do.	Cherra Poonjee Roman Catholic Mission House.	,, ,, ,,	14·34
Do.	Jowai . . .	,, ,, ,,	12·09

East Bengal, Deltaic Bengal, and the Bengal Hills received heavier rain than usual during the month but the divisions of central and north Bengal, Orissa, Chota Nagpur, and Bihar had much less than the average. In the districts included in South Bihar the average actual rainfall of the month was only 0·17″ or 7 % of the normal. There were three periods of rain over Bengal, *viz.*, the 1st to the 4th, the 9th to 11th and the 17th to the 26th and on the 1st, 2nd, 24th and 26th the amounts received were heavy. The following are the falls which exceeded 5″ in 24 hours during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Darjeeling	Darjeeling . .	1st Oct. 1905 .	6·15
Darjeeling	Mongpoo . .	,, ,, .	6·11
Darjeeling	Kurseong . .	,, ,, .	5·04
Chittagong	Mirsarai . .	3rd ,, .	5·04
Khulna	Kaliganj . .	25th ,, .	6·00
Khulna	Nakipur . .	,, ,, .	5·08
Tippera	Comilla . . .	26th ,, .	11·90
Backergunge	Patuakhali . .	,, ,, .	7·09
Tippera	Laksam . .	,, ,, .	5·35

Except over the east and east submontane divisions the United Provinces received little or no rain during the month of October. The only showers reported were received on the 1st and the only falls exceeding 1″ in 24 hours were as follows:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Mirzapur	Chakia . . .	1st Oct. 1905 .	1·60
Azamgarh	Mahul . . .	,, ,, .	1·55
Cawnpore	Akbarpur . .	,, ,, .	1·36
Ghazipur	Muhammadabad .	,, ,, .	1·17
Ghazipur	Ghazipur . .	,, ,, .	1·14

In the Punjab light showers occurred between the 11th and 13th, but the weather was fine at other times and the total rainfall of the month was insignificant throughout the province. The North-west Frontier Province received rain at the same time as the Punjab. The showers were slightly more general and heavier than in the Punjab but the total fall was only half the average. Baluchistan and Kashmir received trifling showers also during the disturbed period between the 10th and the 13th while Rajputana and Central India received no rain throughout the month.

The Central Provinces received showers on the 1st and 2nd, but except in the eastern division the total amount for the month was quite unimportant.

Over the Konkan, Karnatak and south Deccan divisions of the Bombay Presidency light scattered showers were received between the 1st and the 4th and a fairly general, moderate burst of rain between the 13th and the 22nd. The total fall over these divisions was nearly normal and amounts exceeding 3″ in 24 hours were recorded at the following places during the month:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Satara	Kared . . .	16th Oct. 1905.	3·34
Konkan	Mandangad . .	18th ,, .	3·90
North Kanara	Karwar . . .	19th ,, .	3·88
North Kanara	Kumta . . .	,, ,, .	3·07
Satara	Malcolmpeth . .	21st ,, .	5·08

In the north Deccan the fall diminished considerably and was only about one-fourth of the normal while in Gujarat, Kathiawar and Sind there was either no rain or only

a few insignificant showers about the middle of the month :—

In Mysore fairly general daily rain occurred between the 1st and the 19th but after the latter date the fall abruptly ceased. The total fall of the month was normal and amounts of over 3″ in 24 hours were recorded at the following places on the following dates during the month :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Bangalore . .	Bangalore . . .	3rd October 1905	3·04
Hassan . . .	Belure . . .	13th „	3·69
Do. . . .	Arsikere . . .	15th „	4·06
Kadur . . .	Chikmagalur . .	„ „	3·55
Hassan . . .	Hassan . . .	„ „	3·33
Shimoga . . .	Shimoga . . .	„ „	3·16
Chitaldroog . .	Dawangere . .	16th „	4·70
Do. . . .	Holal Kere . . .	„ „	4·00
Do. . . .	Hari Har . . .	„ „	3·19

The greater part of the Madras Presidency received normal or heavier rain than usual The north division of the east coast was the only division in which the fall was deficient. In this division there were three showery periods, *viz.*, between the 1st and the 3rd, the 10th and the 14th and the 20th to the 24th. In all the remaining divisions there was more or less steady daily rain from the 5th to the 20th or 21st when the rainfall abruptly ceased. In the central division of Madras the month's rainfall was exactly normal while in the remaining divisions it varied from 10 to 52% in excess of the average. The heaviest falls exceeding 6·50″ in 24 hours were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date
			Inches.
Nilgiris . . .	Kotagiri . . .	5th October 1905	8·55
Nellore . . .	Iskapalle . . .	13th „	8·70
Do. . . .	Sulurpeta . . .	„ „	8·50
Do. . . .	Nellore . . .	„ „	8·49
Chingleput . .	Ponneri . . .	„ „	7·45
Nellore . . .	Kavali . . .	„ „	7·35
Nellore . . .	Pakala . . .	„ „	7·34
Chingleput . .	Kattur . . .	„ „	7·11
Nellore . . .	Tada . . .	„ „	7·05
Chingleput . .	Sathiavedu . . .	„ „	6·69
Nellore . . .	Kistnapatam . .	14th „	7·96
Do. . . .	Kota	„ „	7·61
Do. . . .	Dugarazpatnam . .	„ „	6·92
South Arcot . .	Panruti . . .	15th „	10·61
Travancore State .	Kanjerapalli . .	„ „	8·40
Do. . . .	Kothamangalam . .	„ „	6·72
Malabar . . .	Cochin . .	„ „	6·55
Travancore State .	Muvattupuzha . .	„ „	6·54
North Arcot . .	Wandiwash . .	16th „	10·63
Chingleput . .	Conjeeveram . .	„ „	7·65
North Arcot . .	Peranamallur . .	„ „	7·50

The following shows the rainfall of the month at the extra-Indian stations :—

Station.	Rainfall.			
	Actual, October, 1905.	Normal, October	Departure from normal, October, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee . . .	3·74	7·14	—3·40	—48
Colombo . . .	16·73	14·80	+1·93	+13
Amini Divi . . .	7·81	6·01	+1·80	+30
Kabul	0	0·32	—0·32	—100
Kashgar . . .	0	0·05	—0·05	—100
Meshed . . .	0·05	0·42	—0·37	— 88
Ispahan . . .	0	0·21	—0·21	—100
Bushire . . .	0	0·08	—0·08	—100
Jask	0	0·04	—0·04	—100
Muscat	0·01	0·02	—0·01	— 50
Baghdad . . .	0	0·04	—0·04	—100
Aden	0	0·01	—0·01	—100
Perim	0	0·07	—0·07	—100
Zanzibar . . .	5·70	2·99	+2·71	+ 91
Seychelles . . .	0·48	5·29	—4·81	— 91
Mauritius . . .	2·06	1·24	+0·82	+ 66

There was no rain during the month at the greater number of these stations.

The following summarises the rainfall data of the month :—

(1) There was practically no rain (less than ·10″) over the greater part of the Punjab, the west of the Central Provinces, north Bombay, Central India and Rajputana.

(2) The month's rainfall was less than usual over the Assam valley, a large part of Bengal, and thence westward over northern and Central India as far as the Indus.

(3) The rainfall was generally heavier than usual over Burma, Cachar, East Bengal, and the Madras Presidency.

The following gives comparative rainfall data for the eleven meteorological divisions:—

METEOROLOGICAL PROVINCE.	RAINFALL.			
	Mean actual for October 1905.	Mean normal for October.	Departure from normal, October 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands	10·24	9·03	+1·17*	+ 13
Burma, Inland	6·95	4·42	+0·09*	+ 2
Assam	5·24	4·41	+0·83	+ 19
Bengal and Orissa	6·89	5·02	+1·87	+ 37
Gangetic Plain and Chota Nagpur	0·29	2·63	−2·34	− 89
Upper Sub-Himalayas	0·06	0·37	−0·31*	− 84
Indus Valley and North-West Rajputana.	0	0·05	−0·04	− 80
East Rajputana, Central India and Gujarat.	0	0·63	−0·63*	−100
Deccan	1·42	2·73	−1·23*	− 45
West Coast	9·88	7·48	+2·40	+ 32
South India	8·79	7·59	+1·30*	+ 17

* A reference to table I will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will, therefore, not agree with the figures in column 1.

Snowfall.

I.—AFGHAN MOUNTAIN DISTRICTS.

Aghan:—The weather was bright and clear generally during October with very light rain in some parts of Afghanistan in the middle of the month. More than the usual snow fell on the Sufed Koh. No snow fell on the Samana or other Orakzai hills.

Kashmir:—Cold weather conditions were delayed. Weather in the valley of Kashmir was unusually fair with bright sunny days and rain was absent. Eastern and northern mountains received some snowfall and snow was lying on the Daosai plains and hills near Skardu.

Almora:—Reports of snowfall are as follows:—

Malla Johar.

	feet.	inches.
1st October	0	6
12th „	0	6
17th „	0	6
	1	6

Malla Danpur.

8th October	0	3
9th „	0	2
10th „	0	3
11th „	0	4
	1	0

Darma Malla (Nirwe Pass.)

	feet.	inches.
7th October	3	0
8th „	3	0
	6	0

Chandas.

4th October	0	6
31st „	0	6
	1	0

Snow fell only on the tops of the mountains but the fall of snow was greater than in past years.

The accumulation of snow on the last day of October was as follows:—

	feet.	inches.
Unta Dhura	15	0
Ralam „	12	0
Millam „	6	6
Pindari Peak	1	0
Kaphini „	1	0
Kantela „	1	0
Nirwe Pass	22	0
Binkam „	9	0

Crop Report.

Madras:—At the close of the month the general prospects were satisfactory. The standing crops were generally fair but some in Ganjam, Kistna, Bellary, Salem, Coimbatore and Tanjore required more rain.

Bombay:—More rain at the end of the month was urgently needed in parts of Kaira, Broach, Surat, the Deccan, Karnatak and Kathiawar. The standing crops were withering in parts of the Panchmahals, Sura

Khandesh, Nasik, Dharwar, Baroda, Palanpur and Cutch. The sowing of spring crops continued.

Bengal:—The prospects of winter paddy were, on the whole, good. Spring sowings were in full progress.

United Provinces:—The continued drought was doing damage to the standing crops in Bulandshahr, Unao, Rai Bareilly, Fyzabad, Fatehpur, Gonda, Gorakhpur, Jalaun, Banda and Tehri. The germination of spring sowings was generally good up to the close of the month.

Punjab:—The condition of the standing autumn crops was average on irrigated and below average to bad on unirrigated lands. The outturn was estimated as average except cotton which was poor.

North-west Frontier Province:—Spring sowings were in progress but were delayed for want of rain. The condition of the standing irrigated crops was generally good in Peshawar and fair elsewhere. Unirrigated crops were poor.

Burma:—The condition of the standing crops and prospects of the harvest, on the whole, continued good.

East Bengal and Assam:—The prospects of the crops were generally fair.

Central Provinces:—Spring sowings were approaching completion at the end of the month and germination was good. Standing crops were deteriorating in parts of Damoh, Akola and Buldana owing to the prolonged drought.

Mysore:—The crops were in good condition but more rain was needed. The season prospects were fair.

Hyderabad:—The prospects of the spring crops improved during the month where rain had fallen. Rain was required in all taluks. Cotton had not fully developed for want of rain. Standing crops were generally fair.

Rajputana:—Autumn crops were harvested during the month and spring operations continued wherever sufficient rain had fallen.

Kashmir Jummoo:—The condition of the standing crops was good.

W. L. DALLAS.

Table I.—Abstract of Observations taken at 8 A.M. at 230 Stations in India, Burma, etc., in October, 1905.

Tab

Abstract of Observations taken at 8 A.M. at 230 Statio

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	I.—Burma Coast and Bay Islands.			+·001								87·3	−0·4	76·2	+1·0	81·8	+0·3	11·1					1
1	Car Nicobar .	25	29·881		29·833	29·936	23rd	29·822	16th & 17th.	·114	79·6	86·4		76·5		81·5		9·9	88·2	1st, 8th 13th & 27th	73·9	31st	
	Port Blair . .	61	29·870	+·014	29·862	29·937	23rd	29·799	20th	·138	80·3	85·7	−1·2	77·8	+0·5	81·8	−0·4	7·9	89·6	6th	75·9	4 days	
	Slipper Island .		29·921			29·998	4th & 6th.	29·832	28th	·166													
	Mergui . .	96	29·844	+·008	29·870	29·936	23rd	29·751	28th	·185	79·0	86·4	−0·8	74·1	+2·0	80·3	+0·6	12·3	91·4	4th	72·4	7th	
	Tavoy . .	26	29·923	+·004	29·874	30·011	23rd	29·809	28th	·202	78·8	87·5	−0·5	74·4	+1·1	81·0	+0·3	13·1	92·5	6th	71·1	22nd	
	Moulmein . .	94	29·830	−·005	29·862	29·921	23rd	29·700	28th	·221	79·5	89·0	+0·6	75·5	+0·8	82·3	+0·7	13·5	92·5	5th & 6th.	72·3	6th & 22nd.	
2	Rangoon . .	57	29·868	−·007	29·863	29·958	23rd	29·751	28th	·207	79·7	87·6	−0·1	76·7	+1·1	82·1	+0·5	10·9	90·6	6th	74·4	22nd	
	Bassein . .	27?	29·859	+·006	29·864	29·992	4th	29·797	28th	·195	79·2	87·3	−0·1	75·8	+0·6	81·6	+0·3	11·5	90·2	4 days	71·4	30th	
	Diamond Island.	41	29·872	−·009	29·848	29·953	4th	29·787	28th	·166	82·1	85·9	−0·6	77·6	+0·9	81·8	+0·2	8·3	88·9	6th	74·2	23rd	
5	Akyab . .	20	29·893	−·005	29·856	29·987	5th	29·804	26th	·183	79·4	87·2	−0·6	77·2	+0·5	82·2	−0·1	10·0	90·9	15th & 14th.	73·2	29th & 30th.	
3	Toungoo . .	183	29·744	+·001	29·870	29·849	23rd	29·021	28th	·228	79·2	88·9	−0·4	76·1	+1·3	83·0	+0·5	13·8	93·4	14th & 15th.	73·6	8th & 10th.	
	II.—Burma Inland.			−·004								88·7	−1·6	74·4	+1·2	81·6	−0·2	14·4					2
3	Thayetmyo .	121	29·792	−·006	29·855	29·875	8th	29·668	28th	·207	81·0	90·6	+0·2	75·2	+1·1	82·9	+0·7	15·4	93·5	5th	68·6	29th	
4	Minbu . .	*165*	29·735	P	29·845	29·833	13th	29·617	28th	·216	79·5	89·1	−2·2	75·7	+0·7	82·4	−0·8	13·4	93·2	6th 14th & 15th.	70·6	28th	
	Yamethin . .	657	29·259	−·019	29·874	29·339	5th	29·146	28th	·193	78·8	89·3	−3·2	74·6	+0·8	82·0	−1·2	14·7	94·8	15th	72·7	10th & 29th	
	Monywa . .	*280*	29·664		29·883	29·758	5th	29·534	28th	·224	79·2	90·2		76·0		83·1		14·2	94·3	1st	69·6	25th	
	Mandalay . .	250	29·669	+·001	29·870	29·775	23rd	29·545	28th	·230	81·7	92·1	+0·3	77·0	+2·2	84·6	+1·3	15·1	95·5	5th	72·3	22nd	
	Myitkyina . .	458	29·473		29·897	29·576	13th	29·332	1st	·244	74·7	84·4		71·2		77·8		13·2	90·7	8th	68·1	13th	
	Bhamo . .	*381*	29·555	+·009	29·897	29·660	13th	29·436	28th	·224	74·7	85·5	−3·0	71·0	+1·4	78·2	−0·8	14·5	90·9	5 days	65·1	14th	
4(a)	Maymyo . .	3,545	26·476		26·421	26·567	5th	26·350	28th	·217	68·9	76·4		63·2		69·8		13·2	80·9	15th & 31st.	59·6	12th	
	Lashio . .	*2,751*	27·149	−·024	27·095	27·252	5th	27·022	28th	·230	68·7	81·6	−1·9	64·8	+1·3	73·2	−0·3	16·8	87·5	15th	60·0	21st & 22nd.	
	III.—Assam.			−·014								85·6	−0·8	70·9	−0·5	78·3	−0·7	14·8					2
7	Silchar . .	104	29·815	−·010	29·874	29·927	4th & 5th	29·679	26th	·248	76·4	86·1	−2·6	72·7	+0·4	79·4	−1·1	13·4	92·0	17th	68·3	28th	
9	Sibsagar . .	333	29·600	−·020	29·897	29·731	12th & 13th	29·451	1st	·280	73·2	83·5	−1·3	69·2	−1·6	76·4	−1·5	14·3	89·2	8th	60·9	29th	
	Dhubri . .	115	29·800	−·013	29·873	29·926	12th	29·667	1st	·259	77·2	86·0	+1·5	72·4	−0·4	79·2	+0·6	13·6	89·2	9th	68·7	29th & 30th.	
	Gauhati . .	195	29·735		29·889	29·864	13th	29·582	1st	·282	75·9	87·5		70·8		79·2		16·7	91·5	23rd	65·5	29th	
	Tezpur . .	252	29·673		29·888	29·869	13th	29·528	1st	·281	74·4	86·2		71·0		78·6		15·2	90·6	9th	67·9	14th & 27th.	
	Dibrugarh .	353	29·571		29·890	29·697	13th	29·424	1st	·273	73·8	84·4		69·1		76·8		15·3	89·2	6th, 8th & 16th.	62·0	16th	
	IV.—Bengal and Orissa.			−·008								87·6	+0·1	74·0	+0·7	80·8	+0·4	13·6					2
6	Chittagong .	87	29·824	−·004	29·860	29·937	5th	29·699	26th	·238	78·1	86·2	−0·3	73·9	+0·5	80·1	+0·1	12·3	89·0	7th & 8th,	68·1	29th	
	Noakhali . .	43	29·852		29·842	29·958	5th	29·737	26th	·221	80·0	86·0		74·5		80·3		11·5	88·7	6 days	68·9	31st	
	Comilla . .	36	29·865		29·849	29·977	4th	29·730	26th	·247	78·6	87·1		73·8		80·5		12·3	91·3	17th	68·3	29th	
	Sirajganj . .	49	29·863		29·863	29·974	13th	29·752	25th	·222	78·1	86·7		74·7		80·7		12·0	90·3	22nd	70·7	28th	
	Narayanganj .	26	29·887	P	29·862	30·006	13th	29·767	25th	·239	80·0	88·1	+0·2	76·3	+1·0	82·2	+0·6	11·8	91·6	7th	71·3	29th & 30th.	
	Barisal . .	13	29·889	−·011	29·847	30·004	5th	29·729	25th	·275	80·9	87·3	−0·3	75·6	+1·0	81·4	+0·4	11·7	90·3	5 days	70·6	29th	
	Mymensingh† .	62	29·855	−·010	29·869	29·961	13th	29·742	1st	·219	79·5	86·9	+0·7	74·9	+1·7	80·9	+1·2	12·0	90·2	8th & 9th.	70·0	27th	
	Faridpur . .	46	29·863		29·859	29·976	13th	29·736	25th	·240	80·0	86·5		74·7		80·6		11·8	89·3	4 days	69·4	29th	
10	Jessore . .	33	29·864	−·016	29·844	29·989	13th	29·730	25th	·259	80·0	87·1	−1·3	75·2	+0·16	81·2	−0·4	11·9	90·5	9th	70·2	30th	
	Calcutta (Alipore)	21	29·880	−·008	29·847	30·006	13th	29·741	25th	·265	79·8	87·4	+0·7	74·9	+0·6	81·2	+0·7	12·5	90·9	5th & 11th.	68·9	30th	
	Saugor Island .	25	29·871	−·009	29·841	29·994	13th	29·715	25th	·279	80·8	87·3	+0·4	77·2	+1·0	82·3	+0·7	10·1	92·4	13th	70·5	30th	

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any st

Note 2.—The data from which divisional means of the figure columns Nos. 40, 42 a

Note. 3.—The barometric readings are not reduced to sea-level in the cases of hill or pl

† Observation of 27 days.

India, Burma, etc., in October, 1905.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st October 1905.	Normal rainfall for period, 1st May to 31st October.	Departure from normal of period, 1st May to 31st October 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													90	+ 1	·911	+ ·015	5·6	—0·2	15			10·24	9·03	+1·17					I.—Burma Coast and Bay Islands.
4	1		2	1	5		1	S 63° W	2·0			2·0	91		·918		9·3					11·60			52·42			4·65	Car Nicobar*
1			4	2	8	11	5	S 71° W	6·6	6·4	+ 3		90	+ 1	·929	- ·006	6·9	+0·5	14			10·27	11·76	— 1·49	85·35	96·66	—11·31	5·41	Port Blair.
4	4	4	3	7	4	2	3	S 34° E	9·5																				Slipper Island.
	1	5	1	2	2	1	1	S 50° E	1·9	1·5	+ 27	1·7	90	+ 3	·877	+ ·022	4·0	- 0·9	20	16·10	+3·90	16·18	12·74	+ 3·44	142·17	151·83	- 9·66	2·50	Mergui.
								Calm	1·0	1·0	0		89	+ 1	·869	+ ·001	2·7	—2·1	13	12·30	+0·70	13·46	9·45	+ 4·01	235·89	201·38	+34·51	2·87	Tavoy.
	2		1	1	1			S 52° E	1·9	1·7	+ 12	2·1	90	+ 2	·901	+ ·025	6·5	+1·5	12	10·70	+1·30	11·26	7·97	+ 3·29	178·53	177·86	+ 0·67	4·10	Moulmein.
3	5	6	1	4		3	5	N 35° E	3·8	3·2	+ 19	3·5	89	— 3	·899	—·008	6·3	+0·7	11	8·50	+2·50	6·28	6·39	- 0·11	104·31	91·80	+12·51	2·90	Rangoon.
5	4	3	7	2	3	2	4	N 66° E	3·9	2·5	+ 56	3·9	94	+ 3	·935	+ ·020	6·2	+1·0	15	12·10	+2·90	11·07	8·13	+ 2·94	113·42	106·37	+ 7·05	1·22	Bassein.
1	9	3	6	1	1	3	2	N 71° E	7·6	6·4	+ 19	7·6	82	- 1	·907	+ ·008	5·1	—0·6	14	11·60	+2·40	8·31	8·00	+ 0·31	109·95	108·18	+ 1·77	1·31	Diamond Island.
4	16		7				4	N 45° E	5·2	2·3	+126	5·0	93	+ 2	·935	+ ·022	3·6	-2·3	10	8·30	+1·70	8·43	10·28	— 1·85	225·12	183·75	+41·37	2·26	Akyab.
1			1	5	3	1	9	S 86° W	10·4	1·8	+478	10·3	93	+ 4	·941	+ ·054	5·5	0	8	9·60	- 1·60	5·51	6·56	— 1·05	83·39	75·12	+ 8·27	2·12	Toungoo.
													89	+ 2	·873	+ ·034	5·6	+ 0·4				6·95	4·42	+ 0·09					II.—Burma Inland.
4	1	11		11	2		1	S 54° E	6·8	3·1	+119		88	+ 4	·953	+ ·083	4·5	-1·2	6	6·90	—0·90	3·65	4·00	— 0·34	39·95	33·84	+ 6·11	1·37	Thayetmyo.
2			17				4	S 52° E	3·5			4·2	86	+ 2	·883	+ ·040	3·9	—0·6	6	5·20	+0·80	4·01	4·41	- 0·40	29·45	29·86	— 0·41	2·12	Minbu.
1	1		8	3				S 43° E	4·6			4·8	89	+ 3	·871	+ ·014	7·2	+4·1?	10	6·60	+3·40	7·20	5·72	+ 1·48	34·13	33·91	+ 0·22	1·86	Yamethin.
			2	5	1	1	4	S 37° W	2·0			2·1	98		·993		5·8		5	5·50	—0·50	3·14	3·95	— 0·81	32·88	26·29	+ 6·59	1·13	Monywa.
1	9	1		6	4			S 11° E	3·8			3·8	81	- 2	·871	+ ·011	5·7	+1·6	6	5·60	+0·40	4·52	4·98	— 0·46	35·77	28·98	+ 6·79	2·76	Mandalay.
	2	8	6	1		1		S 73° E	2·8			2·8	89		·767		6·7		16			21·56			102·67			4·53	Myitkyina.
3	6	2					1	N 35° E	1·7			2·0	92	+ 5	·795	+ ·021	5·7	+1·6	9	5·70	+ 3·30	4·54	3·47	+ 1·07	50·33	68·52	—18·19	1·15	Bhamo.
4	11	2	1	1	5	5	2	N 4° E	1·9				91		·649		4·1		13	11·20	+1·80	7·40	7·71	— 0·31	51·68	52·10	+ 2·58	1·36	Maymyo.
2	6	1	1		1		2	N 32° E	1·5				94	+ 2	·663	+ ·016	8·9	+1·3	11			5·66	3·68	+ 1·98	46·99	54·98	— 7·99	1·33	Lashio.
													90	— 1	·788	0	5·8	+ 1·0				5·24	4·41	+ 0·83					III.—Assam.
								Calm	0	2·1	—100	0	91	+ 2	·833	+ ·005	6·6	+ 0·5	12	7·00	+5·00	18·47	6·03	+12·44	105·63	97·90	+ 7·73	4·56	Silchar.
1	7		3	1	5	1	4	N 9° W	2·0	2·0	0	1·8	96	0	·791	- ·011	8·4	+1·2	5	4·20	+0·80	2·55	4·99	— 2·44	69·08	76·81	— 7·73	0·96	Sibsagar.
	3	13						N 82° E	1·4	2·9	— 52	1·7	85	- 4	·797	+ ·006	5·0	+1·2	3	4·10	—1·10	4·07	3·48	+ 0·59	108·57	85·47	+23·10	3·64	Dhubri.
3	3	2	1	3	1			N 80° E	1·1			1·2	88		·789		5·4		3	4·10	—1·10	0·50	2·92	— 2·42	48·72	52·78	- 4·06	0·18	Gauhati.
	10	5	1					N 64° W	2·5			2·7	89		·760		4·7		6	5·50	+0·50	2·51	3·66	— 1·15	64·61	60·70	+ 3·91	0·80	Tezpur.
3	4	5						N 53° E	1·1			1·0	92		·760		4·9		7	7·70	—0·70	3·36	5·40	— 2·04	65·67	94·19	—28·52	1·03	Dibrugarh.
													86	+ 1	·849	+·025	3·3	—0·1				6·89	5·02	+1·87					IV.—Bengal and Orissa.
3	16	2	6	2			1	N 62° E	3·6	3·0	+ 20	3·3	90	0	·872	+ ·008	4·6	- 0·4	11	6·81	+4·19	6·79	6·37	+ 0·42	125·08	86·32	+38·76	1·63	Chittagong.
	1	2	5	2	3	2	2	S 11° E	2·5			2·7	87		·886		3·9		10	7·13	+2·87	11·47	7·92	+ 3·55	123·54	102·84	+20·70	4·75	Noakhali.
	1	6	4	5	1		1	S 49° E	2·5			2·1	89		·873		4·0		11	5·62	+5·38	19·38	5·43	+13·95	93·84	78·31	+15·53	11·90	Comilla.
				1		1		S 45° W	0·8			0·8	92		·886		4·5		6	4·77	+1·23	3·74	4·37	— 0·63	84·08	55·13	+28·95	1·50	Sirajganj.
	6	7	3	1	5	1	3	N 82° E	2·9	2·3	+ 26	2·5	89	+ 5	·920	+ ·072	4·9	+0·6	7	5·06	+1·94	8·84	4·48	+ 4·36	82·49	59·45	+23·04	2·50	Narayanganj.
	2	2	2		5	1	1	N 56° W	1·4			1·2	86	+ 2	·901	+ ·016	3·2	—0·5	8	5·94	+2·06	5·46	6·69	— 1·23	80·32	68·95	+11·37	1·47	Barisal.
	2	4	3		2			S 72° E	1·7			1·5	88	0	·886	+ ·036	4·3	0	6	5·58	+0·42	15·13	5·12	+10·01	112·31	77·92	+34·39	10·62	Mymensingh.
	2	1	1	2	2	1	3	N 14° W	1·7			1·5	87		·900		3·1		10	5·31	+4·69	10·44	4·49	+ 5·95	83·77	59·18	+24·59	4·01	Faridpur.
	2	1		3				S 63° E	1·0	2·1	— 52	1·0	89	+ 3	·912	+ ·036	3·8	—0·1	9	5·74	+3·26	13·47	4·38	+ 9·09	79·25	55·73	+23·52	4·98	Jessore.
	6	2	1	3	7	2	4	N 81° W	2·7	3·2	— 16		88	+ 4	·897	+ ·054	4·6	+1·2	7	5·33	+1·67	4·78	4·12	+ 0·66	58·74	54·71	+ 4·03	1·55	Calcutta (Alipore).
	9	3		1	6	4	4	N 14° W	8·6	6·5	+ 32		87	+ 1	·905	+ ·017	5·1	—0·3	9	7·90	+1·10	16·05	8·64	+ 7·41	62·90	66·68	- 3·78	4·58	Saugor Island.

a for that station are not utilized in calculating the provincial departures from normal.

lved are incomplete.

s, the elevations of which exceed 32,00 feet.

* Wind variable 4.

Tab

Abstract of Observations taken at 8 A.M. at 230 Stati

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
10	Krishnagar	47	29·852		29·848	29·977	13th	29·780	25th	·197	79·7	88·8		75·0		81·9		13·8	92·1	7th	69·0	28th & 30th.	2
	Midnapore	149	29·745		29·843	29·863	13th	29·625	25th	·238	78·7	88·0		73·5		80·8		14·5	91·3	4th	66·3	30th	2
11	Bankura	298	29·584		29·852	29·696	12th	29·476	1st	·220	78·7	89·7		73·3		81·5		16·4	92·1	4th & 28th.	66·2	4 days	2
	Raniganj	334	29·579		29·872	29·700	13th	29·469	1st & 25th.	·231	75·8	88·7		72·0		80·4		16·7	91·0	4th & 28th.	64·5	29th	2
	Burdwan	99	29·805	−·011	29·854	29·925	13th	29·692	25th	·233	79·3	88·7	0	75·4	+0·8	82·1	+0·4	13·3	90·9	4th, 5th & 12th.	69·8	4 days	2
	Naya Dumka	489	29·412		29·866	29·537	13th	29·294	1st	·243	77·4	88·3		70·8		79·6		17·5	90·0	2nd, 3rd & 4th.	63·4	30th	2
	Berhampore	67	29·832	−·017	29·849	29·952	13th	29·725	25th	·227	79·3	88·1	+0·6	75·1	+0·8	81·6	+0·7	13·0	90·3	5th & 8th	70·3	28th & 29th.	2
	Rampur Boalia	70	29·829		29·849	29·949	13th	29·716	25th	·233	79·7	87·3		74·2		80·8		13·1	90·1	2nd & 5th.	68·1	29th	2
	Malda	72	29·813		29·837	29·943	13th	29·708	1st	·235	79·6	88·0		73·5		80·8		14·5	90·6	3rd & 4th	67·1	29th	2
	Bogra	61	29·831	−·010	29·846	29·943	8th & 13th.	29·715	25th	·228	78·4	87·1	−0·1	73·8	+1·1	80·5	+0·5	13·3	89·7	5th, 8th & 12th.	65·2	28th	2
12	Dinajpur	123	29·777	−·018	29·857	29·895	13th	29·662	1st	·233	78·2	88·0	+0·6	71·9	−0·1	80·0	+0·3	16·1	90·3	3rd	66·5	29th & 30th.	2
	Rangpur	123	29·802		29·882	29·927	13th	29·670	1st	·257	78·6	88·1		72·7		†80·5		15·4	91·2	7th	66·8	30th	2
	Jalpaiguri	284	29·632	−·012	29·878	29·761	12th	29·506	1st	·255	76·2	86·2	+0·4	70·3	+0·5	78·3	+0·5	15·9	88·9	7th	62·1	29th	2
	Cooch Behar	156	29·758		*29·873	29·894	13th	29·670	19th	·224	76·4	86·9		71·7		79·3		15·2	89·3	7th & 9th.	68·1	30th	2
17	Purnea	125	29·789	−·001	29·870	29·906	13th	29·689	1st	·217	79·0	87·2	−0·2	72·3	+1·1	79·8	+0·5	14·9	89·2	3rd, 4th & 5th.	65·6	28th	2
14	Balasore	50	29·855	−·014	29·848	29·979	13th	29·730	25th	·249	78·5	88·4	+0·4	73·0	−0·1	80·7	+0·2	15·4	92·4	5th	64·7	30th	2
	False Point	21	29·884	−·002	29·847	30·001	13th	29·762	24th	·239	79·3	86·4	−1·0	74·6	+0·2	80·7	−0·4	11·6	90·5	7th	70·1	14th	2
	Cuttack	80	29·825	0	29·849	29·931	13th	29·728	19th	·203	78·2	89·8	+0·1	74·7	+0·1	82·3	+0·1	15·1	94·4	5th	68·2	30th & 31st.	2
	Puri	24	29·884		29·847	30·001	4th	29·756	24th	·245	80·7	88·0		77·1		82·6		10·9	91·2	15th	73·6	30th	1
	V.—Gangetic Plain and Chota Nagpur.			−·011								89·7	+1·3	68·5	−0·9	79·1	+0·2	21·2					3
15	Hazaribagh	2,007	27·891	−·006	29·863	27·999	13th	27·784	1st	·215	75·5	84·8	+1·5	66·8	0	75·9	+0·8	18·0	87·7	4th	61·2	31st	2
	Ranchi	2,128	27·780	−·004	29·878	27·889	5th	27·677	1st	·212	74·3	82·7	+0·7	66·2	+0·6	74·9	+0·7	17·5	87·2	4th	61·0	31st	2
	Daltonganj	*730*	29·181		29·891	29·290	13th	29·039	1st	·251	70·0	89·7		64·7		77·2		25·0	93·6	4th	56·0	31st	3
	Purulia	*816*	29·075		29·851	29·184	13th	28·973	1st	·211	76·3	89·3		69·6		79·5		19·7	92·5	4th	63·4	28th	2
	Chaibassa	*760*	29·129	−·014	29·854	29·243	13th	29·028	19th	·215	74·1	89·4	+0·7	69·8	−0·5	79·6	+0·1	19·6	93·9	4th	61·0	30th	3
16	Gaya	375	29·531	−·002	29·866	29·641	13th	29·435	2nd	·206	77·1	89·6	0	70·2	−0·8	79·9	−0·4	19·4	92·9	4th	63·7	31st	2
	Dehri	351	29·542		29·855	29·646	5th	29·431	1st	·215	75·7	89·3		70·9		80·2		18·4	91·3	4 days	64·5	31st	2
	Patna	183	29·714	−·019	29·854	29·831	13th	29·562	1st	·249	79·2	88·8	+0·6	73·1	+0.6	81·0	+0·6	15·7	91·5	4th	66·8	27th & 31st.	2
	Arrah	190	29·712		29·858	29·823	8th & 13th.	29·590	1st	·233	76·3	89·1		69·8		79·5		19·3	91·4	12th	62·6	31st	2
	Buxar	239	29·658		29·858	29·765	5th	29·541	1st	·224	76·5	90·3		70·2		80·3		20·1	92·0	4 days	63·0	31st	2
17	Bhagalpur	160	29·748		29·862	29·864	13th	29·634	1st	·230	82·1	89·1		72·4		80·8		16·7	91·7	27th	65·6	28th	2
	Darbhanga	166	29·732	−·018	29·853	29·844	5th	29·623	1st	·221	79·0	87·5	+0·8	72·9	−0·2	80·3	+0·3	14·6	90·1	4th	68·3	26th & 27th.	2
	Muzaffarpur	178	29·731		29·866	29·850	13th	29·607	1st	·243	79·4	87·8		71·9		79·8		15·9	90·2	4th & 6th.	66·5	31st	2
	Motihari	224	29·679		29·867	29·799	8th	29·563	1st	·236	75·7	88·6		71·2		79·9		17·4	90·4	4th & 8th.	64·8	31st	2
	Chapra	181	29·699		29·839	29·812	13th	29·574	1st	·238	76·7	89·3		70·3		79·8		19·0	90·9	4 days	63·6	27th	2
18	Benares	267	29·631	−·008	29·858	29·737	13th	29·511	1st	·226	76·2	91·5	+1·6	64·8	−3·5	78·2	−1·0	26·7	94·6	4th & 30th.	58·1	27th, 29th & 31st.	3
	Allahabad	309	29·587	−·010	29·857	29·699	13th	29·456	1st	·243	75·6	93·5	+3·0	64·1	−3·5	78·8	−0·3	29·4	96·6	3rd & 4th.	57·5	27th & 31st.	3
23	Gorakhpur	257	29·633	−·011	29·852	29·743	5th	29·508	1st	·235	76·4	87·7	−1·0	69·5	−0·5	78·6	−0·8	18·2	89·2	8 days	64·5	30th	2
19	Lucknow	368	29·506	−·025	29·842	29·629	13th	29·367	1st	·262	75·2	94·1	+2·9	63·4	−2·1	78·8	+0·4	30·7	97·3	5th & 12th.	52·7	20th	4
20	Bahraich	401	29·484	−·013	29·853	29·611	13th	29·340	1st	·271	75·8	91·3	+1·2	66·5	−0·7	78·9	+0·3	24·8	94·1	2nd	60·4	31st	3
21	Cawnpore	416	29·467	−·020	29·851	29·587	13th	29·333	1st	·254	75·1	95·3	+3·8	64·0	−1·8	79·7	+1·0	31·3	99·4	4th & 5th.	56·6	31st	4
	Mainpuri	516	29·381	+·005	29·868	29·511	13th	29·240	1st	·271	72·6	94·0	+1·1	64·7	+0·1	79·3	+0·6	29·3	97·8	29th	58·2	21 st & 28th.	3

† Mean of 28 days. * Mean of 21 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any station,

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42 and 44

continued.

India, Burma, etc., in October 1905—continued.

Wind Direction. Number of winds from. N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st October 1905.	Normal rainfall for period, 1st May to 31st October.	Departure from normal of period, 1st May to 31st October 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
2	2	1	1	2	1	2	N 11° E	1·0			1·1	88		·889		3·5		6	4·97	+ 1·03	4·92	4·20	+ 0·72	76·76	69·21	+27·55	1·53	Krishnagar.
3	1		2	1		2	N 86° E	2·0			1·8	81		·786		2·4		3	5·27	— 2·27	2·15	4·51	— 2·36	51·57	55·17	- 3·60	1·43	Midnapore.
	1			3	4	2	N 74° W	1·8			1·6	77		·748		1·9		1	4·81	— 3·81	2·36	4·08	- 1·72	43·12	51·59	- 8·47	2·36	Bankura.
1	1				1	2	N 11° W	1·3			1·0	87		·786		1·5		3	4·23	— 1·23	1·19	3·02	— 2·03	43·49	51·68	— 8·19	0·56	Raniganj.
1	1		1	1	2	3	N 23° W	1·6	2·1	−24	1·6	85	+5	·853	+·059	4·6	+0·9	3	5·10	— 1·10	4·44	3·27	+ 1·17	74·70	51·86	+22·84	3·83	Burdwan.
	1					1	N 63° E	1·0			1·1	83		·782		1·7		2	4·70	- 2·70	1·38	3·94	— 2·59	51·34	55·06	— 3·72	0·95	Naya Dumka
3	1	1		2		1	N 45° E	1·3	2·1	−38	1·1	85	−1	·856	+·021	3·1	−0·6	3	5·04	— 2·04	4·60	3·95	+ 0·65	56·08	50·84	+ 5·24	3·15	Berhampore.
							Calm	1·7			1·7	83		·843		2·6		5	4·90	+ 0·10	4·08	4·49	— 0·41	68·43	53·10	+15·33	2·68	Rampur Boalia.
7	1	1	2	3		1	N 27° E	2·8			2·6	81		·821		1·2		3	4·39	— 1·39	2·06	4·18	— 2·12	60·37	50·12	+10·25	1·36	Malda.
4	1	1		1	1		N 72° E	1·4			1·2	86	0	·835	−·030	2·7	−0·8	9	4·84	+ 4·16	4·81	4·21	+ 0·60	89·14	61·52	+27·62	1·86	Bogra.
8	7	2	2	1	1	1	N 60° E	1·4			1·3	85	0	·822	+·014	3·3	+0·2	3	3·64	— 0·64	1·40	3·02	— 1·62	66·73	67·03	- 0·30	0·57	Dinajpur.
12	3	5		2			N 70° E	1·6			1·5	83		·819		3·5		4	4·03	— 0·03	1·89	4·94	— 3·05	78·94	78·45	+ 0·49	1·10	Rangpur.
5	5	2		1	1	1	N 63° E	1·4			1·8	85	−3	·767	−·010	3·0	−0·3	5	4·71	+ 0·29	9·16	3·82	+ 5·34	145·28	117·00	+ 8·28	4·03	Jalpaiguri.
3	9				1		N 79° E	1·1			1·1	81		·764		2·5		4	4·17	- 0·17	6·47	4·79	+ 1·68	180·38	120·02	+60·31	3·65	Cooch Behar
3			1				N 65° E	0·6	1·4	−57	0·5	85	−3	·843	+·043	0·8	−1·8	1	3·39	— 2·39	0·10	3·44	— 3·34	60·60	62·01	- 1·41	0·10	Purnea.
3	1			3	2	11	N 28° W	2·8			2·1	81	− 5	·794	−·046	3·7	- 0·9	6	5·52	- 0·52	2·89	5·74	— 2·85	41·82	58·13	−16·31	0·90	Balasore.
2	1			1	8	13	S 76° W	5·8	6·1	— 5	6·0	89	+5	·885	+·008	5·2	+0·6	9	7·74	+1·26	18·56	8·58	+ 9·98	46·50	58·79	- 12·29	4·57	False Point.
3	2			4	6		N 79° W	1·6	1·9	−16		85	+6	·881	+·094	3·5	−0·1	4	6·06	- 2·06	1·65	5·24	−3·59	21·81	54·93	- 23·12	0·75	Cuttack.
2				1	1	2	N 7° W	7·0‡			6·6‡	81		·852		2·5		4	7·62	−5·62	1·56	8·18	−7·42	30·83	52·02	- 21·19	0·57	Puri. *
												74	— 3	·673	— ·023	1·2	−0·9				0·29	2·63	−2·34					V.—Gangetic Plain and Chota Nagpur.
1	5	2	3	6	5	3	S 39° W	5·0	5·0	0	4·4	63	− 7	·555	−·024	1·8	−1·7	1	4·48	- 3·48	0·33	3·14	— 2·81	41·69	50·47	— 8·78	0·33	Hazaribagh.
5	3	1		1	11	5	N 36° W	4·4			5·2	68	— 4	·568	−·018	2·0	−1·1	1	4·35	— 3·35	0·24	2·92	— 2·68	42·89	51·45	— 8·56	0·15	Ranchi.
	1	3	1				S 45° E	1·3			1·1	86		·637		1·3		1	3·06	— 2·06	0·19	2·40	— 2·21	42·49	41·70	+ 0·79	0·12	Daltonganj.
3				1	12	12	N 60° W	2·1			2·6	74		·680		1·9		1	3·80	— 2·80	0·11	3·17	— 3·06	47·65	48·83	— 1·18	0·11	Purulia.
1				1			Calm	1·5			1·6	81	+ 1	·693	−·046	1·7	−1·5	3	4·19	— 1·19	0·63	2·29	- 1·66	45·48	46·61	— 1·13	0·28	Chaibassa.
1		2	5	4	4		S 32° W	3·0	1·5	+100	2·4	71	— 3	·668	−·016	1·4	−1·6	0	2·90	— 2·90	0·05	2·20	— 2·15	37·36	44·44	- 7·08	0·05	Gaya.
1			12	14	1	2	S 31° W	3·5			3·3	76		·681		1·8		1	2·78	- 1·78	0·19	2·49	— 1·30	39·57	40·86	- 1·29	0·49	Dehri.
2	3	3	4	11	5	2	S 36° W	2·4	1·9	+26	2·7	76	+ 3	·770	+·039	1·5	- 0·9	1	3·13	— 2·13	0·22	3·26	— 3·04	58·22	45·90	+12·32	0·22	Patna.
		2	2	3			S 9° W	0·7			0·7	80		·728		0·3		1	3·48	- 2·48	0·34	2·77	— 2·43	37·02	43·27	- 6·25	0·34	Arrah.
1	3	5	7	6	6		S 12° W	2·5			2·4	74		·668		1·5		2	2·84	- 0·84	0·60	2·96	— 2·36	37·00	39·22	— 2·22	0·33	Buxar.
3	2	3	4	1	1	1	S 53° E	1·5			1·3	74		·795		1·2		0	3·03	— 3·03	0	3·54	— 3·54	50·79	46·57	+ 4·22	0	Bhagalpur.
1	9	3	2	1	2		S 66° E	1·0	2·2	−55	0·9	85	+ 2	·842	+·059	0·4	−1·6	1	3·03	— 2·03	0·24	3·24	— 3·00	69·48	48·62	+20·86	0·24	Darbhanga.
	1	1					S 63° E	2·9				83‡		·820‡		0·3		1	2·87	— 1·87	0·34	2·92	— 2·58	59·78	43·28	+16·50	0·34	Muzaffarpur
1	7	4	3	2	2	3	S 82° E	2·4			2·1	88		·777		1·0		1	2·71	— 1·71	0·26	3·38	— 3·12	66·21	49·27	+16·94	0·15	Motihari.
2	2	6	7	6			S 12° E	1·9			1·7	80		·740		0·5		1	2·81	- 1·81	0·56	2·63	— 2·07	41·59	38·62	+ 2·97	0·56	Chapra.
		1	1	9	1		S 39° W	1·5	2·6	−42	1·7	71	− 6	·648	−·031	1·0	−1·2	0	2·20	— 2·20	0·06	2·56	— 2·50	44·99	38·96	+ 6·03	0·06	Benares.
			2	5	10	3	S 82° W	1·9	2·8	−32	1·6	62	− 7	·563	−·071	2·0	0	0	1·90	— 1·90	0	2·57	— 2·57	27·03	38·62	−11·59	0	Allahabad.
3	1	1				1	N 56° E	0·2	1·3	−85	0·2	77	0	·709	−·005	0·5	−1·1	1	2·10	— 1·10	1·65	4·19	— 2·54	51·00	49·69	+ 1·31	1·65	Gorakhpur.
						2	N 18° W	0·9	1·9	−53	1·0	63	− 9	·559	−·069	1·1	−0·3	0	1·60	— 1·60	0	1·16	— 1·16	27·28	36·63	- 9·35	0	Lucknow.
	7	5				3	N 56° E	1·4			1·3	75	— 1	·681	−·010	0·9	−0·4	0	1·40	— 1·40	0	1·55	— 1·55	37·48	45·27	- 7·79	0	Bahraich.
				6	5	1	S 73° W	1·8				54	−12	·492	−·110	1·0	−0·1	0	1·50	— 1·50	0	1·42	- 1·42	20·47	33·88	−13·41	0	Cawnpore.
		2	1	3	3	2	S 84° W	0·4			0·4	67	+ 2	·539	+·007	0·5	−0·6	0	0·80	- 0·80	0	1·12	— 1·12	10·29	28·90	−18·61	0	Mainpuri.

for tha stations are not utilized in calculating the provincial departures from normal.
:d are incomplete.

‡ Mean of 30 days.

T:

Abstract of Observations taken at 8 A.M. at 230 Stat

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	VI.—Upper Sub-Himalayas.			−·008								92·6	+1·6	62·1	+0·6	77·4	+1·1	30·4					
24	Bareilly . .	568	29·313	−·011	29·862	29·434	13th	29·146	1	·288	71·4	91·2	+1·7	63·8	−1·5	77·5	+0·1	27·4	93·4	7th	56·6	31st	
	Dehra Dun .	2,233	27·667	−·011	29·897	27·802	13th	27·517	1st	·285	66·6	84·8	+2·5	59·2	−1·4	72·0	+0·6	25·6	87·0	5th, 7th & 8th.	53·5	29th & 31st.	
	Roorkee . .	899	28·985	−·007	29·185	29·112	13th	28·822	1st	·290	66·1	90·9	+1·6	58·3	−3·0	74·6	−0·7	32·6	93·9	6th	50·3	31st	
22	Meerut . .	738	29·135	−·016	29·359	29·270	13th	28·992	1st	·278	69·9	93·9	+3·4	61·7	−0·7	77·8	+1·4	32·2	97·1	5th	56·3	19th	
26	Delhi . .	718	29·170	−·006	29·868	29·312	13th	29·031	1st	·281	75·1	93·9	+1·8	69·2	+1·3	81·6	+1·6	24·7	97·2	4 days	60·9	24th	
28	Lahore . .	702	29·170	−·012	29·864	29·344	13th	29·024	1st	·320	69·8	94·2	−0·9	61·5	+2·4	77·9	+0·8	32·7	97·4	6 days	55·1	31st	
27	Sirsa . .	662	29·235	+·007	29·879	29·395	13th	29·101	1st	·294	73·2	96·5	+0·4	63·7	+1·1	80·1	+0·8	32·8	100·3	2nd & 3rd	55·1	28th	
	Patiala . .	*818*	29·060		29·864	29·225	13th	28·888	1st	·337	72·5	93·2		61·8		77·5		31·4	96·8	3rd	55·9	30th	
29	Ludhiana .	812	29·064	−·010	29·866	29·208	13th	28·921	1st	·287	71·0	93·6	+1·7	64·1	+1·1	78·9	+1·4	29·5	97·0	1st, 3rd & 8th.	59·2	26th	
	Sialkot . .	830	29·052	?	29·877	29·218	13th	28·911	1st	·307	70·8	94·9	+2·6	65·4	+3·5	80·2	+3·1	29·5	98·6	2nd & 8th	57·2	31st	
	Ambala .	892	28·984	−·007	29·872	29·126	13th	28·824	1st	·302	69·3	94·2	+1·0	60·1	−0·7	77·2	+0·2	34·1	97·0	2nd, 3rd & 8th	52·8	30th	
	Rawalpindi .	1,674	28·222	−·011	29·914	28·399	13th	28·078	1st	·321	67·8	89·8	+1·6	56·7	+0·9	73·3	+1·3	33·1	94·4	8th	48·1	31st	
	VII—Indus Valley and N.-W. Rajputana.			−·006								96·8	+1·5	65·8	+0·8	81·3	+1·2	31·0					
32	Peshawar .	1,110	28·800	−·020	29·924	29·003	13th	28·650	1st	·353	69·0	88·8	+0·4	58·5	+1·3	73·7	+0·9	30·3	95·0	4th	50·0	31st	
	D. I. Khan .	590	29·298	−·020	29·857	29·514	14th	29·144	1st	·370	69·9	93·7	−0·3	60·2	−0·4	77·0	−0·4	33·5	97·2	3rd & 4th	53·1	20th & 28th.	
31	Khushab .	612	29·284	?	29·882	29·468	14th	29·134	1st	·334	73·3	94·8	+1·0	62·7	−0·8	78·8	+0·9	32·1	99·4	4th & 6th	54·5	28th	
	Montgomery .	558	29·329	+·001	29·865	29·521	13th	29·167	1st	·354	76·3	96·6	0	63·3	+1·1	80·0	+0·6	33·3	101·3	2nd	57·0	31st	
	Multan .	420	29·451	−·019	29·847	29·673	13th	29·288	1st	·385	74·3	97·6	+2·1	65·8	+1·4	81·7	+1·8	31·8	102·4	2nd & 5th	58·4	22nd	
47	Jacobabad .	186	29·715	+·004	29·865	29·929	13th	29·576	1st	·353	77·8	101·9	+3·3	62·9	+0·4	82·4	+1·9	39·0	107·4	1st	54·0	13th	
	Hyderabad .	96	29·816	+·007	29·867	29·984	13th	29·707	28th	·277	79·4	99·8	+1·8	70·2	+0·2	85·0	+1·0	29·6	105·6	26th & 27th.	63·0	18th	
	Kurrachee .	30	29·892	−·011	29·873	30·008	13th	29·777	20th	·231	79·3	95·9	+4·3	71·7	+0·8	83·8	+2·6	24·2	104·4	16th	64·7	29th	
51	Bikaner .	*771*	29·123	+·013	29·871	29·292	13th	28·997	1st	·295	78·4	97·4	+1·5	71·8	+0·4	84·6	+1·0	25·6	102·6	1st	63·5	30th	
	Pachpadra .	*380*	29·524	?	29·866	29·644	5th	29·412	18th	·232	79·3	100·0	+1·3	67·0	+2·1	83·5	+1·7	33·0	105·9	1st	61·9	20th & 24th.	
	Jodhpur .	782	29·137		29·910	29·259	13th	29·023	st	·236	78·0	98·6		70·0		84·3		28·6	104·2	1st	62·7	18th & 29th.	
	VIII.—East Rajputana, Central India and Gujarat.			0								95·7	+2·9	69·9	+1·7	82·8	+2·3	25·8					
50	Jaipur . .	1,431	28·497	−·001	29·901	28·624	13th	28·372	1st	·252	79·5	97·4	+3·1	66·6	+2·6	82·0	+2·9	30·8	100·2	3rd	60·0	24th	
	Kotah . .	819?	29·078		29·901	29·185	13th	28·956	1st	·229	82·2	98·2		73·3		85·8		24·9	101·5	2nd	66·1	10th & 23rd.	
	Sambhar .	1,254	28·666	+·008	29·904	28·793	13th	28·537	1st	·256	75·7	96·8	+3·5	66·4	+2·8	81·6	+3·2	30·4	100·5	2nd	59·7	18th, 19th & 24th.	
	Ajmer . .	1,611	28·327	+·002	29·916	28·451	13th	28·205	1st	·246	76·8	95·4	+3·4	69·5	+6·3	82·5	+4·9	25·9	97·9	26th	62·2	15th	
	Udaipur .	1,925	28·022		29·913	28·119	5th	27·916	1st	·203	75·5	93·4		64·6		79·0		28·7	96·0	25th	58·2	23rd & 24th.	
46	Bhuj . .	395	29·531	+·003	29·881	29·650	5th	29·393	19th	·257	81·6	98·1	+2·0	73·3	+2·4	85·7	+2·2	24·8	10·3	16th	66·0	31st	
	Jamnagar .	61	29·875		29·881	29·985	5th	29·736	19th	·249	82·7	96·3		72·4		84·4		23·9	101·1	15th	66·2	3rd	
	Rajkot . .	429	29·507	+·004	29 887	29·626	4th	29·367	19th	·259	84·1	99·3	+4·0	69·6	+1·5	84·5	+2·8	29·7	101·9	1st	63·4	3rd	
	Veraval . .	*18*	29·911	−·002	29·869	30·015	4th	29·772	19th	·243	82·2	88·9	−0·4	75·4	+3·1	82·2	+1·4	13·5	99·1	14th	69·3	3rd	
	Dwarka . .	37?	29·896		29·879	30·014	5th	29·754	19th	·260	83·7	89·6		78·4		84·1		11·2	100·4	19th	73·2	10th	
	Bhavnagar Para	55	29 881	?	29·880	29·984	4th	29·740	19th	·244	82·1	97·8	+1·8	72·4	+0·3	85·1	+1·1	25·4	101·6	1st & 28th.	68·0	3rd	
49a	Nowgong .	757	29·152	−·004	29·886	29·265	13th	29·030	1st	·235	72·6	93·6	+3·3	64·2	−0·9	78·9	+1·2	29·4	97·5	27th & 28th	57·0	31st	
49	Indore . .	1,823	28·122	+·014	29·914	28·223	5th	28·024	19th	·199	76·5	91·3	+3·4	61·9	−1·7	76·6	+0·9	29·4	94·1	3rd, 26th & 28th.	56·1	24th	
	Neemuch .	1,630	28·314	+·009	29·916	28·425	5th	28·215	1st	·210	78·0	93·7	+3·3	64·7	+0·2	79·2	+1·8	29·0	96·5	1st	55·8	22nd & 23rd.	
45	Surat . .	39	29·892	−·005	29·875	29·984	4th	29·760	19th	·224	80·9	96·6	+3·6	73·4	+2·6	85·0	+3·1	23·2	100·2	6th	68·0	30th	

B.P.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any station,

Note 2.—The data from which divisional means of the figure columns Nos. 40, 42 and 44

continued.

India, Burma, etc., in October, 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected	Normal. (uncorrected.)	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st October 1905.	Normal rainfall for period, 1st May to 31st October.	Departure from normal of period 1st May to 31st October 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													61	−2	·458	−·008	0·3	−0·5				0·06	0·37	−0·31					VI.—Upper Sub-Himalayas.
		1						E	9·1	1·9	−95	0·1	79	+ 4	·606	+·001	0·4	− 0·4	0	0·91	−0·91	0	1·00	−1·00	19·49	41·63	−25·14	0	Bareilly.
1				1	1		2	N 71° W	1·4	1·7	−18		64	− 4	·434	−·009	0	−1·2	0	1·10	−1·10	0	0·92	−0·92	44·59	81·87	−37·28	0	Dehra Dun.
	1	2	2					S 8° W	1·8	1·4	+29		72	− 2	·467	−·058	0	−0·7	0	0·80	−0·80	0	0·38	−0·38	14·75	38·25	−23·50	0	Roorkee.
					3	1		N 72° W	0·5	1·4	−64	0·5	61	− 5	·448	−·036	0·1	−0·5	0	0·50	−0·50	0	0·35	−0·35	14·30	28·39	−14·09	0	Meerut.
3	1			2	4	10	6	N 79° W	2·5	2·4	−4	2·2	45	− 5	·399	−·023	0	−0·8	0	0·60	−0·60	0	0·06	−0·06	9·55	24·80	−15·25	0	Delhi.
1		3	1	1		1		S 75° E	1·3	1·6	−19		74	+17	·547	+·114	0·7	+0·2	1	0·40	+0·60	0·33	0·20	+0·13	13·45	16·36	− 2·91	0·32	Lahore.
					2			S 45° W	0·2	2·5	−92	0·2	53	+ 3	·439	+·039	0·3	−0·4	0	0·40	−0·40	0·01	0·11	−0·10	7·68	12·36	− 4·68	0·01	Sirsa.
5	3	9	5	1		1	5	N 59° E	3·6			3·7	59		·482		0·2		0			0			15·03			0	Patiala.
			2				1	S 45° E	1·2	0·9	+33	1·1	56	− 5	·433	−·025	0·3	−0·7	1	0·50	+0·50	0·15	0·33	−0·18	10·67	23·19	−12·52	0·15	Ludhiana.
2	5	8				1		N 62° E	1·3	1·4	− 7	1·1	56	− 3	·431	−·003	0·2	−0·5	0	1·00	−1·00	0·02	0·25	−0·23	18·96	24·89	− 5·93	0·02	Sialkot.
	1		1				3	N	3·0			2·7	62	− 8	·446	−·064	0·3	−0·2	0	0·40	−0·40	0	0·03	−0·03	14·31	26·97	−12·66	0	Ambala.
	2				1			N	2·0	1·2	+67	1·8	53	− 9	·369	−·022	0·8	−0·2	1	1·30	−0·30	0·15	0·44	−0·29	14·83	24·38	− 9·55	0·15	Rawalpindi.
													50	−2	·453	+·014	0·9	+0·1				0	0·05	−0·04					VII.—Indus Valley and N.-W. Rajputana.
					1			W	0·3	2·5	−88	0·3	55	− 4	·396	+·013	0·7	−0·2	0	0·40	−0·40	0	0·09	−0·09	3·63	5·68	−2·05	0	Peshawar.
1	3		1				2	N 21° E	0·5	1·2	−58	0·5	60	+ 3	·447	+·040	0·4	−0·1	0	0·20	−0·20	0	0·04	−0·04	2·90	5·32	−2·42	0	D. I. Khan.
2	13	2	2	3	2	1	1	N 57° E	3·7			3·6	46	+ 1	·390	+·039	0·4	+0·1	0	0·20	−0·20	0·01	0·01	0	9·46	10·30	−0·84	0·01	Khushab.
3	2	3	7	10	3	1		S 27° E	4·8			4·5	37	− 9	·334	−·071	0·3	−0·3	0	0·10	−0·10	0	0·03	−0·03	7·64	7·78	−0·14	0	Montgomery
1		1	3	1	1			S 38° E	1·2	2·0	−40	1·1	52	− 4	·438	−·024	0·1	−0·3	0	0	0	0	0	0	2·45	5·67	−3·22	0	Multan.
3	1	3		2	5	3	4	N 80° W	2·3	2·2	+ 5	2·4	50	− 2	·480	+·042	0·4	+0·1	0	0	0	0	0	0	0·46	2·67	−2·21	0	Jacobabad.
5	2			2	1	2	3	S 84° W	6·3	7·8	−19	5·6	60	+ 7	·601	+·106	0·7	+0·1	0	0	0	0	0	0	0·54	6·07	−5·53	0	Hyderabad.
5	10					8	6	N 16° W	7·5	9·7	−23	7·4	60	−10	·598	−·061	3·7	+2·5	0	0	0	0	0	0	0·13	6·65	−6·52	0	Kurrachee.
	2	2	3	9	10	3		S 15° W	6·1	4·0	+53		53	+ 6	·516	+·067	1·0	+0·1	0	0·30	−0·30	0	0·09	−0·09	2·32	10·12	−7·80	0	Bikaner.
	4	1	6	3	4	1	2	S 26° E	4·5	3·7	+22	4·2	47	− 7	·465	−·013	0·1	−1·0	0	0·20	−0·20	0	0·07	−0·07	4·51	12·49	−7·98	0	Pachpadra.
2	5	5	2	2	8	2		S 34° E	4·2			3·8	33		·316		2·3			0·30	−0·30	0	0·17	−0·17	2·71	12·43	−9·72	0	Jodhpur.
													52	−6	·529	−·034	1·9	+0·6				0	0·63	−0·63					VIII.—East Rajputana, Central India and Gujarat.
6	1				1	2	11	N 36° W	2·9	3·7	−22		35	−15	·358	−·087	1·5	+0·4	0	0·50	−0·50	0	0·22	−0·22	3·68	24·48	−20·80	0	Jaipur.
1		1		1	2	4	3	N 84° W	1·9			1·5	30		·328		0·9		01	0·60	−0·60	0	0·50	−0·50	5·95	29·11	−23·16	0	Kotah.
2	1				1	2	1	N 45° W	4·5	4·7	− 4		43	− 8	·385	−·039	0·8	−0·1	0	0·40	−0·40	0	0·13	−0·13	3·66	19·27	−15·61	0	Sambhar.
	3			1	6	3	9	N 74° W	4·2	2·6	+62	3·7	41	−18?	·380	−·084	1·9	+0·9	0	0·60	−0·60	0	0·29	−0·29	6·11	20·38	−14·27	0	Ajmer.
					1	1	1	N 68° W	2·3			2·0	57		·504		1·1		0	0·80	−0·80	0			17·27			0	Udaipur.
7	2	1	1	2	4	2	5	N 34° W	7·7	6·0	+28	6·5	61	+ 1	·646	+·041	1·8	+0·7	0	0·50	−0·50	0	0·28	−0·28	6·30	13·99	−7·69	0	Bhuj.
2	4	7	1	2	7	1	3	S 73° E	10·4			10·2	61		·674		1·3		0			0			6·70			0	Jamnagar.
5	4	4	1	1	1	2	6	N 3° E	2·9	5·6	−48	2·9	51	−16	·583	−·075	1·9	+0·7	0	0·90	−0·90	0	0·49	−0·49	16·93	27·62	−10·69	0	Rajkot.*
9	4	3	7	1	1	1	4	N 38° E	8·7	2·4	+263		68	+ 2	·734	+·072	3·4	+1·1	0	0·10	−0·10	0	0·77	−0·77	6·76	17·55	−10·79	0	Veraval.
5	5	3	1	2	3	4	6	N 22° W	10·3				71		·824		2·8		0			0·01			2·36			0·01	Dwarka.
3	5	1	2		5		10	N 28° W	4·9			4·1	55	− 9	·604	−·046	3·5	+2·0	0	0·90	−0·90	0	0·29	−0·29	11·22	18·99	− 7·77	0	Bhavnagar, Para.
		1		3	7	7	1	S 58° W	0·5	1·5	−67	0·5	53	−16?	·430	−·137	1·8	0	0	1·70	−1·70	0	1·25	−1·25	14·87	42·68	−27·81	0	Nowgong
1	3	5			1	4		N 45° E	1·9	2·3	−17	1·5	51	−11	·473	−·069	2·6	+1·2	0	2·40	−2·40	0	1·43	−1·43	29·66	32·61	− 2·95	0	Indore.
5	2	2	1		4	7	5	N 55° W	5·5	7·9	−30	4·6	36	13?	·353	−·102	2·7	+1·6	0	0·90	−0·90	0	0·41	−0·41	16·12	29·10	−12·98	0	Neemuch.
3	5	7	7	4				S 81° E	4·0	5·1	−21	3·8	76	+ 3	·806	+·088	1·9	−0·1	0	2·20	−2·20	0	2·00	−2·00	19·85	43·73	−23·88	0	Surat.

data for that station are not utilized in calculating the provincial departures from normal.

derived are incomplete.

* Mean of 30 days.

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Abstract of Observations taken at 8 A.M. at 230 Stat

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.										
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Ahmedabad .	163	29·761	−·012	29·875	29·867	4th	29·621	19th	·246	80·5	98·5	+1·8	72·8	+0·7	85·7	+1·3	25·7	100·3	10 days	67·1	26th
	Deesa . .	466	29·460	+·001	29·884	29·569	5th	29·336	19th	·233	80·9	101·2	+4·3	67·9	+1·1	84·6	+2·7	33·3	104·1	4 days	62·6	24th & 25th.
2	Agra . .	555	29·344	−·009	29·870	29·479	13th	29·218	1st	·261	76·7	95·7	+2·4	69·5	+1·9	82·6	+2·2	26·2	99·5	3rd	63·9	30th & 31st.
21	Jhansi . .	858	29·053	−·005	29·877	29·172	13th	28·926	1st	·246	80·0	96·8	+3·9	72·4	+3·3	84·6	+3·6	24·4	100·3	27th & 28th.	68·1	21st & 22nd.
	IX.—Deccan.			+·002								90·3	+1·9	67·0	−0·6	78·7	+0·6	23·3				
38	Belgaum. .	2,539	27·392	+·002	29·878	27·492	30th	27·228	17th	·204	72·5	84·4	+1·3	65·6	+0·6	75·0	+1·0	18·8	89·3	2nd & 9th.	57·9	28th
	Sholapur .	1,590	28·339	0	29·889	28·423	5th	28·221	18th	·202	77·9	93·2	+3·3	69·8	+1·7	81·5	+2·5	23·4	97·7	1st	61·6	27th
	Poona . .	1,840	28·092	−·011	29·960	28·173	5th	27·975	18th	·198	73·9	92·0	+3·5	67·4	+0·9	79·7	+2·2	24·6	98·0	4th	57·9	29th
	Bijapur . .	*1,948*	27·985	+·005	29·886	28·069	5th	27·873	17th	·196	76·7	90·4	+2·2	69·0	+1·2	79·7	+1·7	21·4	96·9	1st	62·7	24th
40	Malegaon .	1,430	28·497	−·011	29·889	28·592	5th	28·373	19th	·219	78·9	95·2	+4·6						98·9	3rd		
	Ahmednagar .	2,154	27·802	+·005	29·905	27·894	5th	27·688	18th	·206	77·6	92·6	+4·5	66·2	+1·6	79·4	+3·1	26·4	97·9	1st	60·0	23rd & 28th.
	Akola . .	930	29·001	+·003	29·895	29·100	5th	28·868	18th	·232	76·0	94·0	+2·7	64·3	−1·9	79·2	+0·4	29·7	97·4	27th	55·4	25th & 26th,
	Amraot .	1,215	28·713	+·007	29·895	28·811	5th	28·621	18th & 19th,	·190	76·8	91·8	+1·2	67·7	−0·5	79·8	+0·4	24·1	95·2	27th & 28th,	59·5	25th
42	Khandwa .	1,044	28·884	+·005	29·902	28·983	4th	28·772	19th	·211	75·7	93·6	+2·5	63·7	−2·6	78·7	−0·1	29·9	96·7	27th & 28th,	56·6	24th
	Hoshangabad †	1,006	28·936	+·005	29·927	29·038	5th	28·838	19th	·200	71·8	89·3	−0·3	64·1	−2·8	76·7	−0·6	25·2	92·3	26th	57·3	24th, 25th & 26th
	Nagpur . .	1,025	28·899	+·013	29·898	29·004	5th	28·811	19th	·193	74·7	91·5	+1·4	66·4	−2·0	79·0	−0·3	25·1	96·1	29th	57·7	26th & 27th,
43	Chanda . .	*634*	29·295	+·013	29·887	29·417	4th	29·218	19th	·199	75·5	90·5	+0·4	66·0	−2·5	78·3	−1·1	24·5	94·2	28th	59·1	27th
	Seoni . .	2,033	27·899	+·004	29·902	28·005	5th	27·812	19th	·193	74·1	88·7	+2·1	64·0	−0·2	76·4	+1·0	24·7	91·8	27th & 30th.	59·0	24th, 25th & 26th,
	Jubbulpore .	1,327	28·593	+·004	29·911	28·696	5th	28·488	1st	·208	69·7	88·5	+1·1	61·2	−2·8	74·9	−0·9*	27·3	91·4	4 days	53·3	31st
	Saugor‡ .	1,807	28·116	−·001	29·892	28·219	13th	28·014	1st	·205	76·4	89·4	+1·8	66·7	+1·0	78·1	+1·4	22·7	92·4	26th & 27th,	60·6	20th
49a	Sutna . .	1,040	28·857	−·011	29·880	28·967	13th	28·730	1st	·237	73·6	91·5	+3·6	64·4	−1·3	78·0	+1·2	27·1	95·0	28th	56·7	31st
44	Raipur . .	970	28·947	+·005	29·884	29·055	5th	28·863	19th	·192	75·7	89·1	+0·8	69·3	−0·4	79·2	+0·2	19·8	93·7	16th & 28th,	63·4	25th
	Pendra . .	2,123?	27·882		29·886	27·989	4th	27·782	1st	·207	72·8	86·3		63·3		74·8		23·0	90·8	28th	59·1	21st
	Sambalpur .	486	29·426	−·006	29·869	29·541	13th	29·322	24th	·219	76·3	89·0	+0·2	70·8	−1·1	79·9	−0·5	18·2	91·1	4th & 5th.	62·6	30th
39	Aurangabad .	1,905	28·040		29·887	28·155	6th	27·923	19th	·232	79·5	92·6		66·6		79·6		26·0	96·9	3rd	59·2	24th
	Indur . .	1,260	28·674		29·895	28·728	19th	28·569	1st	·159	78·4	89·9		69·0		79·5		20·9	92·8	6th	63·2	28th & 31st.
	Bidar . .	*2,165*	27·793		29·905	27·903	5th	27·680	1st & 18th,	·223	77·4	87·1		69·5		78·3		17·6	89·7	18th, 27th & 28th.	64·0	28th
8	Gulbarga .	1,503	28·413	?	29·876	28·506	4th	28·314	19th	·192	76·9	91·6	+1·5	68·5	−0·6	80·0	+0·5	23·1	96·4	1st	58·3	27th
	Raichur . .	1,326?	28·588	+·003	29·872	28·674	5th	28·496	17th	·178	77·7	90·1	+1·1	71·7	−0·5	80·9	+0·3	18·4	95·6	1st	63·1	28th
	Hyderabad (Deccan).	1,690	28·233	+·004	29·886	28·328	5th	28·131	18th	·197	75·7	85·2	+1·6	68·9	+0·8	79·1	+1·2	20·3	92·4	28th	61·2	26th
	Hanumkonda .	871	29·032		29·858	29·136	5th	28·920	19th	·216	78·2	91·2		71·0		81·1		20·2	94·0	6th, 28th & 29th.	62·2	27th
	X.—West Coast.			−·004								86·2	+0·3	75·6	+0·8	80·9	+0·6	10·6				
37	Bombay .	37	29·887	−·011	29·864	29·959	30th	29·767	18th & 19th,	·192	81·4	89·4	+1·9	78·1	+1·6	83·8	+1·8	11·3	94·5	9th	75·0	30th
	Ratnagiri .	110	29·808	+·004	29·858	29·880	27th	29·693	17th	·187	79·3	87·8	−0·4	75·1	+1·1	81·5	+0·4	12·7	95·3	9th	71·9	30th
	Mormugao .	*60*	29·874	+·002	29·869	29·946	26th	29·748	16th	·198	79·5	85·9	−0·1	76·2	+0·6	81·1	+0·3	9·7	91·0	8th	73·4	23rd
	Goa . .	199	29·720	?	29·858	29·799	23rd	29·603	16th	·196	80·1	85·5	+0·2	77·1	+1·6	81·4	+0·9	8·4	91·5	8th	73·0	27th
	Karwar . .	44	29·892	+·006	29·869	29·957	27th	29·775	17th	·182	87·1	85·4	0	74·7	+1·3	80·1	+0·7	10·7	90·3	8th	71·5	23rd
33	Cochin . .	10	29·925	−·009	29·863	29·986	23rd	29·875	16th	·111	79·3	87·6	+1·4	74·8	+0·2	81·2	+0·8	12·8	91·3	4th & 5th.	72·2	15th
	Calicut . .	27	29·907	−·008	29·864	29·977	23rd	29·838	17th	·139	78·5	86·3	+0·1	74·7	+0·2	80·5	+0·2	11·6	90·8	5th	71·2	22nd
	Mangalore .	65	29·871	−·007	29·863	29·946	23rd	29·768	16th	·178	79·1	84·7	−1·0	74·8	+0·2	80·0	−0·4	9·9	93·7	8th	71·4	23rd
	Trivandrum .	198	29·733	−·007	29·864	29·806	23rd	29·672	11th	·134	78·2	83·3	+0·6	75·2	0	79·2	+0·3	8·1	88·0	2nd & 5th.	72·0	15th & 16t

N. B.—Elevations in italics indicate barometrical determinations.

† Observations of 29 days.
‡ „ „ 30 „
* Mean „ 30 „

Note 1.—When a query is inserted against any reading or in the returns of any, 42, and

Note 2.—The data from which divisional means of the figure columns Nos. 40, stat

—continued.

India, Burma, etc., in October, 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (also uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st October 1905	Normal rainfall for period, 1st May to 31st October.	Departure from normal of period, 1st May to 31st Oct ber 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
3	5	8	1	4	2		5	N 61° E	2·8			2·3	52	− 2	·559	−·002	2·5	+0·5	0	0·80	− 0·80	0	0·77	−0·77	42·19	32·56	+ 9·63	0	Ahmedabad†
2	7	11	4	5	1	1		S 85° E	5·8	6·7	− 13		48	− 2	·475	−·012	1·2	−0·1	0	0·45	−0·45	0	0·28	−0·28	19·62	23·61	− 3·99	0	Deesa.
	1		3	1	13		5	S 48° W	2·8	3·0	− 7	3·3	42	−15	·391	−·106	1·0	+0·2	0	0·60	+0·60	0	0·38	− 0·38	8·48	26·81	−18·33	0	Agra.**
				2	8	4	4	S 68° W	3·7	2·6	+42	4·5	53	+ 1	·548	+·051	0·9	0	0	0·90	−0·90	0	0·64	− 0·64	16·03	36·73	−20·70	0	Jhansi.
													64	−5	·574	−·034	2·5	−0·4				1·42	2·73	−1·23					IX.—Deccan.
		5	4	1	1			S 57° E	8·0	10·5	−24		31	+ 1	·645	+·020	4·7	+0·2	8	3·70	− 0·70	3·45	5·96	− 2·51	27·37	45·85	−18·48	0·85	Belgaum.
	8	5	11		2		5	E	9·5	7·4	+28	9·4	58	− 5	·536	−·025	2·9	−1·5	7	4·70	+2·30	5·35	4·16	+ 1·19	14·47	28·57	−14·10	1·67	Sholapur.
	1	8	5		2	4	2	S 49° E	7·3	5·8	+26		70	− 1	·575	−·026	3·3	−0·5	9	5·60	− 1·60	3·82	4·40	− 0·58	24·69	25·82	− 1·13	2·05	Poona.
3	5	8	5	2	1	3	4	N 70° E	4·4			4·2	75	+ 1?	·691	+·031	3·1	−0·9	8	6·60	+1·40	3·72	4·80	− 0·77	11·40	21·94	− 10·54	1·25	Bijapur.
3	3	2		1		9	6	N 47° W	5·4	4·5	+20	6·2	43	− 20	·433	−·142	1·8	−1·3	0	3·00	− 3·00	0	2·42	− 2·42	13·19	23·04	− 9·85	0	Malegaon.
2		2	7	6			12	S 69° W	6·1			7·4	55	−13	·518	−·082	2·3	−0·4	2	5·20	− 3·20	3·15	2·14	+ 1·01	12·95	20·27	− 7·32	1·65	Ahmednagar.
	3	6	4			2	6	N 53° E	3·4	3·3	+ 3	3·0	58	− 6	·525	−·045	3·1	+0·6	0	2·70	− 2·70	0	2·74	− 2·74	19·01	31·74	−12·73	0	Akola.
5	11	7		1	2	4	1	N 38° E	2·4††	2·9	−17	2·2	53	− 8	·492	−·070	2·5	0	0	2·40	− 2·40	0	2·33	− 2·33	21·19	32·36	− 8·17	0	Amraoti.
							3	N 45° W	5·2	2·9	+79	4·0	54	− 8	·489	−·052	1·4	−0·5	0	2·00	− 2·00	0	1·45	− 1·45	27·69	30·13	− 2·44	0	Khandwa.
1	9	3	1	1	3	2	1	N 51° E	1·5	1·5	0	1·5	72	+ 1?	·572	−·017	2·1	0	0	2·10	− 2·10	0	1·75	− 1·75	49·00	50·24	− 1·24	0	Hoshang-abad.
9	6			2			1	N 10° E	4·6	4·3	+ 7	3·6	63	− 2	·552	−·043	1·7	−1·1	0	3·10	− 3·10	0	2·43	− 2·43	49·20	46·43	− 2·77	0	Nagpur.
6	4							N 19° E	2·2	2·3	− 4	2·0	84	+12	·756	+·093	1·7	−0·9	0	2·70	− 2·70	0·09	2·00	− 1·91	38·90	51·88	−12·98	0·05	Chanda.
5	9	2		1	5	4	5	N 15° W	3·7	3·1	+19	3·1	55	−11	·461	−·101	2·0	−0·3	0	2·80	− 2·80	0·04	2·03	− 1·99	42·17	51·75	− 9·58	0·04	Seoni.
1	1	3	13	9	3		1	S 29° E	1·6	2·1	−24	1·4	79	+ 4?	·582	−·024	0·9	−1·1	0	2·20	− 2·20	0·06	1·86	− 1·80	42·51	56·44	−13·93	0·06	Jubbulpore.
	2	3	1		11	5	1	S 53° W	4·2	2·7	+56	3·7	43	−17	·396	−·114	1·7	+0·2	0	2·10	− 2·10	0	1·27	− 1·27	24·66	46·11	−21·45	0	Saugor.
2	1	1			1	5	3	N 56° W	1·2	4·3	−72	1·1	61	− 5	·517	−·053	3·9	+2·3	0	2·10	− 2·10	0·02	2·45	− 2·43	27·21	43·00	−15·79	0·02	Sutna.
3	2	3			2	1	2	N 10° E	1·4	3·8	−63	1·7	73	+ 1	·652	−·002	2·4	−1·0	0	3·10	−3·10	0	2·09	− 2·09	43·50	48·21	− 4·71	0	Raipur.
	1	1		3	3		7	N 44° W	3·0			2·6	62		·506		2·1		1			0·60			31·28			0·54	Pendra.
	6	11	8	2	3	1		S 72° E	3·9	2·0	+95	3·8	78	0	·719	−·030	2·2	−0·4	2	3·60	−1·60	0·62	1·92	− 1·30	55·43	64·10	− 8·67	0·44	Sambalpur.
	3	12	2		1			N 82° E	7·7			7·6	42		·454		2·0		0	3·40	−3·40	0	2·36	− 2·36	11·36	28·66	−17·28	0	Aurangabad
							8	N 45° W	4·5			3·8	62		·604		1·8		0	2·90	−2·90	0	2·09	− 2·09	33·95	37·14	− 3·19	0	Indur.
	5	4	8	2	5	3	2	S 51° E	5·2			4·4	64		·603		3·2		5	4·40	+0·60	2·99	3·07	− 0·08	27·19	36·21	− 9·02	0·85	Bidar.
	3	15				3		N 82° E	7·5			6·6	72	+ 2	·671	+·028	3·0	−0·6	4	5·00	−1·00	4·90	3·09	+ 1·81	27·92	29·35	− 1·43	1·96	Gulbarga.
		2	12		4	1	5	S 22° E	11·5			10·9	68	− 3	·652	−·021	3·3	−0·1	4	4·20	−0·20	6·25	4·31	+ 1·94	27·67	28·64	− 0·97	3·12	Raichur.
	2	4				1		N 72° E	2·9			2·8	71	− 4	·636	−·032	2·3	−0·3	3			1·54	2·71	− 1·17	22·47	28·45	− 5·98	0·60	Hyderabad (Deccan).
				3			3	N 87° W	3·2			2·8	67		·656		3·1		0	4·10	−4·10	0·18			21·05			0·07	Hanumkonda
													85	−1	·844	+·005	5·2	+0·4				9·88	7·48	+2·40					X.—West Coast.
10	11	6	1					N 80° E	7·5	9·8	−23		82	0	·865	+·020	4·7	+1·3	0	2·70	−2·70	0·20	2·24	− 2·04	32·54	74·45	−41·91	0·09	Bombay.
3	12	9	1	1				S 79° E	8·5	7·7	+10	8·5	84	+ 6?	·835	+·030	3·7	0	8	5·00	+3·00	6·05	4·47	+ 1·58	54·90	106·61	−51·71	1·49	Ratnagiri.
2	3	2	6	7	5	1		S 68° W	7·6				89	− 1	·894	+·004	5·3	+1·3	7			4·26	6·17	− 1·91	65·45	91·18	−25·73	2·30	Mormugao.
11	11	1	4	2				N 85° E	7·2				82	− 3	·840	−·013	5·1	+1·1	6			5·32	5·42	− 0·10	59·91	96·66	−36·75	2·11	Goa.
10	6			3	4			N 49° E	4·5				88	− 1	·811	−·002	5·5	+1·5	7	8·50	−1·50	9·39	7·26	+ 2·13	88·02	120·97	−32·95	5·36	Karwar.
13	12	3		1				N 70° E	6·2				83	− 2	·834	−·017	5·4	−0·3	14	14·80	−0·80	22·32	13·92	+ 8·40	86·61	98·96	−12·35	6·55	Cuncin.
8	10		1	1				N 71° E	6·5			6·5	86	0	·842	+·006	5·1	−0·6	17	11·80	+5·20	14·32	9·75	+ 4·57	105·26	104·12	+ 1·14	3·00	Calicut.
6	15	1	1			1		N 83° E	4·6	2·7	+70		87	0	·868	+·024	5·7	−0·2	14	10·30	+3·70	15·18	7·55	+ 7·63	137·90	119·04	+18·86	2·61	Mangalore.
				1	1	11		N 31° W	4·6				83	− 1	·807	−·003	6·5	−0·3	14	11·90	+2·11	11·85	10·49	+1·36	64·32	46·63	+17·69	2·19	Trivandrum.

the data for that station are not utilized in calculating the provincial departures from normal.

4 are derived are incomplete.

** Wind observations of 30 days.

†† Mean of 28 days.

Tab

Abstract of Observations taken at 8 A.M. at 230 Stati

Number of district.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	XI.—South India.			+·001								88·4	+0·8	72·5	0	80·7	+0·4	16·2					28
57	Pamban .	37	29·877	−·004	29·841	29·945	31st	29·798	17th	·147	81·5	88·7	+1·6	77·8	+0·5	83·3	+1·1	10·9	92·8	3rd	73·7	12th	1
	Tinnevelly .	168	29·758	+·004	29·857	29·818	31st	29·669	15th	·129	81·4	93·3	−0·4	75·9	−0·7	84·6	−0·6	17·4	100·3	1st	71·9	6th & 9th	2
	Madura .	447	29·477	+·013	29·862	29·541	31st	29·415	17th	·126	80·5	91·2	−0·1	74·7	+0·7	83·0	+0·3	16·5	96·4	1st & 3rd.	71·0	9th	2
	Periyakulam .	944	28·979		29·871	29·033	31st	28·914	16th	·119	77·1	90·1		71·4		80·4		18·7	98·9	1st	66·7	25th	3
34	Salem . .	940	29·090	−·007	29·887	29·057	4th, & 31st.	28·932	16th, & 17th.	·125	78·3	91·4	+1·8	71·6	+0·5	81·5	+1·2	19·8	99·2	2nd	63·9	28th	3
	Coimbatore .	1,348	28·575	−·003	29·882	28·639	5th	28·501	16th	·138	75·4	88·2	−0·1	69·9	−0·7	79·1	−0·4	18·3	94·4	1st.	61·8	22nd	3
35	Mercara .	3,781	26·294	+·008	26·177	26·296	26th	26·174	16th	·122	66·7	77·0	+1·2	61·5	−0·7	69·3	+0·3	15·5	82·0	1st & 6th	56·1	27th	2
36	Chitaldroog .	2,405	27·532	−·006	29·877	27·589	5th	27·447	17th	·142	74·7	85·6	+1·0	68·0	+0·2	76·8	+0·6	17·6	93·1	1st	62·4	30th	3
	Bangalore .	3,021	26·951	−·005	29·898	27·008	4th	26·878	17th	·130	71·4	82·5	+1·1	64·9	−0·3	73·7	+0·4	17·6	89·3	3rd	58·9	28th	3
	Hassan . .	3,091	26·892	+·002	29·909	26·943	26th	26·818	17th	·125	70·7	82·8	+1·5	63·8	−0·5	73·4	+0·5	19·0	89·8	1st	56·7	30th & 31st.	3
	Mysore . .	2,518	27·442	−·002	29·912	27·492	26th	27·375	17th	·117	71·7	84·8	+0·7	66·7	−0·3	75·8	+0·2	18·1	91·5	1st	61·4	22nd	3
56	Negapatam .	31	29·872	−·011	29·832	29·937	6th	29·794	15th	·143	80·3	89·8	+1·4	76·8	+0·9	83·3	+1·2	13·0	96·9	1st	74·0	9th & 13th.	2
	Cuddalore .	37	29·875	+·002	29·842	29·954	5th	29·793	15th	·161	79·6	88·3	+0·2	75·1	+0·4	81·7	+0·3	13·2	93·7	29th	70·2	28th	2
	Trichinopoly .	255	29·668	+·004	29·857	29·728	31st	29·594	18th	·134	80·4	91·8	+0·8	74·5	+0·2	83·2	+0·5	17·3	98·6	1st & 2nd	70·9	31st	2
	Pudukkottai .	318	29·608		29·660	29·673	31st	29·542	18th	·131	79·7	89·7		74·7		82·2		15·0	95·6	1st	70·2	16th	2
	Madras . .	22	29·891	−·003	29·844	29·962	5th	29·791	15th	·201	80·0	88·6	−0·4	74·9	−0·2	81·8	−0·3	13·7	94·0	29th	66·5	28th	2
	Vellore . .	707	29·207		29·862	29·297	5th	29·126	15th	·171	77·9	82·8		71·3		77·1		11·5	93·4	2nd	61·2	28th	3
55	Nellore . .	52	29·850	+·010	29·845	29·953	5th	29·771	15th	·182	80·0	91·1	−0·1	74·6	−1·2	82·9	−0·7	16·5	97·3	29th	69·1	28th & 29th.	2
	Masulipatam .	15	29·906	+·018	29·856	30·008	5th	29·811	19th	·197	82·4	90·6	+1·7	75·7	−0·3	83·2	+0·7	14·9	95·1	29th	69·1	28th	2
54	Cuddapah .	433	29·484	+·002	29·860	29·561	5th	29·409	18th	·152	79·3	92·6	+0·7	72·6	−1·6	82·6	−0·5	20·0	101·7	1st	64·4	27th & 28th.	3
	Kurnool .	945	28·984	−·006	29·861	29·063	5th	28·898	17th, & 18th.	·165	77·2	91·7	+0·8	70·3	−0·7	81·0	+0·1	21·4	97·2	1st	61·0	26th & 27th.	3
	Bellary . .	1,475	28·436	−·007	29·868	28·508	4th, 5th & 6th.	28·348	18th	·160	76·9	91·9	+2·2	70·9	+3·0	81·4	+2·6	21·0	97·0	1st	62·7	28th	3
52	Cocanada .	26	29·887	+·008	29·849	29·991	5th	29·783	20th	·208	81·2	88·9	+1·0	75·9	+0·1	82·4	+0·6	13·0	94·1	20th	69·5	31st	2
	Waltair (Vizag.)	***226***	29·686	+·008	29·854	29·797	5th	29·581	20th	·216	81·8	88·3	?	75·9	?	82·1		12·4	91·4	26th	70·4	27th & 31st	2
	Gopalpur .	72	29·834	+·002	29·848	29·950	4th	29·718	24th	·232	79·5	88·0	+0·4	71·6	+0·4	81·3	+0·4	13·4	91·2	19th	67·0	30th & 31st.	2
	XII.—Hill Stations.																						
48	Pishin . .											77·6		41·5		59·6		36·1	82·3	5th	34·0	4 days	4
	Quetta . .	5,502	24·732	+·004	24·692	24·861	13th	24·635	11th	·226	54·9	76·8	+2·2	39·7	+1·4	58·3	+1·8	37·1	82·2	5th & 6th.	31·8	17th	5
	Kalat . .										62·7	78·4	+4·7	33·1	+3·5	55·8	+4·1	45·3	87·0	4th	24·9	29th	6
	Chaman . .	4,311	25·778	−·021	25·740	25·901	13th	25·684	20th	·217	59·9	78·8	+0·1	52·2	+1·5	65·6	+0·8	26·6	85·8	6th	43·1	29th & 30th.	4
30	Leh . .	11,503	19·794	+·014	19·762	19·892	5th	19·671	28th	·221	39·8	57·9	−0·7	31·4	+1·5	44·7	+0·4	26·5	64·6	8th	23·9	25th	4
	Srinagar. .	5,204	24·971	−·014	24·945	25·132	13th	24·861	28th	·271	49·1	71·6	+1·9	43·6	+3·8	57·6	+2·9	28·0	78·1	4th & 5th.	36·1	31st	4
	Sonemarg .	***8,764***	21·946		21·914	22·061	13th	21·849	28th	·212	34·5	58·6		29·8		44·2		28·8	70·4	11th	24·1	29th & 31st.	4
	Skardu . .	***7,505***	22·162		22·932	23·057	13th	22·825	27th	·232	48·7	65·5		40·9		53·2		24·6	71·9	7th	33·1	31st	3
	Dras . .	***10,059***	20·881		20·849	20·987	13th	20·759	28th	·228	38·9	58·8		28·6		43·7		30·2	66·4	8th	21·1	31st	4
	Gilgit . .	4,890	25·232		25·205	25·355	13th	25·140	1st & 28th.	·215	60·8	75·7	+1·8	52·8	−0·3	64·3	+0·8	22·9	86·8	6th	46·6	29th	4
32	Chitral . .	***5,486***									49·8	79·8		44·9		62·4		34·9	88·2	2nd	37·0	28th	5
	Killa Drosh .	4,700 ?									57·3	80·3		53·8		67·1		26·5	86·6	2nd	47·5	29th	3
	Para Chinar .	6,000	24·493		24·460	24·678	13th	24·298	28th	·380	60·2	75·9		49·0		62·5		26·9	80·5	6th	43·2	29th & 30th.	3

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading, or in the returns of any statio

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42 and 44 ar

NOTE 3.—The barometric readings are not reduced to sea-level in the cases of hill or plate

ontinued.

ıdia, Burma, etc., in October, 1905—continued.

Wind Direction. Number of winds from							Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st October 1905.	Normal rainfall for period, 1st May to 31st October.	Departure from normal of period 1st May to 31st October 1905.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
												80	0	·762	0	4·9	−0·8				8·79	7·59	+1·30					XI.—South India.
		4	6	5	4	3	S 40° W	7·8			8·3	86		·922		4·5		10	9·50	+0·50	15·10	8·63	+ 6·47	16·13	11·59	+ 4·54	4·91	Pamban.
3			3	8	10		N 47° W	3·7			3·6	75	+ 3	·807	+·031	5·4	−0·4	8	8·40	−0·40	11·25	6·30	+ 4·95	16·40	10·28	+ 6·12	3·11	Tinnevelly.
7				2	9		N 8° W	4·6	2·9	+59	5·3	78	+ 4	·813	+·057	5·5	−0·3	9	11·40	−2·40	9·38	8·61	+ 0·77	21·65	23·25	− 1·60	4·84	Madura.
3		4	1	1			S 25° E	2·0			2·2	78		·724		3·9		11	10·60	+0·40	10·66	7·55	+ 3·11	22·26	16·47	+ 5·79	3·77	Periyakulam.
5	4		6	5	1		N 24° W	3·4	2·8	+21	3·0	79	− 2	·775	−·006	5·0	−0·9	12	9·50	+2·50	5·50	6·72	− 1·22	25·05	32·20	− 7·15	0·84	Salem.
5	2	1	7	6	6	1	S 11° W	4·9	3·5	+40	4·5	81	− 6	·718	−·056	4·6	−1·1	11	9·40	+1·60	11·09	5·98	+ 5·11	17·59	13·58	+ 4·01	3·72	Coimbatore.
5	5	3	2	2	2	2	N 36° E	3·1	3·6	−14	2·5	84	− 4	·552	−·031	5·3	−1·3	14	13·00	+1·00	9·66	8·61	+ 1·05	98·82	118·93	−20·11	1·84	Mercara.
2	5	5		3	7	5	N 83° W	6·2			5·4	77	+ 1	·665	+·020	4·7	−1·4	6	7·70	−1·70	4·79	3·28	+ 1·51	15·29	21·00	− 5·71	1·73	Chitaldroog.
5	8	2	2	5	7	1	S 33° E	7·1	4·0	+78	6·3	80	− 3	·617	−·010	5·9	−0·2	11	9·30	+1·70	8·97	6·36	+ 2·61	30·20	29·28	+ 0·92	3·06	Bangalore.
5	6	4	2	3	4	1	S 63° E	2·8			2·5	86	+ 4	·652	+·026	7·2	+0·1	12	9·50	+2·50	7·62	6·64	+ 0·98	23·43	28·72	− 5·29	2·25	Hassan.
4	4	1	1	11	6	3	S 63° W	6·8			7·3	84	+ 1	·650	−·009	6·7	−0·3	7	9·40	−2·40	5·06	6·98	− 1·92	19·32	25·01	− 5·69	1·54	Mysore.
			2	2	10	9	N 74° W	6·8	3·7	+ 84	6·0	85	+ 4	·835	+·023	6·3	−0·1	11	11·00	0	11·77	11·65	+ 0·12	20·64	23·75	− 3·11	4·48	Negapatam.
		2	4	5	4	5	W	2·4			3·0	86	−2?	·873	−·039	5·4	−0·6	15	10·00	+5·00	24·07	11·66	+12·41	37·77	29·01	+ 8·76	4·50	Cuddalore.
				4	7	1	N 83° W	1·9	3·8	−50		80	0	·824	+·021	4·5	−1·8	9	9·70	−0·70	5·28	7·15	− 1·87	13·30	21·16	− 7·86	1·85	Trichinopoly.
			1	3	2	11	N 27° W	5·5*			5·3*	81		·823		5·4		12			6·39						1·47	Pudukkottai.
	2		3	6	10	4	N 88° W	4·6	5·0	− 8		89	+ 6	·914	+·041	5·5	−0·2	12	12·50	−0·50	19·65	11·45	+ 8·20	27·69	28·93	− 1·24	5·05	Madras.
		1		1	2	3	N 72° W	2·0			2·0	79		·730		4·2		9	9·30	−0·30	12·05	7·51	+ 4·54	34·00	28·18	+ 5·82	5·73	Vellore.
	1	1	3	5	6	10	N 73° W	4·3				81	0	·835	−·045	5·7	+0·2	9	8·70	+0·30	19·86	7·33	+12·53	31·24	20·14	+11·10	8·49	Nellore.
	3	1	2	1	1	5	N 10° E	5·5	4·4	+25	4·8	77	− 7	·850	−·032	3·8	−1·4	4	8·60	−4·60	3·20	8·42	− 5·22	22·19	32·95	−10·76	1·12	Masulipatam.
	3	8		3	2	5	N 71° E					74	− 1	·746	−·032	4·4	−0·5	9	6·76	−2·30	7·69	5·78	+ 1·91	23·54	26·73	− 3·19	1·64	Cuddapah.
	5		2	4	4	3	N 72° W	4·7				77	+ 4	·723	+·016	4·0	−0·1	4	5·90	−1·90	3·72	4·01	− 0·29	26·05	25·81	+ 0·24	2·43	Kurnool.
	6	7	1	1	4	4	S 62° E	4·5	4·3	+ 5	4·0	69	+ 1	·649	+·014	3·8	−1·9	5	6·70	−1·70	2·57	4·27	− 1·70	13·74	16·65	− 2·91	1·40	Bellary.
						5	N 18° E	6·1			5·1	78	+ 1	·839	+·039	3·3	−1·5	5	9·40	−4·40	1·98	8·72	− 6·74	18·04	31·64	−13·60	0·81	Cocanada.
	3	3	1	6	2	1	N 41° E	8·2				69	− 6	·746	−·064	4·3	−0·5	6	8·20	−2·20	2·04	10·23	− 8·19	27·54	34·39	− 6·85	0·81	Waltair (Vizag.)
			1	1		13	N 21° W	8·4	6·3	+33	8·2	77	− 5	·780	−·039	2·1	−2·4	2	7·90	−5·90	1·31	9·41	− 8·10	28·45	40·50	−12·05	0·66	Gopalpur.
																												XII.—Hill Stations.
																		0	0·20	−0·20	0	0·09	− 0·09	0·12	0·55	− 0·43	0	Pishin.
							Calm	0·5	3·0		0·5	48	+ 4	·219	+·028	0·2	−0·2	0	0·20	−0·20	0	0·09	− 0·09	0	2·41	− 2·41	0	Quetta.
	2		10		3		N 9° W					30		·173				0	0·30	−0·30	0	0·08	− 0·08	0	1·73	− 1·73	0	Kalat.
	11	6	3	5	3		S 50° E	6·7			7·4	40	+ 9	·207	+·026	0·1	−0·5	0	0·10	−0·10	0	0·04	− 0·04	0	0·32	− 0·32	0	Chaman.
	7		5	1	1	1	N 63° E	2·2				41	−12	·103	−·019	2·1	−0·3	0	0·10	−0·10	0·05	0·22	− 0·17	1·96	1·75	+ 0·21	0·04	Leh.
	5	9	5	3			S 35° E	2·3			2·1	85	− 3	·302	+·020	1·3	−1·1	3	2·70	+0·30	0·57	0·84	− 0·27	10·91	11·25	− 0·34	0·22	Srinagar.
	2						N 75° E	2·7			2·5	91		·184		0·8		4			1·81			40·49			0·80	Sonemarg.
	2		2	2	2		S 15° W	2·5			2·5	53		·204		1·6		0	0·10	−0·10	0·01	0·02	− 0·01	4·81	2·95	+ 1·86	0·01	Skardu.
	1						E	5·5			4·4	69		·166		0·9		0	3·10	−3·10	0·08	0·99	− 0·91	12·44	6·45	+ 5·99	0·08	Dras.
	1				2		N 45° W	1·6			1·4	43	− 4	·233	+·005	2·8	−0·6	0	0·30	−0·30	0·08	0·20	− 0·12	4·88	2·55	+ 2·33	0·08	Gilgit.
		1	3				S 14° E	2·8			2·5	68		·246		1·2		0			0			3·93			0	Chitral.
	16		1				S 89° E					59		·281		0·6		0			0·03			2·84			0·03	Killa Drosh.
							Calm	3·7			3·4	37		·197		0·5			1·00	−1·00	0·06	0·37	− 0·31	8·76	12·83	− 4·07	0·06	Para Chinar.

for that station are not utilized in calculating the provincial departures from normal.
re incomplete.
the elevations of which exceed 3,200 feet.

* Mean of 24 days.

Tab

Abstract of Observations taken at 8 A.M. at 230 Statio

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
32	Cherat . .	*4,256*	25·764	+·011	25·732	25·925	13th	25·636	1st	·289	65·4	79·3	+0·7	58·3	+1·1	68·8	+0·9	21·0	87·4	1st	51·0	28th & 29th	36
29	Murree . .	6,333	23·924	+·005	23·892	24·040	13th	23·809	28th	·231	59·1	68·4	−0·9	51·4	−1·9	59·9	−1·4	17·0	72·0	5th, 6th, & 7th	41·0	12th	31·
	Kailang . .	*10,087*	20·989		20·944	21·012	31st	20·946	26th	·066	40·1	61·1	+0·7	31·9	+0·4	46·5	+0·6	29·2	67·5	7th	28·3	29th	39·
	Poo . .											61·4		42·2		51·8		19·2	64·5	7th	38·4	28th	26·
	Simla . .	7,224	23·180	+·003	23·142	23·292	13th	23·094	1st	·198	55·9	63·7	+1·3	51·5	+0·5	57·6	+0·9	12·2	66·6	2nd	47·8	12th	18·
	Sarain . .		23·225			23·340	13th	23·142	1st	·198	47·1	64·8		41·6		53·2		23·2	67·7	8th	37·6	29th	30·
	Kalabagh . .		20·178			20·281	5th	20·098	1st	·183	42·2	48·4		36·6		42·5		11·8	54·4	1st	32·1	28th	22·
	Chakrata . .	7,022	23·343	+·003	23·303	23·353	13th	23·245	1st	·208	56·0	68·5	+2·3	51·4	+0·5	60·0	+1·4	17·1	72·0	27th	46·3	15th	25·
25	Ranikhet . .	6,069	24·155	+·001	24·114	24·269	13th	24·041	1st	·228	55·3	69·9	+0·7	55·0	+0·8	62·5	+0·8	14·9	73·0	1st	52·5	21st & 22nd	20·
	Muktesar . .	7,600	22·881		22·812	22·992	5th	22·785	1st	·207	55·2	66·8		49·9		58·4		16·9	69·1	1st	45·6	23rd	22·
13	Yatung . .	10,380										55·7		37·5		46·6		18·2	61·1	25th & 26th	30·1	23rd	31·0
	Darjeeling . .	7,376	23·084	−·007	23·039	23·195	13th	22·985	1st	·210	55·5	61·7	+1·2	49·6	−0·2	55·7	+0·5	12·1	64·2	5th, 9th & 24th	46·1	28th	18·1
8	Shillong (*b*). .	4,920	‖ 25·209		‖ 25·161	25·298	22nd	24·982	10th	·316	65·9	72·3		54·3		63·3		18·0	77·6	2nd	43·0	23rd	34·6
	Cherra Poonjee .	4,309	25·741		25·692	25·840	8th	25·622	26th	·218	65·9	72·3		60·2		66·3		12·1	75·7	21st	56·5	27th & 29th	19·2
50	Mount Abu . .	3,945	26·114	+·002	26·064	26·207	5th	26·022	19th	·185	73·4	80·5	+1·7	66·3	+2·0	73·4	+1·9	14·2	83·2	14th & 23rd	60·4	30th	22·8
42	Pachmarhi . .	3,528	26·501	+·009	26·443	26·609	5th	26·415	17th	·194	70·6	80·1	+2·0	56·6	−3·1	68·4	−0·6	23·5	83·1	27th	52·2	31st	30·9
34	Wellington . .	6,200	24·261	−·001	24·195	24·314	5th	24·209	16th & 19th.	·105	62·9	70·7	+1·6	53·5	−1·3	62·1	+0·2	17·2	76·2	2nd	46·2	21st	30·0
	Ootacamund . .	*7,322*	23·041		22·977	23·101	4th	23·001	15th & 17th	·100	57·0	64·4		49·4		56·9		15·0	68·0	2nd	42·7	4 days	25·3
57	Kodaikanal . .	7,088	22·836		22·771	22·880	26th	22·781	15th	·099	56·5	63·6		51·4		56·5		12·2	69·0	1st & 2nd	46·4	30th	22·6
	XIII.—Extra India.																						
	Trincomalee . .	12	29·903	+·012	29·841	29·957	8th & 31st	29·837	15th & 16th	·120	78·8	88·9	+0·5	76·0	+0·5	82·5	+0·5	12·9	95·0	29th	73·5	30th	21·5
	Colombo . .	40	29·899	−·017	29·865	29·968	23rd	29·820	11th	·148	79·5	85·4	−0·3	75·0	−0·4	80·2	−0·4††	10·4	87·5	4 days	72·5	10th	15·0
	Meshed . .	3,104									57·9	71·3		46·3	+1·7	58·8		25·0	77·5	8th & 9th	35·0	29th	42·5
	Ispahan†† . .	*5,817*	24·369			24·500	13th & 26th	24·210	20th	·290	56·5	80·1**	+2·5	48·1**	+3·9	64·1††	+3·2	32·0	86·4	2nd	43·3	30th & 31st	43·1
	Bushire§§ . .	14	29·917	−·028	29·890	30·038	25rd	29·753	20th	·285	79·0**	87·9	+0·1	72·0**	+0·8	80·0**	+0·5	15·9	92·6	8th	66·6	18th	26·0
	Bahrein§§ . .	30	29·929			30·049	23rd	29·829	19th	·220	83·4	90·3		79·2		84·8		11·1	95·4	2nd	72·8	30th	22·6
	Jask . .	13	29·935	−·001	29·906	30·041	26th	29·813	19th	·228	82·0	89·7	−1·0	75·2	−0·3	82·4	−0·7	14·5	97·3	12th	68·2	22nd	29·1
	Muscat . .	20	29·927	−·023	29·894	30·039	13th	29·794	20th	·245	83·3	93·9	+3·1	79·8	−1·3	85·9	+3·4	14·1	100·3	11th	77·1	17th	23·2
	Baghdad . .	220	29·817	−·008	30·015	30·000	23rd	29·639	20th	·361	70·5	86·1	+3·3	67·1	+4·9	81·6	+4·1	29·0	106·0	1st	56·0	31st	50·0
	Aden . . .	94	29·861	−·012	29·836	29·920	22nd	29·755	3rd	·165	85·1	90·2	0	77·6	−0·1	83·9	−0·1	12·6	93·3	13th	74·4	27th & 30th	18·9
	Perim . . .	201	29·734	0	29·869	29·788	23rd	29·686	20th	·102	85·3	91·2	+0·1	81·3	+0·8	86·3	+0·5	9·9	94·5	4th	80·0	23rd	14·5
	Kabul . . .		24·325		24·294	24·505	6th	24·132	16th	·373	60·6	81·4	+6·2	41·4P	0P	61·5P	+3·1P	40·0P	87·4	6th	33·7	29th	53·7
	Kashgar . .	4,255	25·756§			26·000	29th	25·510	11th	·490	48·2	72·4	+3·6	43·2	+1·1	57·8	+2·4	29·2	85·6	24th	29·9	31st	55·7
	Amini Divi . .	13									81·9	86·8	+1·6	76·9	+0·4	81·8	+1·0	9·9	90·0	10th	72·8	25th	17·2
	Zanzibar . .	72	29·985	−·030	29·984	30·066	5th	29·908	25th	·158	78·7	85·0	+1·8	75·7	+0·4	80·4	+1·1	9·3	88·9	17th	74·0	2nd & 6th	14·9
	Do. Dunga	*154*	29·948		30·031	30·025	5th	29·858	25th	·167	76·2	85·1		68·5		76·9		16·6	89·3	28th	65·5	2nd & 7th	23·8
	Penang (*a*) .	20	29·930		29·875	29·951	13th & 25th	29·903	17th & 27th	·048	80·5	88·0		73·0		80·5		15·0	90·0	7th, 18th & 23rd	70·0	28th	20·0
	Singapore (*a*) .	10	29·957		29·868	29·987	13th & 14th.	29·924	30th	·063	84·2	89·1		73·8		81·5		15·3	91·8	29th	72·2	20th	19·6

†† Aneroid uncorrected.
(*a*) 9 hours' observations.
(*b*) All observations are doubtful.
‖ Mean of 25 days.
* " " 30 "
** " " 29 "
§§ Observations of 30 days.
§ Mean of 26 days.
†† " " 28 "
‡ " " 27 "
N.B.—Elevations in italics indicate barometrical determinations.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill

ncluded.

dia, Burma, etc., in October, 1905—concluded.

Wind Direction. Number of winds from							Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Station.
E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct. per 1905.	Normal rainfall for period 1st May to 31st October.	Departure from normal of period, 1st May to 31st October 1905.	Heaviest rainfall during month.	
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
	1			3	4	N 21° W	4·5			4·3	43	+ 7	·272	+·048	0·7	−0·2	2			0·30	0·09	+ 0·21	7·00	11·92	− 4·92	0·20	Cherat.
					2	N 14° W	4·9	5·7	−14	5·3	42	0	·211	+·007	0·7	−0·6	3	3·30	−0·30	0·48	1·32	− 0·84	41·03	38·90	+ 2·13	0·25	Murree.
3	14	8	4	1		S 27° E	1·3				47		·119		1·1		0			0	0·45	− 0·45	8·58	8·77	− 0·19	0	Kailang.
	1	1	1	2		S 63° W									1·2		0			0	0·75	− 0·75	3·52	3·77	− 0·25	0	Poo.
	1	1			3	N 5° W	3·9	2·5	+56	3·7	44	− 5	·197	− ·011	0·3	− 0·5	0	1·30	−1·30	0	0·98	− 0·98	36·87	52·27	−15·40	0	Simla.
		5	3			S 9° W	2·0			1·9	65		·209		0·2		1			0·60			28·12			0·60	Sarain.
		9	1	5	9	S 43° W	8·4			7·3	44		·119		0·1		0			0·03			37·51*			0·03	Kalabagh.
						N	5·4	5·1	+ 6	6·5	55	− 5	·242	−·042	0·2	− 0·8	0	1·20	−1·20	0	0·78	− 0·78	39·40	57·33	−17·93	0	Chakrata.
			2	6		S 56° W	2·5	1·7	+47	2·9	54	−13	·277	−·055	0·4	−0·6	0	1·50	−1·50	0	1·49	− 1·49	29·84	45·43	−15·59	0	Ranikhet.
4	1	1	1	18		N 85° W	7·5			7·0	46		·204		0·7		0			0			26·08			0	Muktesar.
																	4	5·43	−1·43	2·76	2·60	+ 0·16	40·37	40·48	− 0·11	2·04	Yatung.
1	6	1	1	1	2	S 76° E	2·6	2·6	0	2·4	83	− 6	·369	−·011	5·5	−0·2	4	4·87	−0·87	7·10	4·35	+ 2·75	144·54	116·18	+28·36	6·15	Darjeeling.
5	4		3			S 56° E	1·1			1·2	78		·170		3·3		10	9·10	+0·90	13·11	5·65	+ 7·46	87·20	71·23	+15·97	4·74	Shillong.
2			1	3		N 12° E	3·2			2·8	80		·507		4·2		10	8·20	+1·80	50·15	13·59	+36·56	473·59	38·06	+85·53	15·30	Cherra Poonjee.
1		2	7	1	3	N 17° W	4·4	4·0	+10	4·4	36	− 8	·291	−·043	1·5	+0·4	0	0·50	−0·50	0	0·69	− 0·69	38·34	60·45	−22·11	0	Mount Abu.
4	2	1	4	2	6	N 20° E	2·7	2·9	− 7	2·8	54	− 1	·407	−·017	1·2	−1·4	0	3·30	−3·30	0	2·18	− 2·18	78·17	73·48	+ 4·69	0	Pachmarhi.
3	2					N 66° E	2·5	2·6	− 4		74	− 4	·428	−·015	5·7	−0·2	15	14·80	+0·20	19·11	11·06	+ 8·05	44·57	31·34	+13·23	4·82	Wellington.
13	2	1		6	2	N 83° E	4·0			3·8	71		·333		5·0		13	13·70	−0·70	10·32	8·57	+ 1·75	41·17	35·76	+ 5·41	1·42	Ootacamund.
7	1	1	3	5	4	N 7° E	12·3				78		·356		4·8		14	16·20	−2·20	15·36	12·49	+ 2·87	43·82	39·55	+4·27	3·80	Kodaikanal.
																											XIII.—Extra India.
		23	2			S 48° W	5·0				87	+ 3	·867	−·019	2·8	−0·6	7			3·74	7·14	− 3·40	14·37	22·28	−7·91	2·05	Trincomalee.
3	5		9	10	1	S 59° W	6·6	7·3	−10		87	+ 7	·886	+·031	5·6	−0·6	18			16·73	14·80	+ 1·93	45·37	47·70	−2·33	2·13	Colombo.
											75		·362		1·1		0			0·05	0·42		1·43			0·05	Meshed.
				2	1	N 72° W	1·0			1·4	53		·246		1·7		0			0	0·21	− 0·21	0·26	0·38	−0·12	0	Ispahan.
7	9	1	1			S 82° E	6·9	6·5	+ 6	7·3	72	+10	·712	+·039	1·1	+0·1	0			0	0·08	−0·08	0·24	0·08	+0·16	0	Bushire.§§
3	1	1	1	1	10	N 7° W	3·3			2·9	82†		·946		0		0			0			0			0	Bahrein.§§
11	1				9	N 37° E	9·3			8·0	61	− 1	·701	−·038	2·5	+2·0	0			0	0·04	−0·04	0	0·17	−0·17	0	Jask.
	1			1	4	N 56° W	2·8			2·9	62	− 4	·714	−·041	1·1	+0·8	0			0·01	0·02	−0·01	0·01	0·42	−0·41	0·01	Muscat.
	1				7	N 30° W	2·0*	2·3	−13	2·6	49		·364		1·9		0			0	0·04	−0·04	0·05	0·37	−0·32	0	Baghdad.
9	3		1	3	4	N 53° E	9·3	12·2	−24	7·5	64	− 4	·767	+·026	1·1	−1·0	0			0	0·01	− 0·01	1·24	0·51	+0·73	0	Aden.
8	12	11				S 40° E	16·6			16·8	67		·840		1·0		0			0	0·07	−0·07	0·02	0·91	−0·89	0	Perim.
4	1	2	1		4	N 43° E					44		·237		0·5	+0·2	0			0	0·32	−0·32	0·47	1·48	−1·01	0	Kabul.
	2		1		3	W	0·5			0·5	63		·203		2·4		0			0	0·05	−0·05	2·17	3·06	−0·89	0	Kashgar
			6	2	5	N 69° W					79		·856		6·3		11			7·81	6·01	+1·80	56·65	43·74	+12·91	2·10	Amini Divi.
2	18	9	2			S 29° E	5·0			4·7	84		·829		5·8		7			5·70	2·99	+2·71	27·46	21·35	+6·11	1·56	Zanzibar.
1	3	1	1			S 27° E	3·8‖‖			3·6	89		·804		6·6		5			2·11			22·64			0·69	Do, Dunga.
5	2	5			3	N 71° E	10·4								1·6		16			16·85			47·27			2·58	Penang.
2	19	7	2	1		S 28° E	5·4								3·6		13			4·98			31·54			1·07	Singapore.

*tations, the elevations of which exceed 3,200 feet.

‖‖ Mean of 20 days.

† Total rainfall since June 1905.

TABLE II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Stations in India, Burma, etc., in October, 1905.

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Abstract of Observations recorded at 10 A.M. and 4

Meteorological Province	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and gravity, 45° Lat.	Temperature of Air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Temperature Wet-bul Mean minimum.	Mean 10 hours.	Mean 16 hours
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burma Coast and Bay Islands.	Port Blair	61	29·886	29·787	·099	29·839	+·021	29·830	85·7	77·8	7·9	89·5	75·8	13·7	83·6	83·7	80·5	−0·3	75·5	79·4	78·
	Rangoon	57	·873	·756	·117	·819	−·012	·813	87·5	76·7	10·8	90·5	73·4	16·1	84·2	85·0	80·4	+0·4	74·6	78·7	77·
	Diamond Island	41	·892	·779	·113	·838	−·007	·813	85·9	77·5	8·4	89·0	74·2	14·8	85·1	84·6	81·0	+0·1	74·4	79·0	77·
	Cocos Island	119	·811	·701	·110	·758		·809	87·3	77·8	9·5	90·6	74·1	16·5	83·6	83·8	81·3		75·0	79·2	79·
	Akyab	20	·909	·799	·110	·855	−·008	·817	87·3	77·1	10·2	90·9	73·2	17·7	83·1	84·9	81·5	−0·1		79·3	79·
Bengal and Orissa.	Chittagong	87	·834	·726	·108	·778	−·010	·813	86·1	74·0	12·1	89·0	68·3	20·7	82·5	83·4	79·5	0	71·8	77·5	77·
	Calcutta (Alipore)	21	·687	·782	·105	·831	−·009	·798	87·4	74·9	12·5	90·9	63·9	22·0	83·7	85·4	80·7	+0·7	73·4	77·4	76·
	Saugor Island	25	·852	·776	·116	·824	−·009	·793	87·2	77·2	10·0	92·3	70·5	21·8	83·6	84·2	81·0	+0·6	74·7	78·2	77·7
	False Point	21	·898	·796	·102	·842	−·004	·805	86·5	74·9	11·6	90·5	70·1	20·4	83·3	84·5	79·5	−0·3	73·8	77·3	77·6
Gangetic Plain and Chota Nagpur.	Hazaribagh	2,007	27·898	27·814	·084	27·863	+·001	·810	84·9	66·8	18·1	87·9	61·3	26·6	80·6	82·0	75·1	+0·8	62·5	67·0	66·8
	Allahabad	309	29·598	29·489	·109	29·537	−·019	·798	93·5	64·2	29·3	96·7	57·5	39·2	85·2	92·1	77·3	−0·3	62·0	70·0	68·9
Upper Sub-Himalayas.	Debra Dun	2,233	27·682	27·606	·076	27·634	−·018	·824	84·7	59·2	25·5	87·0	53·3	33·7	76·5	80·6	71·1	+0·4	54·9	63·5	61·8
	Roorkee	899	28·996	28·892	·104	28·934	−·021	·798	90·7	58·3	32·4	94·0	50·5	43·5	80·4	87·8	72·7	−0·8	56·6	66·9	66·1
	Lahore	702	29·188	29·099	·089	29·133	−·016	·800	94·0	61·5	32·5	97·6	55·1	42·5	82·6	91·7	76·3	+0·6	59·0	70·6	74·5
	Ludhiana	812	·068	28·992	·076	·019	−·023	·797	93·4	64·0	29·4	97·0	59·2	37·8	80·6	92·0	77·1	+1·2	59·6	64·2	65·3
N.W. Rajputana.	Peshawar	1,110	28·814	·710	·104	28·751	−·023	·844	88·7	58·5	30·2	94·8	49·8	45·0	80·3	85·6	72·2	+0·8	51·7	64·0	65·9
	Jacobabad	186	29·653	29·561	·092	29·605	−·065	·739	101·5	62·9	38·6	105·6	54·0	51·6	94·3	95·7	80·9	+1·7	56·0	70·6	72·2
	Kurrachee	30	·903	·803	·100	·851	−·012	·831	95·8	71·7	24·1	104·3	64·6	39·7	89·7	90·1	82·4	+2·4	64·9	72·5	75·5
General India and Gujrat.	Jaipur	1,431	28·507	28·411	·096	28·453	−·006	·817	97·2	66·6	30·6	100·2	60·0	40·2	90·0	94·6	80·6	+2·7	54·7	65·8	67·0
	Udaipur	1,925?	·033	27·935	·098	27·979		·824	93·2	64·7	28·5	96·0	58·2	37·8	87·0	91·7	78·9		58·4	70·6	73·0
	Deesa	466	29·169	29·359	·110	29·409	−·008	·818	101·1	67·9	33·2	104·0	62·4	41·6	92·1	98·4	84·4	+2·6	59·6	69·5	68·5
	Jamnagar	61	·880	·760	·120	29·817		·823	96·3	73·0‡	23·3	101·1	67·8	33·3	89·9	93·1	83·5‡		66·5	73·0	72·1
	Belgaum	2,539	27·397	27·292	·105	27·345	−·001	·790	84·4	65·7	18·7	89·5	58·1	31·4	78·3	81·5	73·8	+0·9	64·4	68·6	69·1
	Sholapur	1,590	28·342	28·207	·135	28·277	−·005	·794	93·0	69·8	23·2	97·3	61·6	35·7	85·0	89·8	80·1	+2·4	63·7	69·6	69·8
	Akola	930	29·008	·861	·127	·946	0	·813	94·2	64·3	29·9	97·2	55·2	42·0	86·3	92·0	78·4	+0·5	59·4	70·8	69·1
	Buldana	2,132	27·817	27·716	·101	27·761	−·011	·807	87·8	65·2	19·6	90·6	59·4	31·2	84·1	85·8	76·9	+1·2	59·5	67·4	66·2
	Khandwa	1,044	28·893	28·776	·117	28·836	0	·826	93·7	63·7	30·0	96·9	56·6	40·3	86·4	91·8	78·2	0	58·7	69·3†	67·3
	Nagpur	1,025	·907	·794	·113	·852	+·017	·826	91·7	66·4	25·3	96·1	57·7	38·4	83·6	90·0	78·2	−0·2	62·1	70·1	69·1
	Do. (Sanitary Commr.'s Office)	1,013	·915	·796	·119	·857		·823	91·1	66·6	24·5	94·6	57·4	37·2	84·1	89·3	78·0		62·3	70·6	69·2
	Hyderabad (Deccan)	1,690	·242	·128	·114	·187	+·011	·810	89·2	68·9	20·3	92·3	61·1	31·2	82·4	85·7	77·9	+1·1	65·7	70·5	70·3
Konkan.	Bombay	37	29·893	29·789	·104	29·838	−·009	·815	89·7	78·1	11·6	94·7	74·9	19·8	84·1	86·0	82·6	+1·9	74·7	77·3	78·7
	Karwar	44	·900	·790	·110	·846	+·004	·823	85·4	74·7	10·7	90·3	71·5	18·8	81·8	83·8	78·8	+0·7	73·1	76·5	77·7

‡ Mean of 27 days. § Mean of 28 days. ‖ Mean of 29 days. † Mean of 30 days.

4 Stations in India, Burma, etc., for October, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
													Total number of 10 hours and 16 hours winds from																	
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																								%	%						
·919	·922	·922	—·005	89	83	80	86	— 2	6·4	7·2	6·8	+0·4		1	6	7	6	8	14	13	7	S 48° W	S 1° W	27	26	183*	151	10·27	5·41	Port Blair.	Burma Coast and Bay Islands.
·910	·865	·886	—·019	91	78	72	85	— 4	6·5	6·9	6·7	+0·8	2		6	5	11	19	2	6	11	S 6° E	S 36° E	26	30	45*	70	6·28	2·90	Rangoon.	
·914	·869	·871	—·009	86	75	73	80	— 5	5·3	5·9	5·6	—0·3	2	3	10	6	17	3	6	4	11	S 81° E	S 57° E	14	20	180*	180	8·31	1·31	Diamond Island	
·942	·936	·916	+·018	87	82	80	85	0	6·7	6·9	6·8	+1·4		9	4	7	8	16	4	4	5	S 29° E	S 51° E	18	17	231	¶	6·61	1·22	Cocos Island.	
·957	·925				84	77			3·8	2·9	3·4	—1·4		2	7	3	19	3	6		22	N 43° E	S 66° E	3	8	122*	60	8·43	2·26	Akyab.	
·886	·865	·835	—·017	89	79	75	82	— 3	4·8	4·2	4·5	—0·2		10	8	3	9	5	8	5	14	N 33° W	N 12° W	16	13	80*	67	6·79	1·63	Chittagong.	Bengal and Orissa.
·860	·799	·842	+·026	93	75	66	81	— 1	5·2	4·5	4·9	+0·3	3	5	8	9	2	2	16	6	11	N 68° W	N 18° W	16	11	60	67	4·78	1·55	Calcutta (Alipore)	
·894	·862	·863	+·019	89	78	74	81	0	5·2	5·1	5·2	—0·2		9	14	5		6	15	5	8	N 51° W	N 9° W	16	14	201	178	16·05	4·58	Saugor Island.	
·852	·848	·842	+·008	95	75	73	82	+ 2	6·0	5·7	5·9	+1·0		10	15	8	3	7	6	6	7	N 25° E	N 51° E	21	24	141*	144	18·56	4·57	False Point.	
·498	·472	·519	—·039	78	48	44	62	— 5	2·4	3·2	2·8	—1·7	3	12	9	5	3	3	4	7	16	N 19° W	N 30° W	37	24	106*	125	0·33	0·33	Hazaribagh.	Gangetic Plain and Chota Nagpur.
·535	·400	·491	—·126	86	44	27	56	—10	1·5	1·7	1·6	—0·6	10	4		4	2	4	8	20	10	S 85° W	N 48° W	13	19	39*	74	0	0	Allahabad.	
·527	·421	·414	—·037	75	46	40	59	— 7	0	1·0	0·5	—0·8	16	2		1	4	6	14	10	9	S 65° W	N 42° W	40	19	31	31	0	0	Dehra Dun.	Upper Sub-Himalayas.
·480	·352	·428	—·065	89	46	27	59	— 4	0	0·3	0·2	—0·7	20	1			17	3		1	20	N 89° W	S 6° E	5	7	38	31	0	0	Roorkee.	
·701	·624	·569	+·124	86	53	42	64	+12	0·5	0·8	0·7	—0·1	16	6	1	2	4	5	1	14	13	N 68° W	N 9° W	32	11	30	38	0·33	0·33	Lahore.	
·791	·277	·381	—·077	77	37	18	49	— 7	0·3	0·4	0·4	—0·6	16	1			3			22	20	N 69° W	N 41° W	58	22	19*	26	0·15	0·15	Ludhiana.	
·703	·404	·377	+·004	61	39	33	44	— 7	0·8	1·4	1·1	—0·4	48	4	5	3				1	1	N 29° E	N 54° E	16	27	13*	55	0	0	Peshawar.	Indus Valley and N.W. Rajputana.
·736	·473	·431	+·006	63	27	29	44	— 2	0·4	0·5	0·5	+0·1	15	2	2	5	1	9	17	7	4	S 44° W	S 17° W	34	7	59*	50	0	0	Jacobabad.	
·780	·690	·641	—·051	69	44	51	60	— 8	2·7	3·0	2·9	+2·1		1	7	3	1	4	17	24	5	S 76° W	S 69° W	51	64	182*	226	0	0	Kurrachee.	
·735	·318	·318	—·084	44	24	19	33	—13	0·9	1·8	1·4	—0·3		12	4	4			3	10	29	N 38° W	N 27° W	68	38	68	74	0	0	Jaipur.	E. Rajputana, C. India and Gujarat.
·755	·592	·535		68	41	39	53		1·0	1·8	1·4		27	1	4	6	3	2	7	9	3	S 59° W		10		47*		0	0	Udaipur.	
·720	·312	·392	—·056	59	29	17	39	— 7	1·2	1·6	1·4	—0·3		3	5	8	13	14	6	7	6	S 18° E	N 78° E	28	12	142	158	0	0	Deesa.	
·786	·507	·568		70‡	42	34	51		1·5	1·9	1·7			15	14	5			4	12	12	N 16° W		51		239*		0	0	Jamnagar.	
·834	·560	·590	—·009	93	61	54	74	— 2	4·2	4·7	4·5	—0·9	5	1	7	10	12	5	5	10	5	S 40° E	N 51° E	16	12	194§	230	3·45	0·85	Belgaum.	Deccan.
·785	·491	·532	—·041	71	45	36	54	— 7	3·8	5·7	4·8	—0·8		3	18	6	19		7	1	8	N 84° E	N 57° E	33	29	224*	197	5·35	1·67	Sholapur.	
·757	·410	·474	—·080	75	44	27	52	— 9	1·8	3·2	2·5	—0·6	16	6	13	11	5			1	10	N 40° E	N 18° E	39	30	70*	84	0	0	Akola.	
·756	·410	·428	—·072	59	40	33	47	—12	1·6	1·7	1·7	—1·9	1	10	16	17	5	1		3	9	N 44° E	N 24° E	52	50	110*	125	0·77	0·77	Buldana.	
·751	·366	·438	—·092	73	40‡	25	49	— 9	1·3	2·2	1·8	—0·7	29	6	11	7	1			1	7	N 27° E	N 24° E	34	35	346?	74	0	0	Khandwa	
·774	·453	·516	—·054	78	49	32	56	— 5	1·7	2·1	1·9	—1·8	3	17	18	16	2		2		4	N 41° E	N 39° E	63	50	86*	94	0	0	Nagpur.	
·835	·467	·527		78	50	34	57		1·6	2·5	2·1		43		5		2				12	N 18° W		18		14*		0	0	Do. (Sanitary Commr.'s Office)	
·719	·568	·605	—·029	84	58	46	66	— 3	3·8	4·9	4·4	+0·2	44		5	8	1			2	2	N 65° E	S 81° E	17	32	68*	94	1·54	0·60	Hyderabad (Deccan).	
·850	·890	·865	+·013	85	72	71	78	— 3	3·3	2·6	3·0	—0·1		2	9	11	6	1	2	15	16	N 25° W	N 9° E	23	32	182	218	0·20	0·09	Bombay.	West Coast.
·815	·871	·850	+·021	92	78	76	85	0	3·0	3·7	3·4	—1·0	1	1	3	1			9	30	17	N 79° W	N 75° W	74	66	107	60	9·29	5·36	Karwar.	

¶ Mean of 28½ days.

* Corrected.

Tab

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Statio

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
South India.	Periyakulam	945	28·978	28·846	·132	28·937		29·813	89·9	71·4	18·5	98·6	66·7	31·9	82·2	86·0	80·1		69·3	73·5	74·1	
	Salem	940	29·005	·873	·132	·947	−·004	·821	91·3	71·7	19·6	98·6	64·0	34·6	82·2	87·1	79·9	+1·1	70·0	75·7	77·1	
	Chitaldroog	2,405	27·834	27·421	·113	27·480	−·005	·792	85·1	68·0	17·4	90·2	62·5	27·7	79·3	82·6	75·2	+0·5	65·2	70·7	71·4	
	Bangalore	3,021	26·956	26·849	·107	26·904	−·003	·811	82·4	64·8	17·6	89·1	58·7	30·4	76·6	78·0	72·1	+0·2	63·1	68·5	68·4	
	Hassan	3,091	·898	·789	·109	·845	+·005	·815	82·6	63·9	18·7	87·8	56·7	31·1	76·8	78·1	71·8	+0·5	63·2	69·1	68·8	
	Mysore	2,518	27·413	27·323	·120	27·384	−·010	·809	84·5	66·7	17·8	90·7	61·6	29·1	77·7	81·5	74·1	0	65·6	69·3	70·0	
	Pudukkottai	318	29·612	29·486	·126	29·549		·797	89·5	74·7	14·8	94·9	70 2	24·7	83·5	86·4	82·1		72·6	76·0	76·0	
	Madras	22	·897	·781	·113	·846	+·001	·800	88·7	74·9	13·8	93·7	66·7	27·0	84·0	85·3	80·5	−0·3	74·0	78·5	78·6	
	Bellary	1,475	28·443	28·318	·125	28·384	−·015	·790	91·8	70·8	21·0	95·0	62·7	32·3	83·8	87·9	80·0	+0·9	66·3	71·6	71·5	
	Waltair	*226*	29·691	29·587	·104	29·635	+·004	·801	88·3	75·9	12·4	91·6	70·2	21·4	85·8	84·8	80·8	−0·4	71·8	75·2	75·4	
Hill Station Baluchistan.	Quetta	5,502	24·738	24·659	·079	24·690	+·001	24·650	76·7	39·7	37·0	82·0	31·8	50·2	68·3	70·9	58·2	+1·7	36·5	49·6	50·4	
Hill Stations Northern India.	Leh	11,503	19·794	19·689	·105	19·743	+·010	19·711	57·7	31·4	26·3	64·6	23·9	40·7	47·1	53·7	43·0	+0·3	27·3	34·9	38·4	
	Srinagar	5,204	24·982	24·877	·105	24·928	−·007	24·898	71·4	43·5	27·9	78·1	35·9	42·2	57·9	69·2	55·9	+2·7	41·8	53·8	61·2	
	Sarain		23·237	23·180	·057	23·201			64·8	41·6	23·2	67·7	37·6	30·1	59·7	56·6	53·2			47·7	48·1	
	Kalabagh		20·203	20·165	·038	20·176			48·4	36·6	11·8	53·4	32·1	21·3	45·4	45·0	42·5			36·3	38·3	
	Simla (Ridge)	7,224	23·196	23·148	·048	23·163	−·006	23·125	63·5	51·5	12·0	66·6	47·8	18·8	57·8	60·1	57·5	+0·8	43·3	47·0	49·0	
	Chakrata	7,022	·360	·311	·049	·330	−·005	·289	68·5	51·4	17·1	72·0	49·8	22·2	63·5	61·7	60·0	+1·4	44·3	52·2	51·4	
	Ranikhet	6,069	24·170	24·102	·068	24·127	−·005	24·086	69·8	55·0	14·8	72·4	52·4	20·0	66·4	65·9	62·4	+0·7	47·3	53·3	53·3	
	Muktesar	7,600	22·902	22·839	·063	22·862	¶	22·820	66·8	49·9	16·9	68·9	46·6	22·3	59·1	63·2	58·4	¶	41·5	48·0	51·8	
	Katmandu	4,388	25·705	25·594	·111	25·647	+·010	25·601	79·1	55·4	23·7	81·3	49·3	32·0	70·6	73·8	67·3	+0·4	55·0	63·4	64·6	
	Darjeeling	7,376	23·070	23·031†	·039	23·048	−·020	23·004	61·7	49·7	12·0	64·4	46·3	18·1	58·5	59·8	55·7	+0·5	47·8	55·7	57·5	
Central India.	Mount Abu	3,915	26·129	26·058	·071	26·087	−·003	26·038	80·4	66·3	14·1	83·4	60·6	22·8	76·9	77·9	73·3	+1·7	54·6	58·2	59·0	
	Pachmarhi	3,528	·518	·435	·083	·471	+·006	·418	80·2	56·6	23·6	83·2	52·2	31·0	76·3	77·8	68·4	−0·5	52·0†	60·2†	61·6†	
	Chikalda	3,642	·403	·315	·088	·353	+·003	·297	80·4	63·5	16·9	86·8	60·6	26·2	76·4	78·2	72·0	+0·8	56·6	63·1	64·2	
Stations, S. India.	Kodaikanal	7,688	22·849	22·775	·074	22·809		22·744	63·4	51·4	12·0	69·0	46·4	22·6	60·6	58·6	57·4		48·1	54·9	55·5	
	Ootacamund	*7,322*	23·051	·980	·071	23·014		·950	64·3	49·4	14·9	68·0	42·5	25·5	61·6	59·5	56·9		47·4	54·8	54·6	
	Dodabetta	*8,539*	22·067	·007	·060	22·035		21·972	57·8	48·0	9·8	62·5	43·8	18·7	55·8	53·9	52·9			50·6	50·2	
Extra India.	Aden		29·868	29·749	·119	29·811	−·019	29·835	90·2	77·6	12·6	93·1	74·4	18·7	87·1	89·1	82·4	0	72·1	77·4	75·5	
	Perim	201	·741	·634	·107	·690	−·003	·822	91·3	81·3	10·0	94·5	80·0	14·5	88·2	89·2	84·8	+0·6	73·6	77·3	77·9	
	Zanzibar	72	·992	·873	·119	·938	−·030	·937	84·9	75·7	9·2	88·9	74·0	14·9		84·1	78·8	+1·1	72·8		76·8	
	Port Victoria (Seychelles).	15	·997	·903	·094	·961	¶ +·006	·900	83·8	77·1	6·7	86·4	73·9	12·5	82·1	82·7	79·1	¶ +1·4	73·0	76·4	76·6	
	Mauritius (Pamplemouses).	181				·937	−·016	30·065				85·1	59·1	26·0			72·8	+0·7				

N. B.—Elevations in italics indicate barometrical determinations.

† Mean of 30 days. § Mean of three previous columns.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.

ncluded.

dia, Burma, etc., for October, 1905—concluded.

Vapour Tension.				Humidity.					Cloud.				Wind direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																								%	%						
·711	·686	·703		89	65	58	69		3·9	6·0	5·0		23	12	4	3	1	1	6	9	3	N 39° W		23		53*		10·68	3·77	Periyakulam.	South India.
·804	·802	·786	+·021	91	74	63	78	0	5·2	6·3	5·8	−0·3	5	4	7	8	5	5	10	15	3	S 60° W	S 51° W	14	26	70*	60	5·50	0·84	Salem.	
·648	·636	·641	+·043	86	65	58	73	+ 4	4·5	5·1	4·8	−1·1	3	2	10	19	7	1	4	7	9	N 66° E	N 39° E	26	15	129*	134	4·79	1·73	Chitaldroog.	
·609	·590	·603	−·005	91	67	63	77	− 1	5·5	6·0	5·8		3	4	14	12	2	4	8	11	4	N 34° E	N	11	8	150*	113	8·97	3·06	Bangalore.	
·627	·602	·615	+·017	96	68	64	79	+ 2	5·8	6·0	5·9	−1·1	7	1	14	12	5	7	8	5	3	S 76° E	N 48° E	21	42	60*	60	7·62	2·25	Hassan.	
·616	·594	·624	−·004	94	65	57	75	0	6·1	6·6	6·4	−0·9		3	13	13	7	3	10	12	1	S 73° E	N 63° E	13	12	179*	175	5·06	1·54	Mysore.	
·800	·763	·782		90	71	63	75		5·7	6·0	5·9			15	11	2	2	5	5	2	20	N 17° W		45		128		?	?	Pudukkottai.	
·906	·896	·893	+·037	96	78	75	85	+ 2	5·4	5·8	5·6	−0·4		10	10	14	6	2	10	4	6	N 51° E	N 54° E	21	20	110	115	19·65	5·05	Madras.	
·630	·578	·619	−·004	78	54	45	63	− 2	4·1	4·7	4·4	−2·3	5	4	8	20	5	2	3	7	8	N 62° E	N 40° E	26	13	95*	103	2·57	1·40	Bellary.	
·737	·752	·755	−·037	81	60	63	70	− 3	4·3	5·3	4·8	0	1	6	16	17	7	8	6		1	N 89° E	N 82° E	45	10	96		2·04	0·81	Waltair.	
·167	·157	·168	−·014	75	24	23	42	0	0·3	1·5	0·9	+0·3	41	4				1	1	7	8	N 60° W	N 60° W	26	42	16*	46	0	0	Quetta.	Hill Station, Baluchistan.
·104	·104	·107	+·003	66	31	25	41	− 1	2·5	4·8	3·7	−0·3			4	2	4	16	28	8		S 29° W	S 60° W	63	45	51	48	0·05	0·04	Leh.	
·375	·553	·347	+·045	86	77	76	80§	0	0·9	2·4	1·7	−1·0	22	4	6	2	6	1	3	2	16	N 22° W	N 23° W	21	18	52*	72	0·57	0·22	Srinagar.	Hill Stations Northern India.
·209	·250				41	55			0·5	1·4	1·0		24	1	3	1		18	12	3		S 20° W		40		45*		0·60	0·60	Sarain.	
·141	·177				46	59			0·7	2·4	1·6		16	1				11	7	17	10	S 75° W		43		175*		0·05	0·03	Kalabagh.	
·213	·236	·214	−·022	52	41	45	48	− 5	0·7	0·8	0·8	−0·6	17	27	1		1	3	1	3	9	N 16° W	N 24° W	50	16	92*	108	0	0	Simla (Ridge).	
·275	·274	·260	−·019	58	47	50	53	− 7	0·2	1·3	0·8	−0·9	15			2	45					S 2° E	S 51° W	74	32	152*	149	0	0	Chakrata.	
·275	·280	·266	−·058	57	43	44	49	−13	0·3	0·4	0·4	−1·4	18		1				21	18	4	S 72° W	S 57° W	60	50	67*	53	0	0	Ranikhet.	
·224	·269	·222		50	44	47	48		1·1	2·3	1·7		8	1			1	2	12	37	1	S 78° W		74		170*		0	0	Muktesar.	
·508	·505	·480	+·004	97	68	60	76	+ 1	2·1	2·8	2·5	−1·5	5		1	25	1		3	24	3	W	S 86° W	3	34	10	16	0·12	0·07	Katmandu.	
·418	·452	·393	+·023	88	85	87	88	+ 3	5·8	6·4	6·1	+0·1	24		6		4	1	5	5	17	N 56° W	S 88° W	26	15	58*	79	7·10	6·15	Darjeeling.	
·273	·283	·285	−·048	46	29	30	38	− 8	1·4	2·4	1·9	+0·1	2	6	6	5	10	3	15	5	10	S 64° W	N 46° W	12	13	117*	118	0	0	Mount Abu.	
·334†	·365†	·348	−·081	75†	37†	39†	53	− 9	1·1	2·0	1·6	−1·8	3	6	16	14	5		3	3	12	N 37° E	N 30° E	40	28	67*	77	0	0	Pachmarhi.	Hill Stations, Central India.
·428	·441	·419	−·039	65	47	46	56	− 7	3·2	4·4	3·8	+0·4	6	16	15		12		4		9	N 24° E	N 3° E	39	40	202*	146	0	0	Chikalda.	
·380	·412	·366		80	72	84	79		4·6	6·1	5·4		1	13	9	7	5	1	1	5	18	N 3° W		43		292		15·36	3·80	Kodaikanal.**	Hill Stations, S. India.
·362	·378	·345		87	66	74	76		5·5	7·0	6·3		1	6	6	25	3	2	2	10	7	N 57° E		29		102*		10·32	1·42	Ootacamund.	
·319	·327				71	78			5·4	7·2	6·3			10	13	13	5	3	3	7	8	N 34° E		32		382		13·78	1·33	Dodabetta.	
·815	·700	·789	+·027	75	63	51	69	0	0·6	0·2	0·4	−1·3			15	9	14	2	17	1	4	S 53° E	S 78° E	27	55	180*	307	0	0	Aden.	Extra India.
·798	·808	·822	−·023	68	59	58	68	− 3	0·2	0·5	0·4	−0·8¶					34	28				S 25° E	S 85° E	92	80	404*	444	0	0	Perim.	
	·823			86		70				4·4					2	6	5	9	6	1	1	1	S 65° E	S 6° E	48	47	114*	120	5·70	1·56	Zanzibar.	
·840	·838	·826	+·032	81	76	74	79	− 2	4·8	5·5	5·2	−1·0¶	4		2	7	39	7	1	1	1	S 45° E	S 39° E	76	54	202	187	0·48	0·28	Port Victoria (Seychelles).	
		·580	+·028				72	+ 2			5·4	−0·3										S 78° E	S 78° E			223	264	2·06	0·40	Mauritius (Pamplemouses).	

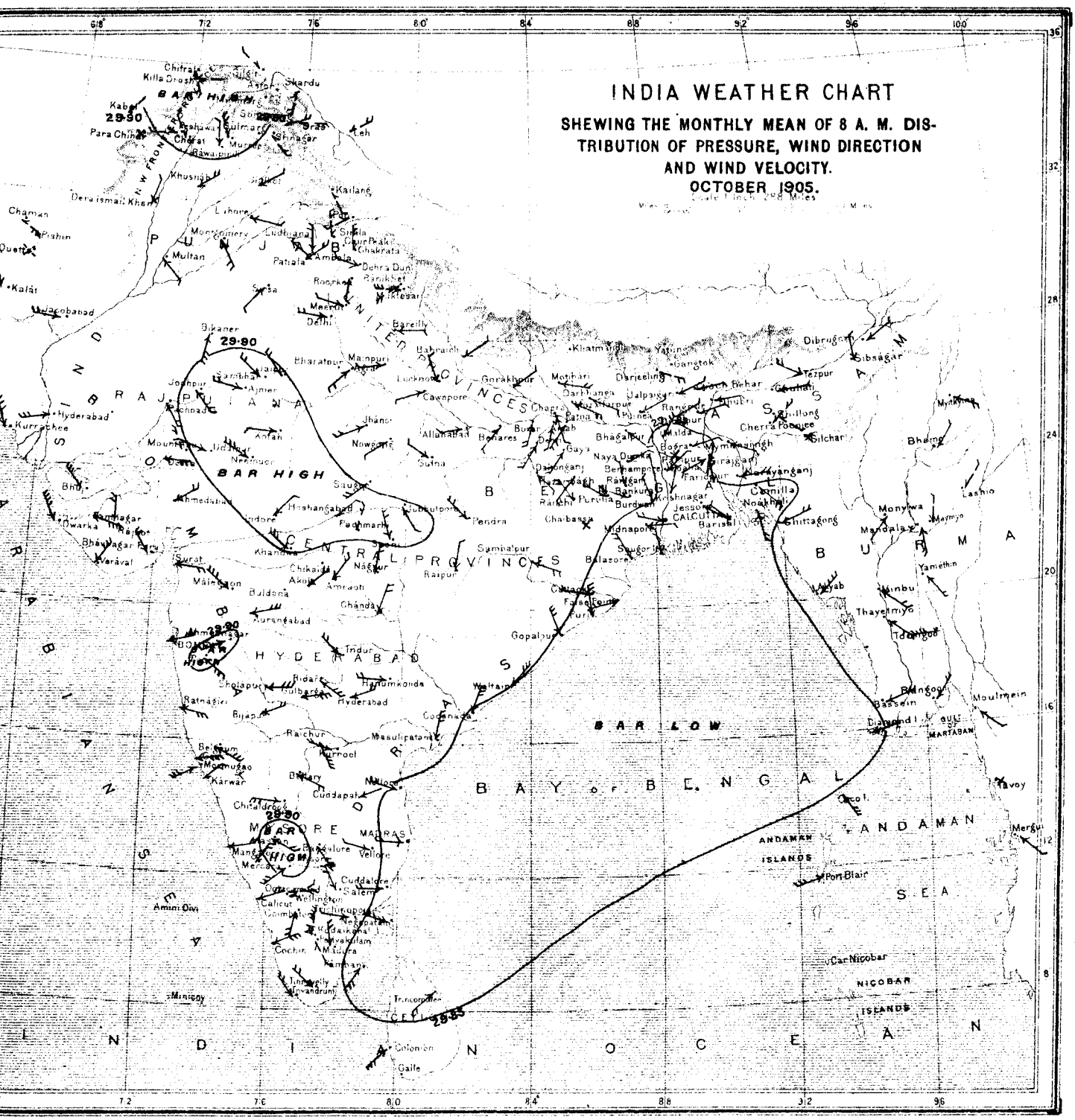
* Corrected.

‖ Mean of 29½ days.
¶ Departures from old normals.

** Wind variable 2.

†† Mean of 30¾ days.

G. I. C. P. O.—No. 142 Meteor.—1-5-05—385.



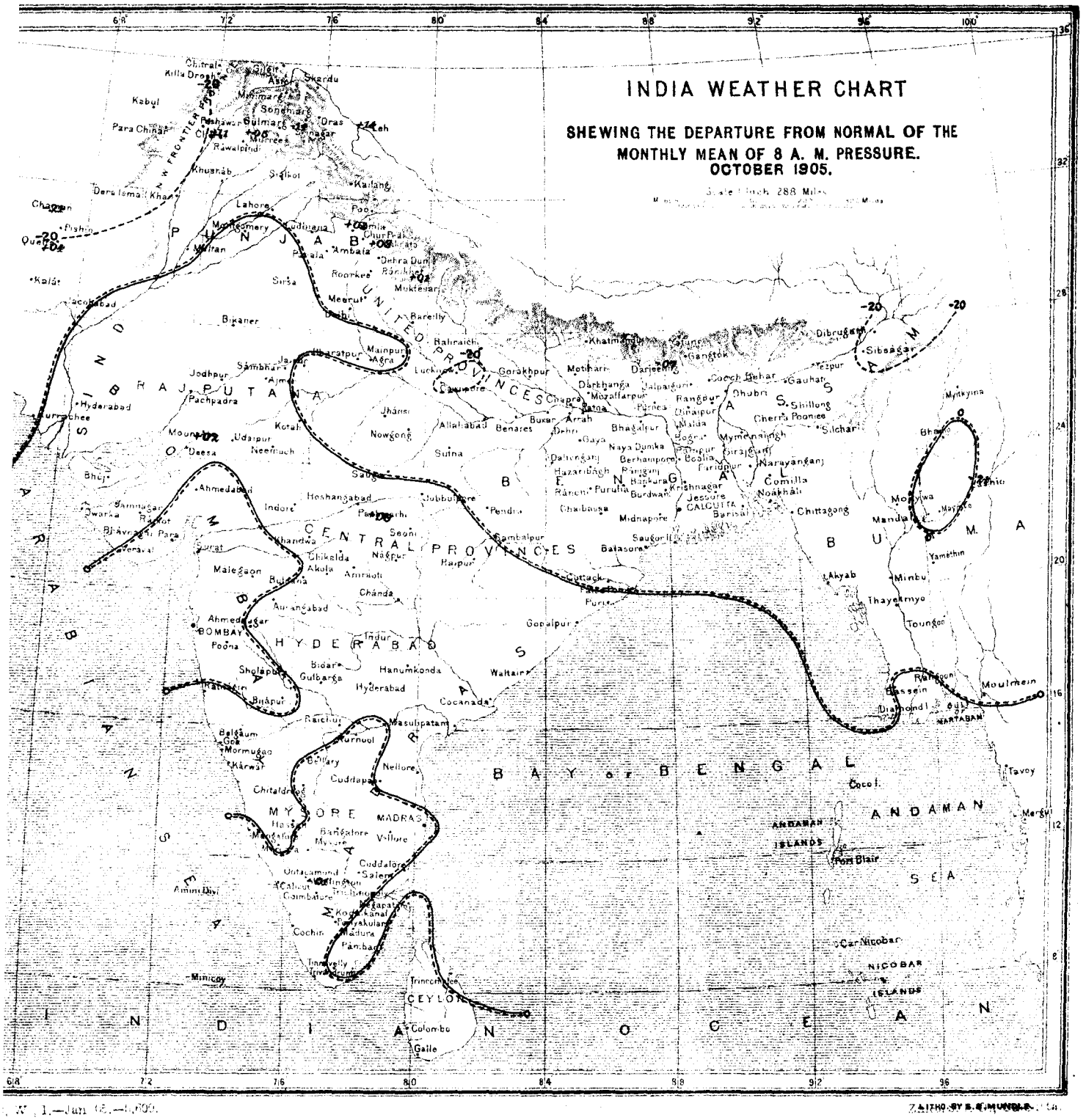
V, I—Jan. 06.—5,600

LITHO. BY S. E. MUNDLE, Zinco. S. I. O., Calcutta.

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric sure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the e observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of bert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are cated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the th is shewn by the following notation:—

Velocity of	0 to 2 miles per hour	...	one	feather added to the wind arrow.
,, ,,	2 to 5 ,, ,, ,,	...	two	feathers ,, ,, ,, ,,
,, ,,	5 to 10 ,, ,, ,,	...	three	,, ,, ,, ,, ,,
,, ,,	10 to 20 ,, ,, ,,	...	four	,, ,, ,, ,, ,,
	over 20 ,, ,, ,,	...	five	,, ,, ,, ,, ,,



The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal amounts of departure. The numbers are given in thousandths of an inch, 20 representing '020' or two hundredths of an inch, &c. Continuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted lines that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuous and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative departures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

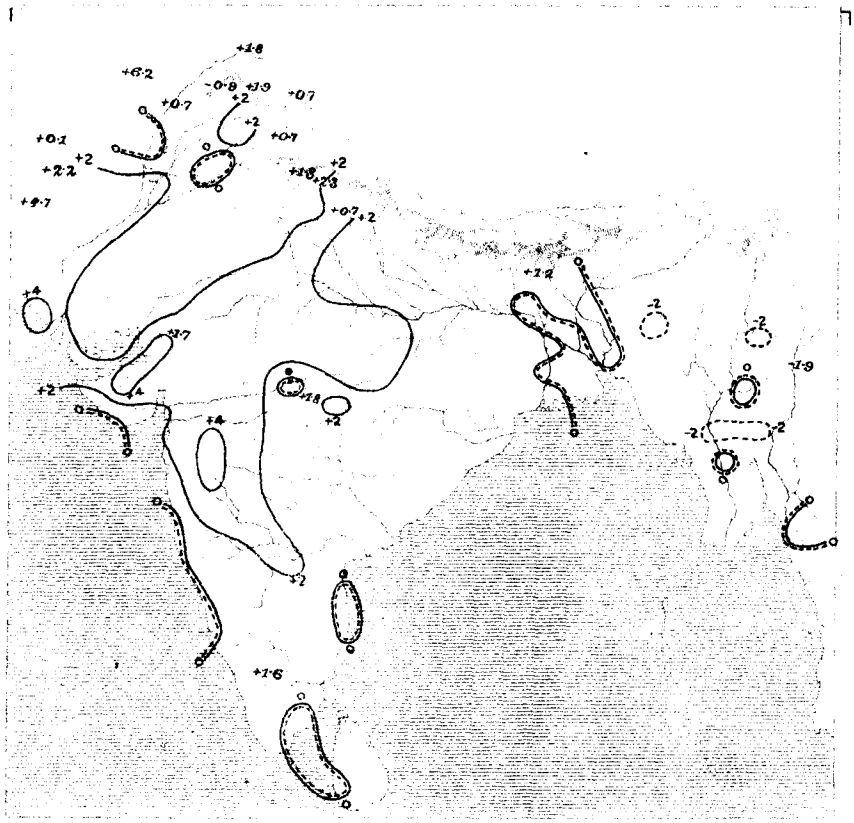
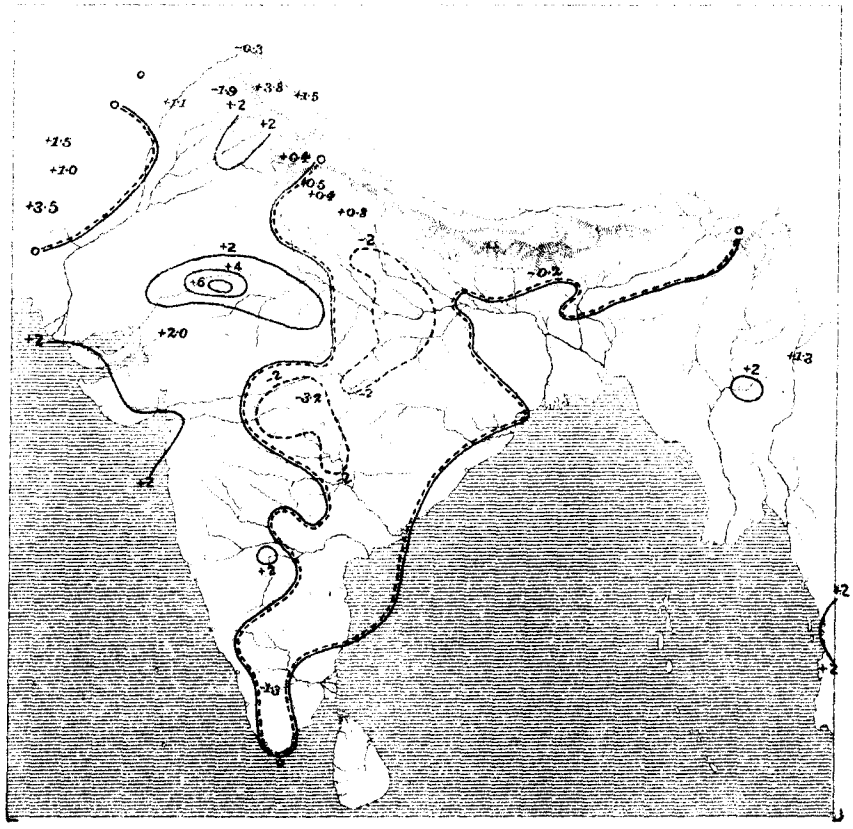


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S. G. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

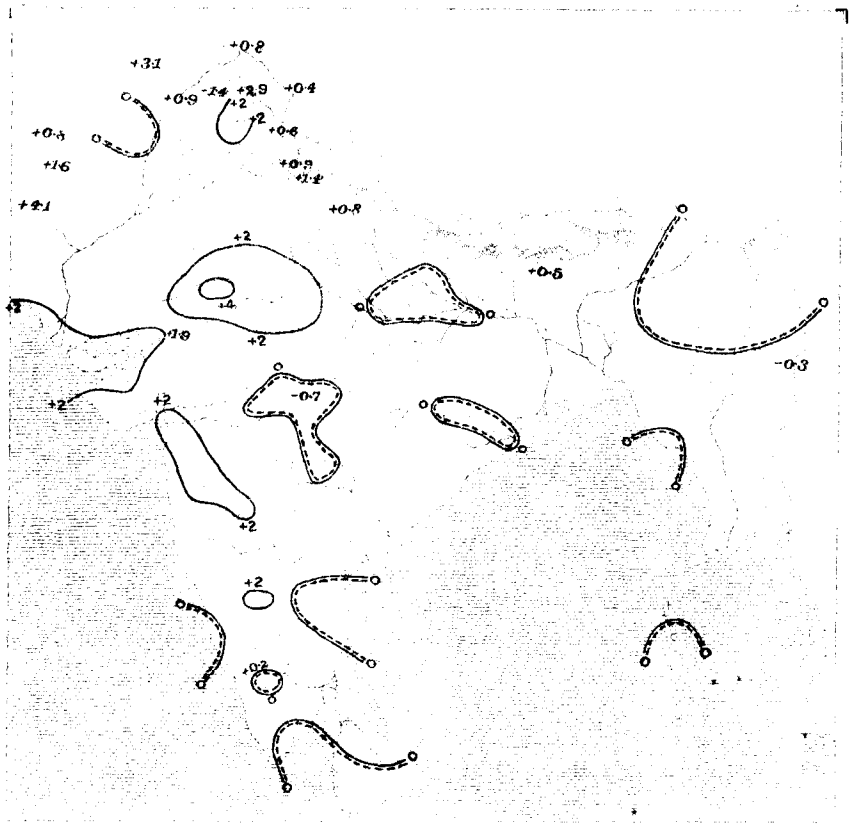
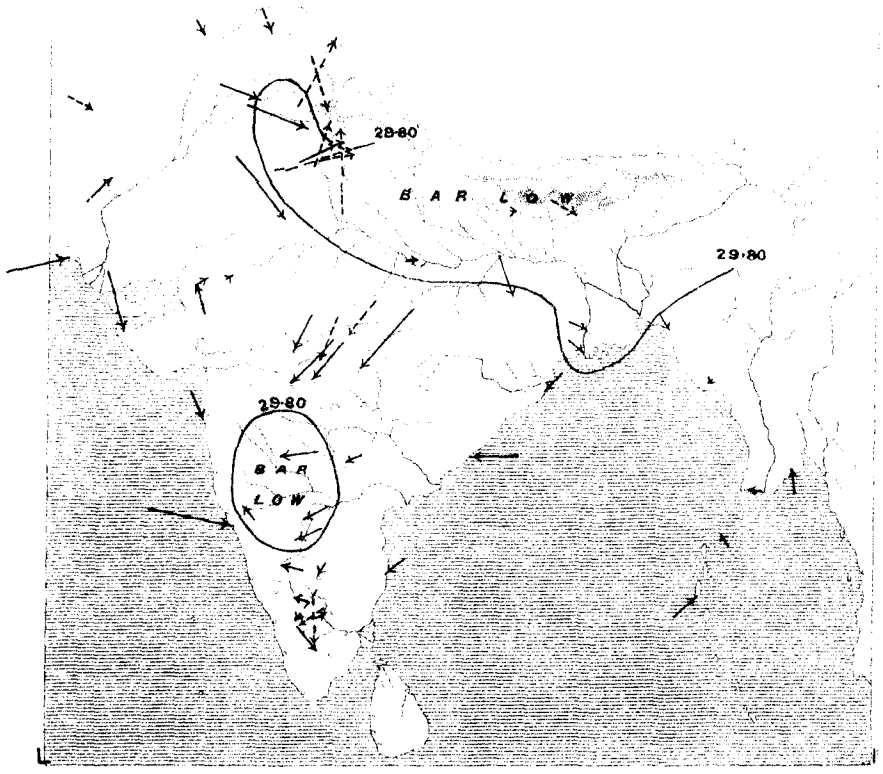


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S.S.MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF ABSOLUTE
HUMIDITY AT 8 A. M.

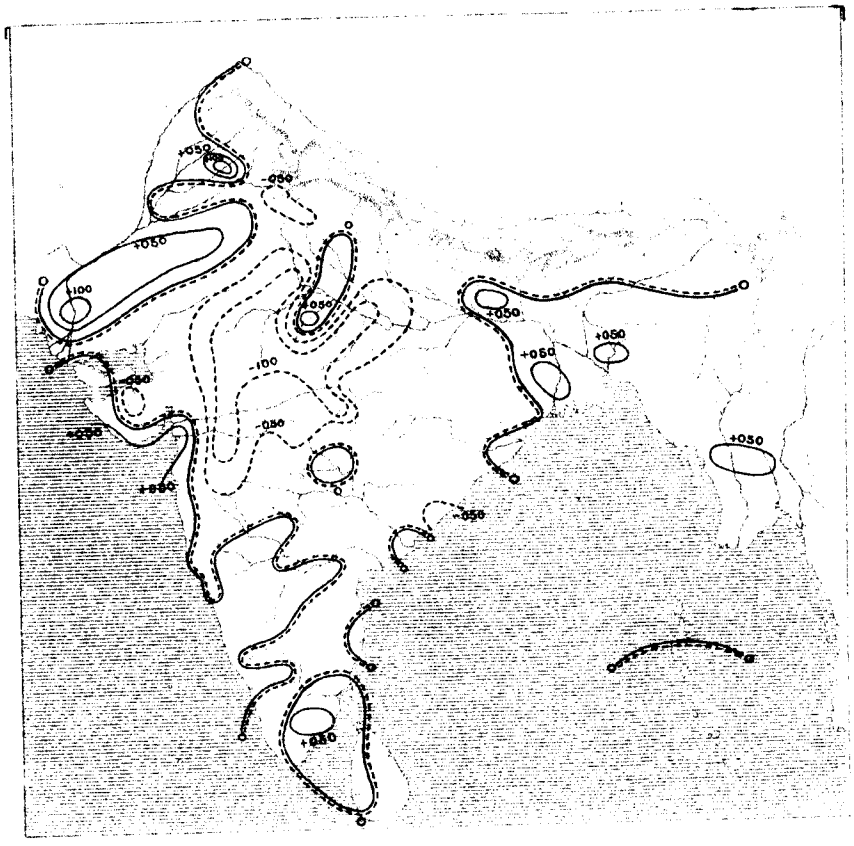
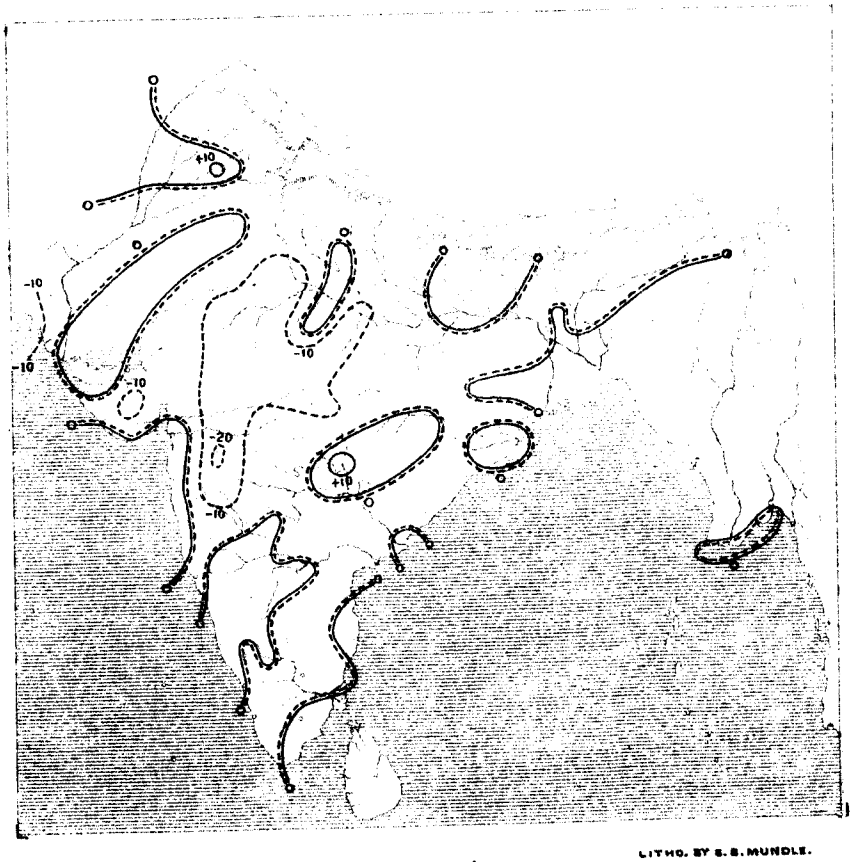


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF RELATIVE
HUMIDITY AT 8 A. M.



LITHO. BY S. S. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 A. M.

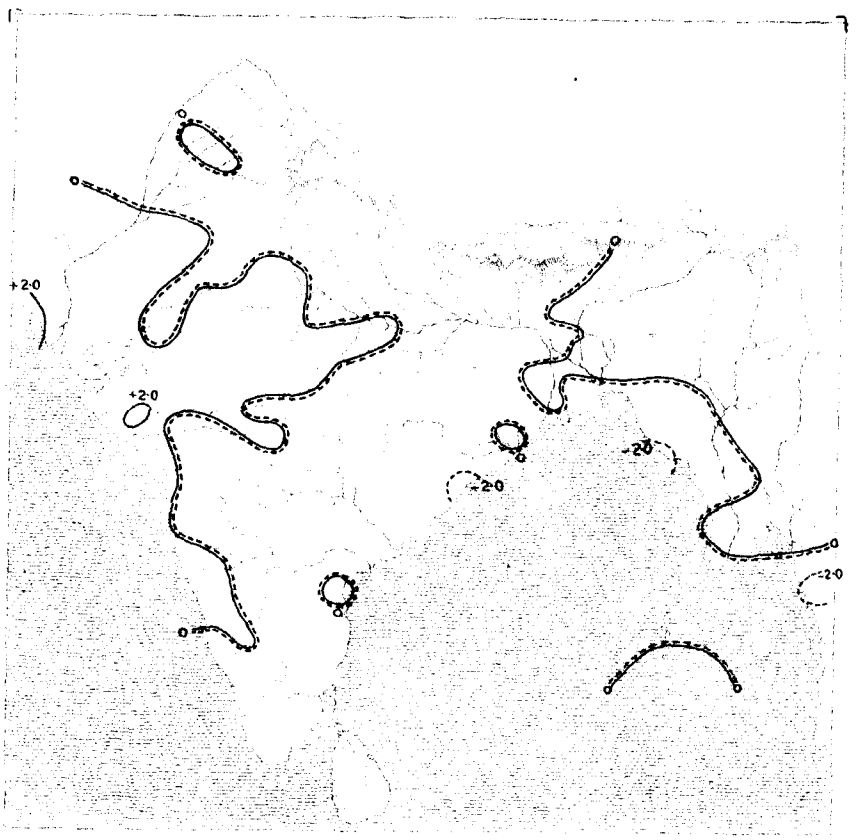
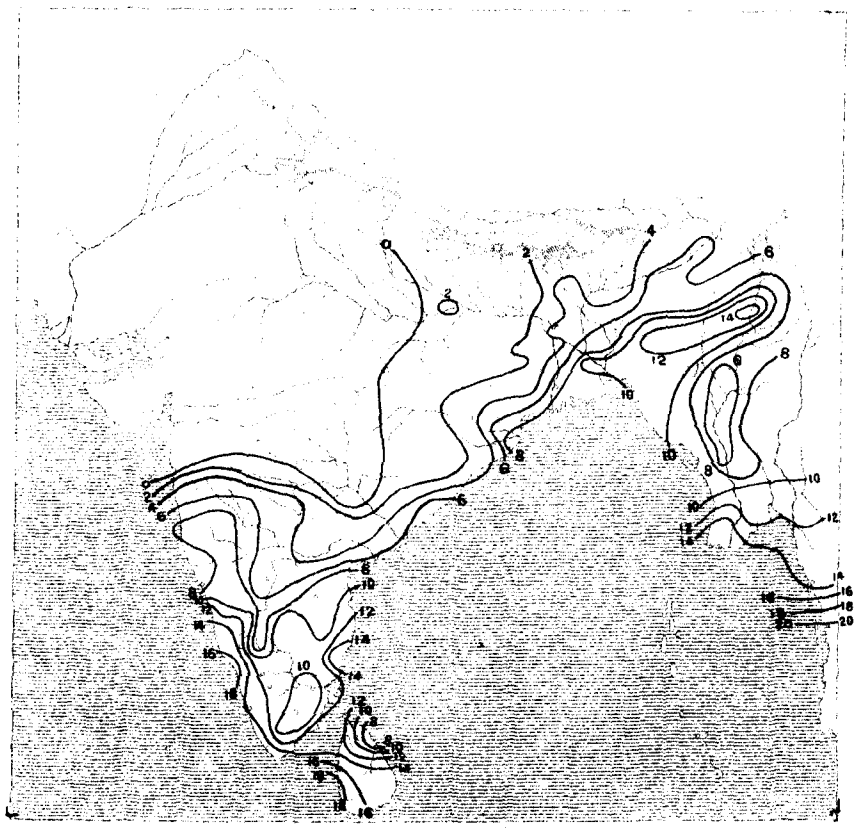
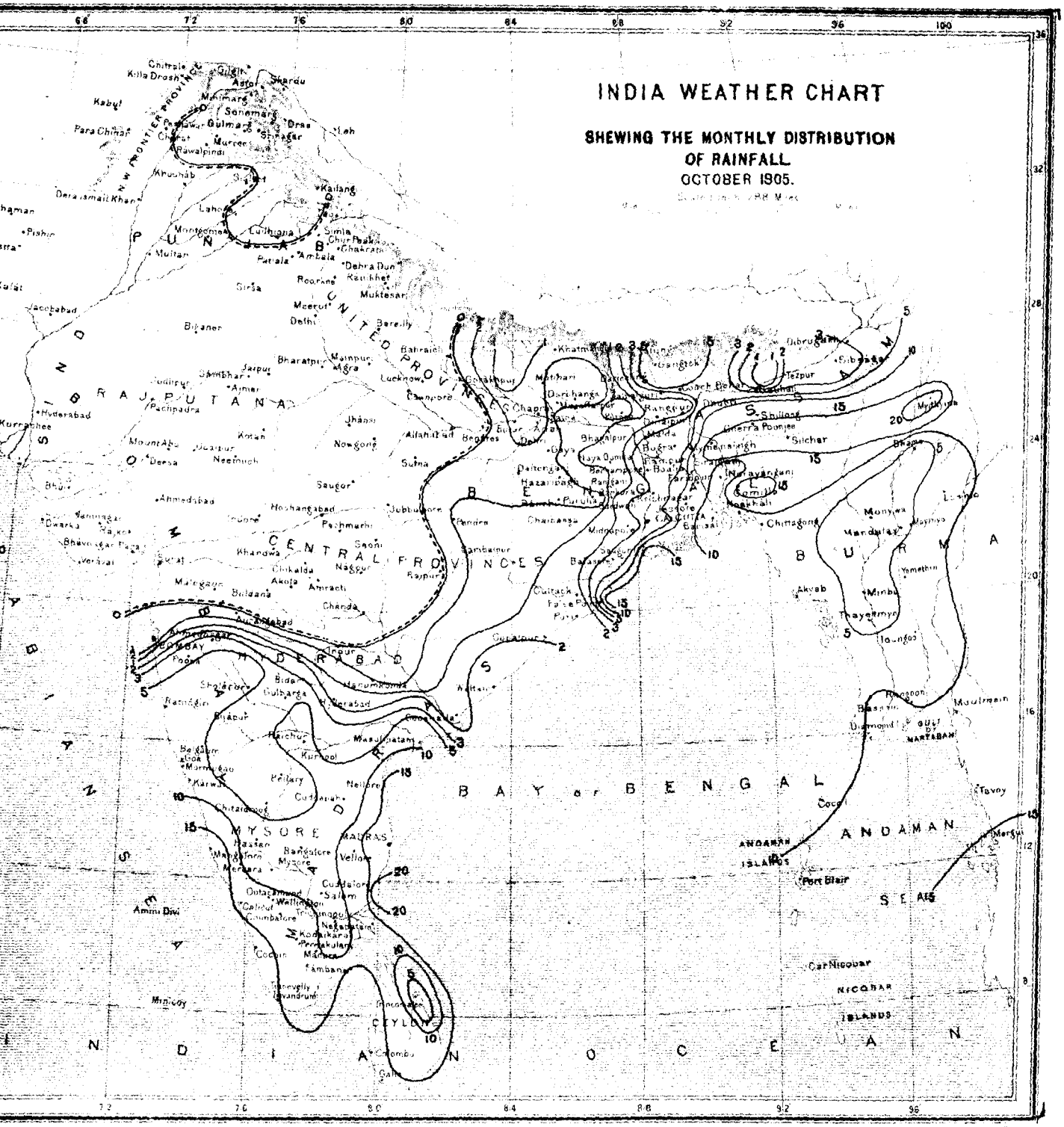


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.



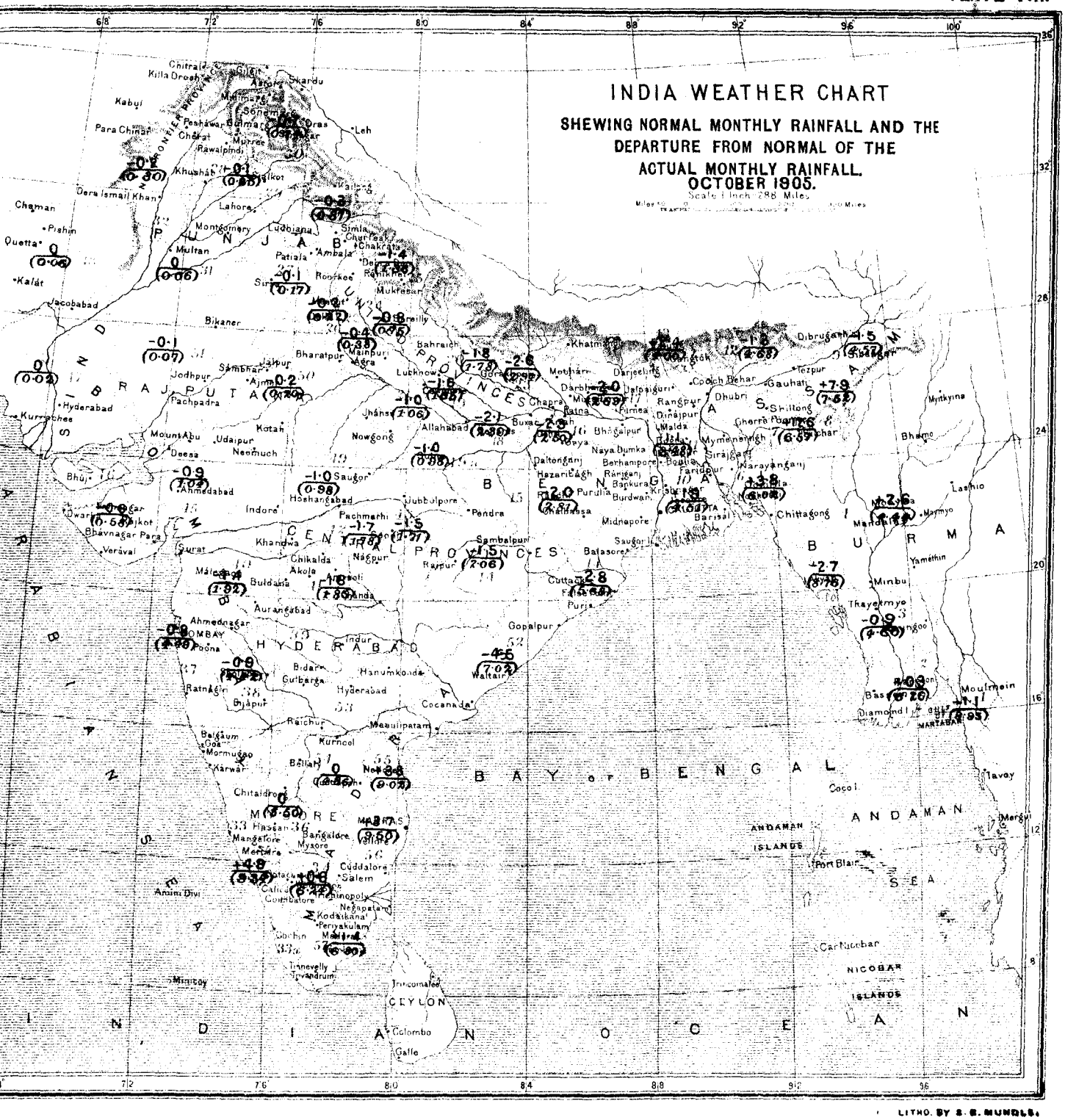
LITHO. LY S.B. MUNDLE.



I.—Jan. 05.—1,600.

LITHO. BY S. I. MUNDLE
Zinco. S. I. O., Calcutta.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet evation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from e where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S. E. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above e give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province
33. Majabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, NOVEMBER 1905.

INTRODUCTION.

THIS review of the weather in India during the month of November 1905, is based on observations taken daily at 8 A.M. at 229 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 63 stations. In the rainfall summary the data furnished by the meteorological observatories and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review have been utilized. The brief notes on solar, magnetic and seismic disturbances are supplied by the chief observatories.

Summary of the chief features of the weather in India during the month of November, 1905.

Normal Conditions for the Month of November.

During November the weather is almost invariably fine over northern and central India with clear skies and light winds, but is often disturbed in the Bay area. The month is practically rainless over India to the north of Lat. 21° N., except in Assam and Bengal, which receive rain from the cyclonic storms over the Bay. These storms usually originate in the south of the Bay and travel westward or north-westward to the Madras coast. The Peninsula to the south of Lat. 15° N. receives moderate to heavy rain, due to the retreating south-west monsoon current in the Bay. The rainfall is usually heaviest in the Coromandel coast districts south of Madras, and in Mysore, the Nilgiris, Palnis and other hills of southern India.

Actual Conditions in November, 1905.

Quiet weather prevailed over the Indian land area during November, 1905. From the 1st to the 9th pressure was comparatively uniform, and the only rainfall reported was some scattered showers—mainly over Burma, Assam and the extreme south of the Peninsula. During this period the most marked feature of the weather was the excessive heat prevailing over north-west India, where the mean temperature varied between 4° and 10° above the normal. The following gives comparative temperature data for the divisions of north-west India for each alternate day from the 1st to the 9th :—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of				
	1st November.	3rd November.	5th November.	7th November.	9th November.
	°	°	°	°	°
United Provinces of Agra and Oudh.	+1·3	+3·0	+3·1	+3·3	+3·4
Punjab	+2·5	+2·9	+4·0	+4·5	+5·8
North-West Frontier Province	+2·0	+1·9	+3·1	+6·9	+6·8
Sind	+0·7	+5·2	+7·0	+4·6	+6·4
Rajputana	+3·4	+7·4	+6·6	+8·0	+7·5
Gujarat	+2·9	+3·5	+2·6	+4·9	+5·0
Central India	+2·2	+4·4	+5·1	+4·8	+3·9

Temperature was also higher than usual—though to a less extent than in the north-west—over north-east India, the showers in that area having been less frequent and less heavy than usual.

On the 10th moderate to heavy rain set in over the southern half of Madras. The rainfall diminished both in amount and extent between the 12th and the 16th, extended again on the 17th and 18th, was light between the 19th and 23rd, but became heavier and more general on the 24th and subsequently extended along the west coast reaching as far north as Bombay, Poona and Ahmednagar

on the 27th and 28th. During the period from the 11th to the 15th the temperature was unsteady over northern India but was very high over north-west and central India, as is shown in the following table:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	11th November.	12th November.	13th November.	14th November.	15th November.
	°	°	°	°	°
United Provinces of Agra and Oudh.	+4·3	+4·9	+4·5	+3·7	+2·7
Punjab	+5·3	+5·4	+4·8	+4·2	+1·1
North-West Frontier Province	+4·8	+4·5	+3·3	+2·5	+1·1
Sind	+5·4	+4·5	+2·6	+4·3	+3·3
Rajputana	+7·8	+8·7	+7·5	+5·8	+4·2
Gujarat	+3·2	+5·6	+4·8	+5·5	+4·5
Central India	+5·4	+7·3	+6·9	+5·6	+4·0
Central Provinces	+2·7	+3·7	+3·5	+4·6	+3·5
Berar	+1·6	+2·9	+3·2	+3·4	+5·0

On the 16th a fall took place, but, though the mean temperature in the north-west was reduced, the fall was not sufficiently large to reduce it to below the normal in that area. In the north-east and centre, on the contrary, the mean temperature fell to below the normal and remained normal or below till the 24th. The following gives data:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF								
	16th Nov.	17th Nov.	18th Nov.	19th Nov.	20th Nov.	21st Nov.	22nd Nov.	23rd Nov.	24th Nov.
	°	°	°	°	°	°	°	°	°
Burma	+0·5	+0·4	−0·1	−0·1	−1·9	−0·5	−1·3	−1·2	−0·8
Assam	+0·5	−0·1	−1·6	+0·2	−1·0	−0·4	+1·3	+1·9	−1·5
Bengal	+0·7	−1·3	−1·6	+1·3	+1·4	0	+2·0	+0·7	−0·3
Orissa	+1·5	−2·4	−3·2	+1·0	+0·9	+0·1	+0·7	−3·3	+3·3
Bihar	−2·7	−1·2	−0·3	+2·2	+1·4	+0·2	+0·8	+2·2	−0·7
Chota Nagpur	+0·3	−2·2	−2·7	−2·4	−1·9	−1·6	−0·8	+0·1	+0·2
United Provinces of Agra and Oudh.	−0·3	−0·7	−0·8	−0·2	+0·7	+1·2	+1·0	+0·9	+0·5
Central India	+2·6	+2·5	+2·0	+0·3	−0·1	−0·2	−0·5	−1·0	+1·0
Central Provinces.	+0·1	−0·3	−1·0	−2·0	−2·4	−2·4	−1·1	−0·6	−0·8
Berar	+2·2	−0·5	−1·9	−3·1	−2·5	−1·7	−1·5	+2·4	+0·4

On the 25th a decided increase of temperature occurred over the Peninsula, and though the rainfall over the south of the Peninsula, the West Coast and the Bombay Deccan temporarily reduced the heat to below the normal in those regions, the interior of the Peninsula remained warmer than usual until the close of the month. The following gives comparative data of temperature for the Peninsular divisions from the 25th to the 30th:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	25th Nov.	26th Nov.	27th Nov.	28th Nov.	29th Nov.	30th Nov.
	°	°	°	°	°	°
Central Provinces	−0·4	+1·2	0	+0·8	+2·4	+0·8
Berar	+3·3	+3·4	+2·8	−0·8	+6·5	+3·0
West Coast	+3·2	+0·7	+0·7	+0·2	+1·0	+2·0
Bombay Deccan	−6·3	+4·1	+2·8	−2·9	+1·8	+3·4
Mysore	+2·9	+3·4	+3·3	+3·8	+0·5	+1·0
Madras Coast	+1·8	+1·6	+1·0	+1·0	+0·6	+1·5
Madras Deccan	+4·4	+5·6	+3·1	+2·1	+1·8	+2·7
South India	−0·4	+0·8	+1·1	+2·3	−0·7	−0·2

In north-west India the temperature remained high during this interval while in north-east India it was generally normal or below the normal. The following gives data for the different divisions of northern India and Burma:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF					
	25th Nov.	26th Nov.	27th Nov.	28th Nov.	29th Mov.	30th Nov.
	°	°	°	°	°	
Burma	−0·7	−1·8	−1·1	+0·4	+0·9	+0·5
Assam	−1·7	−1·6	−0·9	−1·0	+0·2	+1·1
Bengal	−1·3	−1·4	−1·7	−1·2	−0·2	−0·2
Orissa	−0·7	−1·9	−1·1	−0·4	−0·8	−1·4
Bihar	−2·0	+1·2	−2·2	−1·3	−0·8	−1·3
Chota Nagpur	−1·6	+0·3	−0·4	+1·0	−0·1	−1·6
United Provinces of Agra and Oudh.	+0·3	+1·3	+0·6	+0·9	+0·9	−0·7
Punjab	+2·1	+1·5	+3·0	+2·0	+1·0	−0·5
North-West Frontier Province.	+3·8	+3·6	+2·7	+1·9	+0·5	+0·5
Sind	+4·9	+1·8	+4·6	+4·2	+3·6	+2·2
Rajputana	+0·4	+1·9	+3·3	+3·6	+2·5	+0·6
Gujarat	+3·5	+1·9	+1·4	+0·5	+1·3	+2·3
Central India	+1·0	+1·2	+0·2	−0·5	+0·9	+0·7

Solar, Magnetic and Seismic Disturbances.

KODAIKANAL OBSERVATORY:—Solar Observations—November 1905.

November was, as usual, a rather unfavourable month for solar observations but there were only four days on which no observations could be made. There were eight days on which prominences could not be observed at all, and four others on which only part of the limb could be examined, or on which the observing conditions were bad.

Spots.—There were 29 new groups of spots seen during the month against 16 in October, and the mean daily number was 6·7, the highest yet recorded. The most striking feature of the month was the great train of spot groups visible at once. The climax was reached on the 12th when 9 groups were visible, arranged in two rows roughly parallel to the equator. The northern row consisted of 6 scattered groups and the southern row of 3 containing more than 50 individual spots. In the northern row the spots were so close that the spectroheliogram on that day showed an almost continuous belt of very bright flocculi. While the distribution of groups between the two hemispheres (13 groups north, 16 groups south) was more nearly equal than it has been since July there was a marked difference between the latitudes in the two hemispheres. The mean latitude of the northern groups was about 9° while that of the southern groups was 16°. There were six southern groups with a latitude greater than 20° while no northern group had a higher latitude than 19°. For several months past the appearance has been as if the spot cycle in the northern hemisphere was farther advanced than in the southern. Of the groups observed 699, 700 and 702 were the return of 677, 674 and 676 respectively. The most important groups of the month were 690, 694, and 708. The first and third of these consisted of long trains of regular spots, but 708 was the longer of the two and the number of individual spots was larger. In the earlier stages there seemed no doubt that the whole of the spots which have been taken together as group 708 were connected, but later on they might have been fairly broken up into several groups. Be this as it may a region of the sun extending over 28° of longitude was affected and the outburst was one of the largest which has been observed during the present cycle. Group 694 though covering a smaller area than 708 had a more active career. It came round the east limb as a large irregular spot on the 10th and became smaller and smaller till the 13th. On the 14th it appeared as a train of spots with one fairly large spot in the rear; on the 16th it consisted of a large number of small spots which later decreased in number and increased in size till, by the 21st, it had become a two-spot group.

Spot spectra.—Spectrum observations did not indicate any very great activity. There were strong reversals of C in 683 and 690, and D3 was seen, on the 1st, to be very dark near 676.

Prominences were fairly numerous. Four were observed of a height exceeding 100″—one on the 4th, one on the 17th, and two on the 18th. There was a slightly disturbed prominence on the 3rd at latitude + 12° west which, when first seen, was 75″ high. Later it apparently rose up bodily and became quite separated from the limb. Metallic prominences were seen on the 1st, 6th, 7th and 16th. Those of the 6th and 7th were parts of the same prominence. On the 6th it showed great disturbance, the bottom was exceedingly bright and C, D3, and F showed displacements in both directions. The maximum displacements observed in C were 4A° to red and 1A° to violet. Sodium, magnesium and iron lines were bright, and successive photographs showed that the shape of the prominence was changing rapidly.

There was a "great" magnetic disturbance which lasted from 20h on the 15th to 15h on the 16th and there were "moderate" disturbances on the 12th, 13th, 14th, and 16th. During the time of the "great" disturbance and the following "moderate" disturbance, group 694 was crossing the central meridian and was developing with great rapidity. On the 12th, 13th, and 14th the long group 690 was crossing the central meridian. It may be added that in northern latitudes there was a fine display of aurora on the night of the 15th.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

COLABA OBSERVATORY, BOMBAY:—*Magnetic Record*—

During the month the traces showed 9 calm days, 15 days of small, 3 days of moderate and 3 days of great disturbances.

During the week from the 12th to 18th November the magnetic traces were more or less much disturbed. The 11th was a quiet day, and the first of the series of the large disturbances during the month commenced about the noon of the 12th. The Horizontal Force fell rather rapidly at first, but markedly without the violent fluctuations usually associated with disturbances of the larger type. The minimum, showing a total fall of ·00243 C. G. S. unit, was reached at about 21h, after which the force steadily began to rise with small fluctuations. And though normal conditions seemed apparently to be reached about the following morning, the activity of the disturbing cause seemed to remanifest itself by the appearance on the traces subsequently—on the 14th and 15th—of waves of smaller period. These were followed by a heavy disturbance at about 20h on the 15th which commenced, as is usual, with a sudden and abrupt rise in force equivalent to ·00064 C. G. S. unit, the force falling thereafter rapidly, accompanied with violent fluctuations. The minimum was reached at about 2h on the 16th showing a total fall of ·00254 C. G. S. unit. The force then began to rise for a short period till about 12h, after which it again began to fall and reached its second minimum value at about 18h. The disturbing forces apparently ceased then to affect the traces, and the rise to normal conditions which were reached about the midnight of the 17th, was fairly steady.

The selected quiet days of the month were the 1st, 8th, 11th, 26th and 30th.

The mean observed values of the several elements as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follow:—

Declination	0° 12′ 53″ east.
Horizontal Force	·37397 C. G. S. unit.
Dip	21° 59′·9
Horizontal Force range	·00059 C. G. S. unit.
Horizontal Force summed range	·00369 " "
Declination range	1′·02
Declination summed range	5′·93

Note.—(Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.)

Three small seismic disturbances were recorded during the month, one on the 4th and two on the 9th.

Magnetic Disturbances.

November, 1905.		November, 1905.		November, 1905.	
1	C.	11	C.	21	S.
2	C.	12	G.	22	S.
3	S.	13	M.	23	S.
4	S.	14	M.	24	S.
5	S.	15	G.	25	S.
6	S.	16	G.	26	C.
7	S.	17	M.	27	S.
8	C.	18	S.	28	C.
9	S.	19	S.	29	C.
10	S.	20	C.	30	C.

The magnitudes of the disturbances are determined from Horizontal Force traces.
C=calm; S=small; M=moderate; G=great; V. G.=very great.
Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Govt. Observatory, Bombay.

ALIPORE OBSERVATORY, CALCUTTA.

List of displacements recorded by the Seismograph at the Alipore Observatory in November 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima G. M. T.	End G. M. T.	Maximum amplitude in m. m.	Duration.	REMARKS.
Nov.	H. M.	H. M.	H. M.	H. M.		H. M	
3rd .	19-9'7		19-18'4	19-33'1 9th	0'75	0-23'4	Sensibility 1 m.m.=0″·38 of tilt.
8th .	22-20'0	22-28'1	22-44'9	0-3'2	2'75	1-43'2	
11th .	19-39'3		19-42'4	19-46'4	0'50	0-7'1	
21st .	22-54'7		22-56'3	23-3'9	0'50	0-9'2	Sensibility 1 m.m.=0″·48 of tilt.
21st .	23-12'5	23-19'7 22nd	23-20'7	23-41'5	2'25	0-29'0	
21st .	23-45'6	0-1'3	0-8'0	0-34'9	2'00	0-49'3	
26th .	20-10'3			20-21'5		0-11'2	Thickening of line. Sensibility 1 m.m.=0″·38 of tilt.
28th .	17-43'0		17-47'6	18-10'0	0'50	0-27'0	Sensibility 1 m.m.=0″·38 of tilt.

The local times of the commencement:—

Date 1905.	H. M.
November 4	1-3'0
„ 9	4-13'3
„ 12	1-32'6
„ 22	4-48'0
„ 22	5-5'8
„ 22	5-38'9
„ 27	2-3'6
„ 28	23-36'3

J. A. CUNNINGHAM,
Offg. Asstt. Meteo. Reporter to the Govt. of India.

SIMLA SEISMOGRAPH RECORDS:—

List of earthquakes recorded by the Omori-Ewing Seismograph at the Simla Observatory during the month of November 1905.

Date.	Beginning of P. T. G. M. T.	End of P. T. G. M. T.	Beginning of L. W. G. M. T.	Maxima G. M. T.	End approximately G. M. T.	Duration approximately.	Maximum amplitude in m. m.	REMARKS.
	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	M. M.	
2	...	...	...	3 9	3 10'6	0 1'8	'05	Centre short distance away.
12	...	...	...	0 58'6	...	0 1'0	'03	Local.
15	...	...	11 54'3	11 54'7	11 56'1	0 1.47	'16	„
22	...	...	...	21 45'?	...	0 0'5?	...	Slight shock
24	..	...	...	2 30'?	...	...	...	„

J. PATTERSON,
Deputy Meteorologist.

ROYAL ALFRED OBSERVATORY, MAURITIUS:—The weather was unfavourable for observing on the 4th, 7th, 14th, 15th, 19th to 22nd, 29th and 30th. On all the remaining days groups of spots were recorded which were arranged as follows:—

2 groups were observed on the 1st.
3 „ „ „ „ „ 2nd, 27th, and 28th
4 „ „ „ „ „ 6th, 8th, 9th, 17th, 25th and 26th
5 „ „ „ „ „ 3rd, 5th, 10th, 16th, 18th, 23rd and 24th.
6 „ „ „ „ „ 11th.
7 „ „ „ „ „ 12th.

Day.	Hrs.	Magnetic Disturbances.
4	18½-21	Double wave in H. F. (+·00008 to —·00012).
5	1½-2½	Wave in H. F (+·00022).
6		Accentuated diurnal variation in H. F.
10		Loss of Register in H. F., in Declination accentuated diurnal variation with wave.
12 to 13	13-13	Large variation.
13	16-22	Wave in H. F. (—·00049).
14		Sudden increase of H. F. (·00019) followed by frequent rapid fluctuations until 15th 18½h.
15 to 16	18-18	Large variations.
16	18-23½	Occasional small fluctuations in H. F.
17	7-23	Frequent small rapid fluctuations in H. F.

T. F. CLAXTON,
Director.

A severe shock of earthquake was felt at Elephant Point Telegraph Office, on the morning of the 12th November, lasting for about 15″. The entire building swayed and creaked but there was no damage done. The office clock stopped at 2 his.

Weather in Indian Monsoon region.

Conditions were apparently generally quiet over the Indian monsoon area during the month of November 1905. The following shows the departures from normal at the stations in the South-east Trades region:

November, 1905.	Mauritius.	Zanzibar.	Seychelles.
	"	"	"
Departure from normal of mean pressure.	—·005	—·034	+ 023
	°	°	°
Actual mean wind direction . .	S 86 E	S 89 E	S 45 E
Normal mean wind direction . .	S 83 E	S 36 E	S 84 E
Actual mean wind velocity (miles per diem).	224	99	131
Normal mean wind velocity (miles per diem).	257	110	140
Rainfall departure	+2·30	—6·49	—3·96

The pressure departures were somewhat irregular, the mean barometer having been below the normal at Zanzibar, normal at Mauritius and above the normal at the Seychelles. The mean wind was considerably more easterly than usual at Zanzibar and more southerly at the Seychelles while at Mauritius the Trades blew from the normal direction. The force was low at all the three stations. The month's rainfall was more than twice as heavy as usual at Mauritius while at Zanzibar only about one-third and at the Seychelles about one-half of the usual fall was received. There were no reports of disturbed weather of any consequence over the Arabian Sea or the Bay of Bengal, while over India and also over the countries to the westward the rainfall of the month was even less than the normal small amount.

Depressions and cyclonic storms.

The weather was very quiet during the month of November 1905, and there was a complete absence of important cyclonic storms.

Between the 1st and the 9th there was a shallow low pressure area over the Indus Valley, but this disappeared and a general rise of pressure took place over north-west India on the 12th, when the usual high pressure area was established over that area. Between the 12th and the 22nd the barometer was high in the north of India and low in the extreme south of the Peninsula and over Ceylon.

On the 23rd pressure gave way over the Peninsula and the east of the Arabian Sea and the winds shifted to the south of east at some of the western stations. A shallow low pressure area was formed over the Arabian Sea off the west coast of the Peninsula and, drifting northward off the coast during the 24th, 25th, 26th and 27th, carried rain as far north as Bombay, Poona and Ahmednagar. By the 29th the depression had disappeared and the usual distribution, viz., high pressures in the north and centre and low pressures over the south of the Peninsula prevailed during the last two days of the month.

Pressure.

The mean pressure over the Indian land area for the month of November exceeded the normal at all stations by 1905 amounts which varied from 0·031″ at Sibsagar and Multan to 0·093″ at Masulipatam and averaged 0·057″ for the whole area. The above is the largest general anomaly which has been recorded in November in recent years.

The chart of actual mean pressure of the month of November shows a large area of high (30·05″ to 30·10″) and uniform pressure over the north-western and central parts of the country and a subsidiary area of high pressure over the Assam Valley. From these areas pressure decreased and was lowest over Ceylon and the south Malabar Coast.

Relatively to the geographical mean, pressure was in defect over the Assam Valley, central and west Bengal, the Gangetic plain, a large part of north-west India, the West Coast and part of the Deccan, while it was in excess over Burma, Deltaic Bengal, the whole of the central parts of the country and the east of the Peninsula. The principal anomalies were as follows:—

Station.	Positive anomalies.	Station.	Negative anomalies.
	"		"
Masulipatam . . .	+·036	Sibsagar . . .	—·026
Waltair . . .	+·032	Multan . . .	—·026
Nagpur . . .	+·022	Bahraich . . .	—·025
Mergui . . .	+·028	Lucknow . . .	—·025
Bassein . . .	+·027	Gorakhpur . . .	—·024
Cocanada . . .	+·024	Patna . . .	—·022
False Point . . .	+·023	Darbhanga . . .	—·022
Narayanganj . .	+·022	Kurrach . . .	—·021

The mean pressure of the month exceeded the normal at all the hill stations. The excess at the level of the hill stations was approximately the same as that at the neighbouring plains stations and hence the vertical pressure gradients generally exhibited little departure from the normal. The following gives data for eleven pairs of stations :—

HILL STATION.	Departure from normal pressure, November, 1905.	PLAIN STATION.	Departure from normal pressure, November, 1905.	Departure of pressure difference.
	"		"	"
Quetta	+·051	Jacobabad	+·045	—·006
Leh	+·029	Lahore	+·040	+·011
Murree	+·054	Peshawar	+·045	—·009
Simla	+·048	Ludhiana	+·042	—·006
Chakrata	+·047	Roorkee	+·052	+·005
Ranikhet	+·044	Bareilly	+·046	+·002
Darjeeling	+·023	Dhubri	+·057	+·034
Lashio	+·020	Bhamo	+·058	+·038
Mount Abu	+·057	Deesa	+·047	—·010
Pachmarhi	+·076	Hoshangabad	+·067	—·009
Wellington	+·057	Coimbatore	+·065	+·008

The following gives pressure departure data for the extra-Indian stations :—

STATION.	Departure from normal of mean 8 A.M. pressure of November, 1905.
	"
Trincomale	+·066
Colombo	+·040
Bushire	+·030
Jask	+·005
Muscat	+·017
Baghdad	+·042
Aden	+·020
Perim	+·033
Zanzibar	—·034
Seychelles	+·023
Mauritius	—·005

The above shows that pressure, on the mean of the month, exceeded the normal over the countries to the westward of India, though to a less extent than over India itself, but that in the South-east Trades region atmospheric pressure was less than usual at Zanzibar and Mauritius.

The chief abnormal features of the pressure distribution of the month were as follows :—

(1) Pressure exceeded the normal everywhere both on the hills and plains.

(2) The departures from normal were considerable to large and averaged +·057″ on the mean of all stations.

(3) Pressure was in excess though to a less extent than over India, over the Persian area and was generally in defect in the South-east Trades region.

(4) At the hill stations the excess, was generally similar to that at the stations on the neighbouring plains, so that the vertical pressure gradients were approximately normal.

The following table gives the mean pressure departures and anomalies for the eleven meteorological provinces :—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of November, 1905.	Pressure anomaly, November, 1905.
	"	"
Burma Coast and Bay Islands	+·079	+·022
Burma, Inland	+·061	+·004
Assam	+·051	—·006
Bengal and Orissa	+·065	+·008
Gangetic Plain and Chota Nagpur	+·043	—·014
Upper Sub-Himalayas	+·048	—·009
Indus Valley and North-West Rajputana	+·046	—·011
East Rajputana, Central India and Gujarat	+·055	—·002
Deccan	+·063	+·006
West Coast	+·047	—·010
South India	+·064	+·007

Temperature.

The month of November, 1905, was generally drier than usual, and the high temperatures, which had been a characteristic of the preceding months, continued.

The mean maximum or day temperature of the month was below the normal over Burma, parts of Assam and Bengal and locally at Tinnevelly and Gorakhpur. At most stations the deficiency was small, but exceeded 2° at the following places:—

Station.	Mean maximum temperature. Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°	°
Yamethin	85·7	88·8	—3·1
Minbu	86·4	88·6	—2·2

In all other parts of the Indian area the mean maximum temperature exceeded the normal, the excess having been greatest and more than 4° at the stations for which comparative data are given below:—

Station.	Mean maximum temperature. Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°	°
Jhansi	90·3	85·3	+5·0
Ajmer	88·6	83·9	+4·7
Deesa	96·1	91·5	+4·6
Hyderabad (S)	92·5	88·0	+4·5
Meerut	85·5	81·3	+4·2
Sambhar	88·6	84·5	+4·1
Bellary	90·8	86·7	+4·1

At most of the hill stations also the mean maximum temperature of the month exceeded the average. At the following places the excess was more than 2°:—

Hill Station.	Mean maximum temperature. Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°	°
Quetta	68·0	64·8	+3·2
Chakrata	63·1	60·0	+3·1
Kailang	54·1	51·6	+2·5
Pachmarhi	76·0	73·3	+2·7

The highest day temperatures of the month were generally recorded during the first week, except along the West Coast, where the maxima occurred later. The following table shows the highest readings registered in the different divisions during the month, together with the highest readings previously recorded at the stations mentioned:—

Province or Division.	Station.	Highest maximum temperature recorded in November, 1905.	Date on which recorded.	Highest maximum temperature recorded in November previous to 1905.	Year in which recorded.
		°		°	
Burma	Mandalay	92·5	2nd & 5th	96·5	1901
Assam	Gauhati	89·0	1st	—	—
Bengal	Bankura	91·6	5th & 13th	96·1	1896
Orissa	Balasore	89·4	14th	94·4	1896
	Cuttack	89·4	4 days	91·5	1896
Bihar	Buxar	90·5	12th	95·5	1896
Chota Nagpur	Chaibassa	92·4	13th	94·7	1896
United Provinces.	Jhansi	96·7	4th & 6th	98·2	1871
Punjab	Sirsa	95·3	6th	96·6	1895
N.-W. F. Province.	D. I. Khan	91·8	1st	92·3	1901
Sind	Jacobabad	100·5	3rd	99·5	1897
Rajputana	Bikaner	99·2	3rd	98·6	1901
Gujarat	Deesa	101·6	8th	103·1	1901
Central India	Nowgong	94·0	4th	93·0	1895
Central Provinces.	Khandwa	95·7	1st	99·2	1901
Berar	Akola	93·9	7th	97·5	1896 and 1899.
West Coast	Ratnagiri	95·8	24th	98·8	1896
Bombay Deccan	Malegaon	95·4	2nd	103·3	1899
Mysore	Chitaldroog	88·6	11th	90·6	1896
Madras Coast	Masulipatam	91·6	5th	94·1	1891
Madras Deccan	Bellary	94·0	4 days	96·4	1882
South India	Tinnevelly	96·2	4th	98·3	1892

The table shows that at Jacobabad, Bikaner and Nowgong the highest temperatures registered were higher than any previously recorded.

The absolutely highest temperature recorded during the month was 101°·6 at Deesa on the 8th, but this was not very exceptional, as in November, 1901, readings of 103°·1 and in 1895 of 102°·9 were registered.

The mean minimum or night temperature of the month was lower than usual over parts of Burma, Bengal, the United Provinces, the Central Provinces and north Madras and in the extreme south of the Peninsula. The departures from normal exceeded — 1°.5 at the following places :—

Station.	Mean minimum temperature.		
	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°	°
Sambalpur	59·6	62·3	—2·7
Chanda	56·7	59·3	—2·6
Chaibassa	58·8	60·4	—1·6
Chittagong	64·2	65·8	—1·6
Akyab	69·8	71·4	—1·6
Roorkee	48·4	49·8	—1·4

In all other parts of the country the mean minimum temperature exceeded the average, and over the western desert and the west of the United Provinces the excess was very large. At the following stations it was more than 4° :—

Station.	Mean minimum temperature.		
	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°	°
Ajmer	60·0	51·0	+ 9·0
Jhansi	64·7	58·6	+ 6·1
Jacobabad	56·0	50·8	+ 5·2
Multan	57·6	52·4	+ 5·2
Agra	61·0	55·9	+ 5·1
Jaipur	60·0	55·2	+ 4·8
Lahore	51·5	46·8	+ 4·7
Kurrachee	66·3	61·8	+ 4·5
Sialkot	54·2	49·9	+ 4·3
Rajkot	63·5	59·3	+ 4·2
Hyderabad (S)	64·1	60·0	+ 4·1
Pachpadra	58·2	54·1	+ 4·1
Sirsa	53·6	49·5	+ 4·1

At Murree, Simla, Darjeeling and Pachmarhi the mean night temperature was below the normal, but at the remaining hill stations it was above, and at Quetta and Mount Abu the departures were more than + 3°.

The mean temperature of the month was below the normal over parts of Burma, Assam and south-east Bengal and along the foot of the central Himalayas. In practically all other places the temperature, on the mean of the month, exceeded the average, and at the following places the excess was more than 4°:—

Station.	Mean temperature.		
	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°	°
Ajmer	74·3	67·4	+6·9
Jhansi	77·5	71·9	+5·6
Jacobabad	73·3	68·8	+4·5
Hyderabad (S.)	78·3	74·0	+4·3
Deesa	78·7	74·6	+4·1
Jaipur	74·6	70·5	+4·1

In Baluchistan the mean temperature was largely and at the remaining hill stations slightly above the normal.

The following gives temperature data of the extra-Indian stations :—

Station.	Mean temperature.		
	Actual, November 1905.	Normal, November.	Departure from normal, November 1905.
	°	°	°
Trincomalee	80·6	80·0	+0·6
Colombo	81·3	80·3	+1·0
Kabul	51·7	51·2	+0·5
Kashgar	41·9	40·4	+1·5
Bushire	71·4	70·1	+1·3
Jask	76·4	75·9	+0·5
Muscat	81·2	77·6	+3·6
Baghdad	65·0	62·0	+3·0
Aden	80·8	79·9	+0·9
Perim	82·3	82·0	+0·3
Zanzibar	81·9	79·4	+2·5
Seychelles	79·8	77·6	+2·2
Mauritius	74·6	75·2	—0·6

The above data show that the departures from normal were generally unimportant, but that at Muscat, Baghdad, the Seychelles and Zanzibar the excess was considerable :—

The following summarises the chief departures of the temperature conditions of the month :—

(1) Both the day and night temperatures and consequently also the mean temperatures were lower than usual over parts of Burma, Assam and Bengal.

(2) The day temperatures were in excess, the night temperatures in defect and the mean temperature about normal over west Bengal, Orissa, the east of the Central Provinces and Ganjam.

(3) Over the remainder of the country the day, the night and the mean temperatures exceeded the average and in the north-west the excess was large.

(4) In Baluchistan temperature was considerably higher than usual.

The following table gives temperature departure data of the month for the eleven meteorological provinces :—

METEOROLOGICAL PROVINCE.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, November, 1905.	Mean minimum temperature, November, 1905.	Mean temperature, November, 1905.
	°	°	°
Burma Coast and Bay Islands	—0·3	0	—0·2
Burma Inland	—1·5	0	—0·8
Assam	—0·1	+0·4	+0·2
Bengal and Orissa	+1·1	—4·0	+0·3
Gangetic Plain and Chota Nagpur.	+2·0	0	+1·0
Upper Sub-Himalayas	+2·3	+2·0	+2·2
Indus Valley and north-west Rajputana.	+2·7	+4·0	+3·4
East Rajputana, Central India and Gujarat.	+3·4	+3·9	+3·7
Deccan	+2·1	+1·1	+1·6
West Coast	+1·3	+2·0	+1·7
South India	+1·8	+1·0	+1·4

The following table gives comparative temperature data for the month for the 57 meteorological provinces or divisions of India :—

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE.					DEPARTURE FROM NORMAL OF MONTH OF		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
BURMA	Tenasserim	87·6	71·9	79·7	15·7	23·9	—0·1	+0·3	—0·4
	Lower Burma (Deltaic)	86·1	73·1	79·6	13·0	19·6	—0·3	+0·1	—0·4
	Central do.	87·2	68·1	77·7	19·1	29·6	—0·5	—0·6	+0·1
	Upper do.	85·0	65·6	75·3	19·4	31·2	—1·9	+0·3	—2·2
	Arakan	84·2	69·8	77·0	14·4	25·7	—0·9	—1·6	+0·7
BENGAL AND ASSAM	Eastern Bengal	83·4	64·0	73·7	19·4	30·4	+0·9	—0·2	+1·1
	Assam (Surma)	84·0	63·5	73·8	20·5	30·1	—0·8	—0·1	—0·7
	Do. (Hills)	67·6	49·3	58·5	18·3	27·7	...	...	...
	Do. (Brahmaputra)	80·1	61·7	70·9	18·3	31·6	+0·3	+0·6	—0·3
	Deltaic Bengal	83·9	64·0	74·0	19·9	30·5	+1·2	—0·3	+1·5
	Central do.	84·0	61·8	72·9	22·2	33·2	+1·7	—0·3	+2·0
	North do.	82·4	61·2	71·8	21·2	33·4	+0·3	—0·3	+0·6
	Bengal Hills	52·2	34·9	43·6	17·3	28·4	+0·6	—0·1	+0·7
	Orissa	85·1	65·0	75·1	20·1	31·7	+1·4	—1·3	+2·7
	Chota Nagpur	82·9	57·6	70·3	25·3	37·8	+1·9	—0·1	+2·0
	Bihar (South)	84·5	59·8	72·2	24·7	38·0	+1·6	+0·3	+1·3
	Do. (North)	82·5	59·6	71·0	22·9	36·0	+0·1	—0·1	+0·2
UNITED PROVINCES OF AGRA AND OUDH.	United Provinces (East)	85·9	55·0	70·5	31·0	44·3	+3·3	—0·7	+4·0
	Oudh (South)	86·4	54·5	70·5	31·9	47·6	+3·1	+1·7	+1·4
	Do. (North)	83·6	55·5	69·6	28·1	43·6	+0·8	—1·1	+1·9
	United Provinces (Central)	88·3	58·4	73·4	29·9	45·7	+3·8	+2·5	+1·3
	Do. (West)	86·4	56·6	71·5	29·8	46·5	+3·5	+3·3	+0·2
	Do. (East Submontane).	80·8	58·8	69·8	22·0	36·1	—0·8	+0·5	—1·3
	Do. (West Submontane).	81·4	50·8	66·1	30·5	45·4	+2·5	—0·6	+3·1
	Do. (Hills)	61·9	45·0	53·4	16·9	32·7	+1·8	+0·4	+1·4
PUNJAB	Punjab (South-East)	85·4	59·4	72·4	26·0	39·8	+2·5	+3·2	—0·7
	Do. (South)	84·8	52·9	68·9	31·9	48·8	+1·5	+4·1	—2·6
	Do. (Central)	84·5	51·5	68·1	33·0	49·3	+0·9	+4·7	—3·8
	Do. (Submontane)	82·8	51·3	67·1	31·5	48·5	+2·3	+2·5	—0·2
	Do. (Hills)	56·8	33·2	45·0	23·6	40·8	+1·3	+0·2	+1·1
	Do. (West)	86·0	55·0	70·5	31·1	48·0	+2·2	+4·0	—1·8

Province.	Division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Departure from normal of month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
N.-W. F. Province	North-west Frontier Province	81·0	50·0	65·5	31·1	49·7	+1·4	+3·9	—2·5
Bombay and Malabar Coast Districts (Madras).	Malabar	87·9	75·1	81·5	12·8	18·9	+1·4	+1·4	0
	Madras (South Central)	88·9	70·4	79·6	18·5	30·0	+2·1	+1·7	+0·4
	Coorg	77·5	61·2	69·4	16·3	24·9	+1·6	+1·1	+0·5
	Mysore	83·5	64·1	73·9	19·5	30·6	+2·6	+1·6	+1·0
	Konkan	89·0	74·0	81·5	15·0	23·4	+1·2	+2·5	—1·3
	Bombay Deccan	87·3	63·6	75·5	23·7	35·2	+1·9	+2·7	—0·8
	Hyderabad (North)	86·1	62·5	74·3	23·7	35·3	...	...	...
	Khandesh	87·4	59·2	73·3	28·2	42·5	+1·2	+2·5	—1·3
Central Provinces and Berar.	Berar	88·5	60·2	74·4	28·4	40·4	+1·9	+0·7	+1·2
	Central Provinces (West)	87·2	57·9	72·6	27·4	41·6	+2·7	+0·4	+2·3
	Do. (Central)	85·0	56·6	70·8	28·4	40·8	+2·4	+0·3	+2·1
	Do. (East)	83·9	59·0	71·5	25·0	35·8	+1·6	—1·5	+3·1
Bombay (North)	Gujarat	94·6	65·5	80·0	29·1	39·8	+3·4	+3·4	0
	Kathiawar and Cutch	91·3	67·1	79·2	24·2	37·7	+2·6	+3·1	—0·5
	Sind	91·0	62·1	76·6	28·9	45·1	+3·6	+4·6	—1·0
	Baluchistan Hills	69·0	36·0	52·6	33·0	48·7	+2·2	+1·8	+0·4
Rajputana and Central India.	Central India (East)	86·1	56·1	71·1	30·0	43·1	+3·4	+2·1	+1·3
	Rajputana (East), Central India (West)	88·9	59·7	74·3	29·2	43·5	+4·0	+5·8	—1·8
	Do. (West)	90·8	61·0	75·8	29·8	46·4	+3·8	+2·6	+1·2
Madras	East Coast (North)	85·0	69·4	77·2	15·6	24·9	+1·4	—0·7	+2·1
	Hyderabad (South)	87·7	65·4	76·6	22·3	32·0	+2·0	+1·7	+0·3
	Madras (Central)	90·0	68·2	79·1	21·8	31·1	+2·2	+1·9	+0·3
	East Coast (Central)	87·6	72·0	79·8	15·6	25·8	+1·7	+0·6	+1·1
	Do. (South)	85·2	73·0	79·1	12·2	22·5	+1·5	+1·5	0
	Madras (South)	87·0	73·4	80·0	13·6	24·0	+0·1	—0·1	+0·2

The above shows that the mean day temperature exceeded 90° over Gujarat, Kathiawar, Sind and West Rajputana, while the lowest mean night temperature was 50° in the North-West Frontier Province. The highest mean temperature of the month was 81·5° along the west coast. The mean daily range of temperature was generally greater than usual except in the Punjab.

In the following paragraphs is given a brief account of the more important changes of temperature:—

Between the 1st and the 5th showers occurred over Burma and Assam and the mean temperature was lower than usual in parts of these provinces. The following gives comparative data:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of 1st Nov.	2nd Nov.	3rd Nov.	4th Nov.	5th Nov.
	°	°	°	°	°
Burma	—0·7	+0·2	—0·4	—0·9	+0·1
Assam	+2·5	+1·3	+1·0	—0·3	—1·1

The mean temperature was also lower than usual over Orissa and the east of the Central Provinces. Data for Orissa are given below:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of 1st Nov.	2nd Nov.	3rd Nov.	4th Nov.	5th Nov.
	°	°	°	°	°
Orissa	—0·8	—0·8	—1·4	—0·3	—0·2

Elsewhere the heat was greater than usual, more especially in the north-west, where the excess varied, at the different stations, between 4° and 10°. The following gives data for north-west India:—

Province or Division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of 1st Nov.	2nd Nov.	3rd Nov.	4th Nov.	5th Nov.
	°	°	°	°	°
United Provinces of Agra and Oudh.	+1·3	+1·3	+3·0	+3·3	+3·1
Punjab	+2·5	+3·4	+2·9	+3·3	+4·0
North West Frontier Province.	+2·0	+1·9	+1·9	+2·5	+3·1
Sind	+0·7	+1·9	+5·2	+4·2	+7·0
Rajputana	+3·4	+4·6	+7·4	+8·4	+6·6
Gujarat	+2·9	+3·9	+3·5	+2·8	+2·6
Central India	+2·2	+3·1	+4·4	+5·4	+5·1

In this region the temperature exceeded the normal both by day and night, but the excess was most marked in the night temperatures which were over 10° higher than usual at the following stations:—

Date.	Station.	Minimum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
2nd November 1905.	Ajmer	65·2	54·8	+10·4
3rd "	Ajmer	71·1	54·3	+16·8
	Kurrachee	75·2	64·7	+10·5
	Sambhar	69·5	56·2	+13·3
4th "	Sambhar	68·5	55·9	+12·6
	Kurrachee	77·2	64·4	+12·8
	Ajmer	72·6	53·8	+18·8
	Jhansi	73·6	61·8	+11·8
5th "	Jacobabad	65·9	53·3	+12·6
	Ajmer	66·7	53·4	+13·3

On the 6th temperature fell over the Peninsula and varied irregularly from the average over that area during that and the two following days. This is shown below:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	6th November.	7th November.	8th November.
	°	°	°
Central Provinces	+2·3	+2·3	+1·2
Berar	+2·0	+2·4	−0·1
West Coast	+0·3	+0·9	+0·6
Bombay Deccan	+2·5	+1·5	+0·1
Mysore	−0·4	−2·8	+1·3
Madras Coast	+0·1	+0·8	+1·4
Madras Deccan	+0·2	+1·4	+0·2
South India	−1·9	+0·5	+2·8

Higher temperatures than usual were recorded over northern India, particularly in the north-west, during this interval. The following gives data:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of		
	6th November.	7th November.	8th November.
	°	°	°
Assam	+0·1	+1·8	+2·0
Bengal	+0·5	+0·6	+1·4
Orissa	+0·2	−0·4	+0·3
Bihar	+1·5	+1·5	+2·1
Chota Nagpur	+1·5	+0·5	+1·6
United Provinces of Agra and Oudh	+3·6	+3·3	+3·2
Punjab	+4·6	+4·5	+4·7
North-West Frontier Province	+3·5	+6·9	+6·8
Sind	+5·5	+4·6	+8·2
Rajputana	+6·7	+8·0	+7·7
Gujarat	+2·7	+4·9	+5·1
Central India	+5·5	+4·8	+3·9

Temperature generally exceeded the average on the 9th and 10th, but on the latter date rain set in over the south of the Peninsula and continued till the 25th. This rainfall had, however, little effect on the temperatures which remained generally normal or above the normal during its continuance. The following gives data for the Madras Coast and for South India for each alternate day from the 10th to the 24th:—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of							
	10th November.	12th November.	14th November.	16th November.	18th November.	20th November.	22nd November.	24th November.
	°	°	°	°	°	°	°	°
Madras Coast	+1·1	+1·0	+1·2	+1·6	−0·9	+0·5	+1·0	+2·6
South India	+1·5	+1·6	+1·1	−0·4	−0·4	+1·0	+1·2	−1·1

Between the 9th and 15th the heat was steadily excessive over northern India—more particularly in Rajputana—but on the 16th a brisk fall set in, which affected all parts of northern and central India, though it was not sufficient to lower temperature in the north-west to below the normal. The following gives comparative data for the divisions of

northern and central India for each alternate day from the 10th to the 24th :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of							
	10th November.	12th November.	14th November.	16th November.	18th November.	20th November.	22nd November.	24th November.
	°	°	°	°	°	°	°	°
Assam . . .	+2·3	+0·1	+1·1	+0·5	−1·6	−1·0	+1·3	−1·5
Bengal . . .	+1·7	+2·5	+3·0	+0·7	−1·6	+1·4	+2·0	−0·3
Orissa . . .	+2·0	+2·8	+3·4	+1·5	−3·2	+0·9	+0·7	+3·3
Bihar	+2·2	+2·5	+2·2	−2·7	−0·3	+1·4	+0·8	−0·7
Chota Nagpur . .	+1·3	+4·4	+5·7	+0·3	−2·7	−1·9	−0·8	+2·0
United Provinces .	+4·3	+4·9	+3·7	−0·3	−0·8	+0·7	+1·0	+0·5
Punjab . . .	+6·3	+5·4	+5·2	+0·1	+1·6	+1·2	+1·7	+1·5
North-West Frontier Province	+4·7	+4·5	+2·5	+1·0	+0·8	+1·5	+2·6	+3·1
Sind	+5·2	+4·5	+4·3	+2·6	+3·8	+3·8	+2·5	+3·9
Rajputana . . .	+8·3	+8·7	+5·8	+3·9	+3·0	+2·0	+1·0	+1·1
Gujarat . . .	+3·4	+5·6	+5·5	+4·4	+3·6	+2·5	+2·3	+2·8
Central India . .	+5·4	+7·3	+5·6	+2·6	+2·0	−0·1	−0·5	+0·1
Central Provinces .	+1·2	+3·7	+4·6	+0·1	−1·0	−2·4	−1·1	−0·8

The heat was very excessive over the north-west of India between the 12th and the 14th, and, as was the case between the 6th and 8th, the excess was most marked in the night temperatures, which were over 10° above the normal at the following places on the dates named :—

Date.	Station.	Minimum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
12th November, 1905.	Sialkot . .	61·7	50·7	+11·0
	Agra . .	69·4	57·0	+12·4
	Lahore . .	57·6	47·5	+10·1
	Peshawar . .	56·9	45·9	+11·0
	Bikaner . .	72·5	60·8	+11·7
	Neemuch . .	66·7	55·5	+11·2
	Ajmer . .	67·1	51·5	+15·6
	Jhansi . .	70·1	59·7	+10·4
13th "	Bhuj . . .	76·0	63·7	+12·3
	Ajmer . .	66·7	51·3	+15·4
	Jaipur . .	66·6	55·5	+11·1
	Saugor . .	67·6	57·6	+10·0
	Nowgong . .	64·0	53·8	+10·2
	Jhansi . .	70·1	59·5	+10·6
14th "	Khandwa . .	67·6	56·8	+10·8
	Ajmer . .	63·2	51·1	+12·1
	Jhansi . .	70·1	59·2	+10·9

Rain extended from South India over the west of the Peninsula between the 25th and 28th and the mean temperature of the West Coast fell to about the normal: this is shown below :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	25th November.	26th November.	27th November.	28th November.
	°	°	°	°
West Coast . . .	+3·2	+0·7	+0·7	+0·2

On the two last days of the month the temperature distribution was irregular, the principal abnormal feature having been the large excess over the Deccan. The following gives comparative data of all divisions for these two days :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of	
	29th November.	30th November.
	°	°
Burma	+0·9	+0·5
Assam	+0·2	+1·1
Bengal	−0·2	−0·2
Orissa	−0·8	−1·4
Bihar	−0·8	−1·3
Chota Nagpur	−0·1	−1·6
United Provinces of Agra and Oudh . .	+0·9	−0·7
Punjab	+1·0	−0·5
N.-W. Frontier Province	+0·5	+0·5
Sind	+3·6	+2·2
Rajputana	+2·5	+0·6
Gujarat	+1·3	+2·3
Central India	+0·9	+0·7
Central Provinces	+2·4	+0·8
Berar	+6·5	+3·0
West Coast	+1·0	+2·0
Bombay Deccan	+1·8	+3·4
Mysore	+0·5	+1·0
Madras Coast	+0·6	+1·5
Madras Deccan	+1·8	+2·7
South India	−0·7	−0·2

Winds.

The winds are ordinarily variable over Upper India during this month, but the north-east monsoon prevails fairly steadily over the Bay, the Peninsula and the West Coast.

At the Bay Islands and on the Burma coast the winds, on the mean of the month, were somewhat more northerly than usual and the steadiness exceeded the average at several stations. The following gives data:—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, November, 1905.	Normal, November.	Actual percentage, November, 1905.	Normal, percentage, November.	Departure from normal, November, 1905.
	°	°			
Port Blair	N 35 E	N 81 E	60	42	+18
Cocos Island	N 38 E	N 69 E	72	37	+35
Rangoon	N 74 E	N 66 E	33	57	—24
Diamond Island	N 55 E	N 60 E	43	57	—14
Akyab	N 2 E	N 6 E	67	31	+36

At Chittagong and False Point this increased northing was likewise shown, but at Calcutta and Saugor Island the winds, on the mean of the month, were much more westerly than usual. This is shown below:—

Station.	Mean wind direction.	
	Actual, November 1905.	Normal, November.
	°	°
Chittagong	N 2 W	N 18 W
False Point	N 16 E	N 30 E
Calcutta	N 73 W	N 12 W
Saugor Island	N 45 W	N 2 E

The winds were slightly more westerly and steadier than usual in the Gangetic Plain. The following gives data for Allahabad:—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, November, 1905.	Normal, November.	Actual percentage, November, 1905.	Normal percentage, November.	Departure from normal, November, 1905.
	°	°			
Allahabad	N 66 W	N 51 W	47	24	+23

The winds were slightly steadier than usual in the Upper sub-Himalayas, but the mean directions were very variable.

Very light and unsteady winds prevailed at Peshawar, but in Sind the mean directions were approximately normal. At Deesa the winds, though lighter and less steady than usual, blew from about the normal direction, while in east Rajputana, as in the Gangetic Plain, the mean wind direction was more westerly than the average.

The following gives comparative data of the mean air movement and steadiness over northern India, Burma and the Bay Islands:—

Province or division.	Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual percentage, November, 1905.	Normal percentage, November.	Departure from normal, November, 1905.	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
Bay Islands	66	40	+26	155	161	— 6
Burma	48	48	0	122	123	— 1
Bengal	57	55	+ 2	86	98	—12
Chota Nagpur	57	43	+14	150	110	+40
Orissa	33	54	—21	107	144	—37
United Provinces of Agra and Oudh.	32	16	+16	40	37	+ 3
Punjab	31	24	+ 7	21	28	— 7
North-West Frontier Province	7	12	— 5	5	48	—43
Rajputana	40	35	+ 5	63	65	— 2
Sind	29	14	+15	105	109	— 4
Gujarat	24	47	—23	132	175	—43

The above shows increased velocity in Chota Nagpur, but normal or lighter winds than usual elsewhere. The steadiness of the wind was, however, generally normal or greater than usual, except in Orissa and Gujarat.

The mean wind direction was more southerly than usual over the Bombay Deccan and the Nizam's dominions, and was more easterly than the average at the remaining stations in the Deccan. The mean steadiness and velocity varied irregularly from the normal.

Along the West Coast the wind was less steady than usual, but the mean direction of the winds was approximately normal. This is shown below:—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, November, 1905.	Normal, November.	Actual, percentage, November, 1905.	Normal percentage, November.	Departure from normal, November, 1905.
	°	°			
Bombay	N 21 E	N 18 E	35	51	—16
Karwar	N 27 W	N 30 W	43	45	—12

Over south India the winds, as in parts of the Deccan, were more easterly than the average. The following gives data :—

STATION.	MEAN WIND DIRECTION.	
	Actual November, 1905.	Normal, November.
	°	°
Salem	N 64 E	N81 E
Chitaldroog	N 89 E	N 72 E
Bangalore	N 84 E	N 60 E
Hassan	N 81 E	N 70 E
Mysore	S 83 E	N 39 E
Madras	N 40 E	N 27 E
Bellary	S 87 E	N 82 E
Waltair	N 75 E	N 77 E

The winds were, on the whole, steadier than usual—in some places largely so—and the velocity was generally above the average. This is shown below :—

STATION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, November, 1905.	Normal percentage, November.	Departure from normal, November, 1905.	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
Salem	48	24	+24	98	74	+24
Chitaldroog	82	69	+13	183	149	+34
Bangalore	82	68	+14	188	120	+68
Hassan	75	79	— 4	76	72	+ 4
Mysore	82	22	+60	244	206	+38
Madras	81	62	+19	152	156	— 4
Bellary	77	54	+23	89	77	+12
Waltair	78	52	+26	220	...	...

The following gives comparative data of the mean air movement and steadiness over the peninsular divisions :—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, November, 1905.	Normal percentage, November.	Departure from normal, November, 1905.	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
Central Provinces	57	55	+ 2	54	78	—24
Berar	37	50	—13	84	102	—18
Bombay Deccan	69	64	+ 5	230	231	— 1
Madras Deccan	50	58	— 8	77	81	— 4
West Coast	39	48	— 9	156	149	+ 7
Mysore	80	60	+20	173	137	+36
Madras Coast	80	53	+27	89	77	+12
South India	48	24	+24	98	74	+24

At the Himalayan hill stations the mean wind directions were very variable, but, on the whole, both the steadiness and velocity exceeded the average.

At Mount Abu and Chikalda the mean wind directions were much more westerly than the average, while at Pachmarhi the direction was normal. This is shown below :—

HILL STATION.	MEAN WIND DIRECTION.	
	Actual, November, 1905.	Normal, November.
	°	°
Mount Abu	N 59 W	N 44 E
Chikalda	N 87 W	N 6 W
Pachmarhi	N 43 E	N 44 E

In the Gulf of Aden the mean wind direction was unusually southerly. At Perim both the steadiness and velocity exceeded the average, while at Aden both were below it. The following gives data :—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, November 1905.	Normal, November.	Actual percentage, November, 1905.	Normal percentage, November.	Departure from normal, November, 1905.	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°						
Aden	S 45 E	S 87 E	33	67	—34	209	310	—101
Perim	S 29 E	N 89 E	90	74	+16	499	485	+14

In the South-east Trades region the winds were very steady, but lighter than usual. At Mauritius the mean direction was approximately normal, at the Seychelles

more southerly, and at Zanzibar more easterly than usual. This is shown below :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, November 1905.	Normal, November.	Actual percentage, November, 1905.	Normal percentage, November.	Departure from normal, November, 1905.	Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	°	°						
Mauritius . .	S 86 E	S 83 E	...	...	...	244	257	—13
Seychelles . .	S 45 E	S 84 E	47	9	+38	131	140	— 9
Zanzibar . .	S 89 E	S 36 E	54	17	+37	99	110	—11

The following summarises the above:—

(1) The winds, on the mean of the month, were more northerly than usual over the Bay.

(2) The wind was unusually westerly over northern India and unusually easterly over the Deccan and south India.

(3) In the hills the winds were fairly steady, but the directions were as usual very variable.

(4) In the South-east Trades region the winds, though steady, were lighter than usual. At the Seychelles the mean direction was abnormally southerly.

Humidity and Cloud.

The absolute humidity at 8 A.M on the mean of the month exceeded the normal over the greater parts of—

(1) Burma, Assam and north Bengal.

(2) The southern half of the Peninsula.

(3) Sind, Rajputana, the Punjab and the North-West Frontier Province.

Elsewhere the mean absolute humidity was in defect of the average. The departures from normal were frequently large, as is shown by the following statement :—

Positive Departures.		Negative Departures.	
Station.	Departures.	Station.	Departures.
	"		"
Hyderabad (S.) . .	+·165	Ahmednagar . .	—·138
Bhuj	+·097	Malegaon . . .	—·090
Thayetmyo . .	+·092	Gopalpur . . .	—·089
Kurrachee . .	+·085	Waltair . . .	—·082
Jhansi	+·084	Saugor . . .	—·082
Jacobabad . . .	+·080	Bhavnagar . . .	—·031
Khushab . . .	+·074	Chaibassa . . .	—·078
Lahore . . .	+·073	Balasore . . .	—·076
Belgaum . . .	+·069	Amraoti . . .	—·075
Toungoo . . .	+·061	Sholapur . . .	—·075
		Lucknow . . .	—·075
		Sambalpur . .	—·073
		Nowgong . . .	—·072
		Seoni . . .	—·069
		Cawnpore . . .	—·068
		Indore . . .	—·066
		Hyderabad (D) . .	—·065
		Chanda . . .	—·064
		Allahabad . . .	—·062

Notwithstanding the prevailing high temperatures, the distribution of the departures from normal of the mean relative humidity at 8 A.M. differed but little from that of mean absolute humidity. Areas of excess of mean relative humidity were shown over Burma, over the south of the Peninsula and over north-west India, but in each case the area of excess, owing to the high temperature, was much less in extent in the case of relative humidity than in the case of absolute humidity. The mean relative humidity was 5% or more in excess of the average at the following stations in the areas mentioned :—

	Station.	Relative Humidity.		
		Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
		%	%	
Burma .	Thayetmyo . .	87	78	+9
	Toungoo . .	94	88	+6
	Mergui . . .	83	78	+5
Peninsula . .	Mercara . .	86	81	+5
North-West India.	Lahore . . .	82	67	+15
	Hyderabad (s) .	61	50	+11
	Khushab . .	55	48	+7
	D. I. Khan . .	70	65	+5
	Bhuj . . .	64	59	+5
	Jhansi . . .	55	50	+5
	Mainpuri . .	74	69	+5

Over the whole of the remainder of the country the mean relative humidity at 8 A.M. was lower than usual and

over the more central areas the departures were large. This is shown below :—

STATION.	RELATIVE HUMIDITY. Actual, November, 1905.	Normal, November.	Departure from normal, November 1905.
	%	%	
Bhavnagar	47	66	—19
Saugor	37	54	—17
Lucknow	59	76	—17
Indore	41	57	—16
Rajkot	40	55	—15
Jaipur	41	54	—13
Allahabad	59	72	—13
Malegaon	43	56	—13
Gopalpur	67	80	—13
Hazaribagh	53	66	—13
Ranchi	54	66	—12
Sholapur	41	53	—12
Hyderabad (D)	61	73	—12
Neemuch	36	47	—11
Agra	48	59	—11

The mean 8 A.M. relative humidity of the month was less than 40% or more than 90% at the following stations which hence outline the regions of greatest and least dampness on the mean of the month :—

STATION.	Mean Relative humidity over, 90%.	Station.	Mean relative humidity less than 40%.
	%		%
Sibsagar	98	Kotah	38
Toungoo	94	Saugor	37
Monywa	93	Neemuch	36
Lashio	92	Jodhpur	36
Dibrugarh	92		
Motihari	92		
Akyab	91		
Bhamo	91		
Pamban	91		

At the hill stations the departures of the mean 8 A.M. humidity from normal were irregular, but they were not large, except in the case of Baluchistan and the interior of Kashmir. The following gives data :—

HILL STATION.	RELATIVE HUMIDITY. Actual, November 1905.	Normal, November.	Departure from normal, November, 1905.
	%	%	
Chaman	52	43	+ 9
Quetta	35	...	...
Leh	42	67	—25
Gilgit	40	52	—12
Chakrata	49	53	— 4
Ranikhet	59	63	— 4
Simla	40	42	— 2

At Aden both the daily absolute and relative humidities, on the mean of the month, were in excess, and at Perim both were in defect, of the normal. This is shown below :—

STATION.	ABSOLUTE HUMIDITY. Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.	RELATIVE HUMIDITY. Actual, November. 1905.	Normal, November	Departure from normal, November, 1905.
	"	"	"	%	%	
Aden	·734	·675	+ ·059	70	68	+ 2
Perim	·698	·742	—·044	65	69	— 4

At the Seychelles the mean daily absolute humidity was in excess of the normal, but the mean temperature was considerably higher than usual and the relative humidity was in defect. At Mauritius both the absolute and relative humidities were in excess of the average. The following gives data for the stations in the South-east Trades region :—

STATION.	ABSOLUTE HUMIDITY. Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.	RELATIVE HUMIDITY. Actual, November, 1905.	Normal, November.	Departure from normal, November, 1905.
	"	"	"	%	%	
Seychelles	·866	·836	+ ·030	81	83	— 2
Mauritius	·635	·603	+ ·032	74	68	+ 6

The month's data show that the mean 8 A.M. relative humidity was in excess of the normal over the outskirts of the empire in Lower Burma, the south of the Peninsula

and the Indus Valley, but that the whole central area was occupied with a large area of diminished humidity. In the Gulf of Aden and the South-east Trades region the departures of humidity from normal were irregular.

The following table gives actual and departure data for the nine meteorological provinces:—

Meteorological Province.	Mean absolute humidity.		Mean relative Humidity.	
	Average actual, November 1905.	Departure from normal, November 1905.	Average actual, November 1905.	Departure from normal, November 1905.
	"	"	%	
Burma Coast and Bay Islands	·789	—·048	76	—6
Bengal and Orissa	·613	—·014	72	—5
Gangetic Plain and Chota Nagpur.	·356	—·029	55	—5
Upper Sub-Himalayas	·3·0	—015	56	—4
Indus Valley and North-west Rajputana.	·419	+·066	57	+3
East Rajputana, Central India and Gujarat.	·290	0	36	—6
Deccan	·377	—·051	48	—9
West Coast	·742	+·021	74	—2
South India	·610	+·009	70	—3

The mean 8 A.M. cloud amount of the month was less than usual over north-east India, Burma and the Bay area, over Mysore and over the greater part of north-west India. The deficiency was greatest at the coast stations around the Bay, but was moderate in amount in parts of the Punjab and of Mysore. The departures from normal exceeded—1·0 at the following large number of stations:—

Station.	Mean cloud amount.		
	Actual, November 1905.	Normal, November.	Departure from normal, November 1905.
Tavoy	0·7	4·0	—3·3
Akyab	0·8	3·7	—2·9
Diamond Island	1·6	4·1	—2·5
Mergui	2·0	4·3	—2·3
Bhamo	2·4	4·2	—1·8
Bassein	1·6	3·4	—1·8
Gopalpur	1·4	3·2	—1·8
Silchar	2·9	4·7	—1·8
Barisal	0·2	1·9	—1·7
Chittagong	1·9	3·5	—1·6
Rangoon	1·7	3·2	—1·5
Ludhiana	0·6	2·1	—1.5
Saugor Island	1·7	3·1	—1·4
Dhubri	0·7	1·9	—1·2
Cuddalore	4·8	6 o	—1·2
Montgomery	0·6	1·8	—1·2
Sialkot	0·4	1·5	—1·1
Chitaldroog	3·3	4·4	—1·1

In all other parts of the Indian land area the sky was more cloudy than usual at 8 A.M. the increased cloudiness having been particularly marked along the West Coast and thence eastward over Central India and the north of the Central Provinces. The departures from normal exceeded +1·0 at the following places:—

Station.	Mean cloud amount.		
	Actual, November 1905.	Normal, November.	Departure from normal, November 1905.
Sibsagar	8·9	5·2	+3·7
Sutna	4·0	1·1	+2·9
Indore	3·7	1·1	+2·6
Neemuch	3·3	0·9	+2·4
Mormugao	3·7	1·4	+2·3
Rajkot	3·1	1·0	+2·1
Goa	3·7	1·6	+2·1
Ahmedabad	3·6	1·8	+1·8
Kurrachee	3·0	1·3	+1·7
Bhavnagar	2·9	1·2	+1·7
Belgaum	4·0	2·3	+1·7
Tinnevelly	6·9	5·2	+1·7
Ratnagiri	3·0	1·4	+1·6
Bombay	3·1	1·5	+1·6
Madura	6·0	4·5	+1·5
Saugor	2·5	1·1	+1·4
Veraval	2·9	1·6	+1·3
Surat	2·5	1·3	+1·2
Hoshangabad	2·5	1·3	+1·2
Bangalore	5·4	4·2	+1·2
Karwar	2·6	1·5	+1·1
Akola	2·6	1·5	+1·1
Trincomalee	4·6	3·5	—1·1

At most of the north-western hill stations the sky, on the mean of the month, was less cloudy than usual at 8 A.M. but there was some excess at the central and southern hill stations. The departures from normal exceeded 1·0 only at the following places :—

Hill Station.	Mean cloud amount.		
	Actual, November 1905.	Normal, November.	Departure from normal, November 1905.
Murree	0·9	2·8	—1·9
Srinagar	1·5	2·9	—1·4
Wellington	6·0	4·8	+1·2

The mean cloud amount at 8 A.M. was more than 5·5 or less than 0·5 at the following stations which hence outline the regions of greatest and least cloudiness on the mean of the month :—

Station.	Mean cloud amount over 5·5.	Station.	Mean cloud amount less than 0·5.
Sibsagar	8·9	Sialkot	0·4
Mymensingh	8·0	Meerut	0·4
Negapatam	7·1	Purnea	0·4
Tinnevelly	6·9	Muzaffarpur	0·3
Mercara	6·2	Bankura	0·3
Pudukkottai	6·2	Bogra	0·2
Madura	6·0	Malda	0·2
Mysore	5·8	Barisal	0·2
Madras	5·7		
Coimbatore	5·7		
Pamban	5·6		

At Perim and Aden the mean daily cloud amount was less than normal. The following gives data :—

Station.	Mean cloud amount.		
	Actual, November, 1905.	Normal November.	Departure from normal, November 1905.
Perim	2·5	3·0	—0·5
Aden	3·2	3·8	—0·6

In the South-east Trades region the mean cloud amount varied irregularly from the normal, as is shown by the following comparative data :—

Station.	Mean cloud amount.		
	Actua November 1905.	Normal, November.	Departure from normal, November 1905.
Seychelles	5·9	6·9	—1·0
Mauritius	6·6	5·6	+1·0

Summarising the above the monthly data show :—

(1) That the sky, on the mean of the month, was clearer than usual over a large part of north-west India and over north-east India, Burma and the Bay area.

(2) That the sky was more cloudy than usual elsewhere

(3) That the greatest deficiency of cloud was reported from the coast stations of the Bay and the greatest excess from the West Coast and the north of the Central Provinces and Central India.

The following table gives actual and departure data for the nine meteorological provinces :—

Meteorological Province.	Mean cloud amount.	
	Average actual, November 1905.	Departure from normal, November 1905.
Burma Coast and Bay Islands	3·1	—1·4
Bengal and Orissa	2·4	—0·8
Gangetic Plain and Chota Nagpur	2·4	+0·5
Upper Sub-Himalayas	1·0	—0·5
Indus Valley and north-west Rajputana	1·9	+0·3
East Rajputana, Central India and Gujarat	1·9	+0·5
Deccan	2·8	+0·3
West Coast	2·6	+0·7
South India	5·1	—0·3

Rainfall.

November 1905 was an even drier month than usual over nearly the whole country. The total rainfall of the month as shown by the meteorological observatories is given in Plate VII. This plate shows that rain fell over the Peninsula to the south of a line running from the west coast near Bombay eastward to Aurangabad, then southward to Bellary and thence north-north-eastward to Gopalpur, as well as over Burma and Assam; but that over the whole of northern and central India and the greater part of the Deccan there was absolutely no rain throughout the month except at a few hill stations. The largest total amounts at the southern observatories were 10·38″ at Cuddalore, 10·99″ at Madras, 12·52″ at Pambau and 14·61″ at Trincomalee. In Burma the largest amount was 4·26″ at Toungoo and in Assam 2·04″ at Sibsagar.

The chief periods of rain were:—

The 1st to the 9th, when scattered showers occurred over Burma and Assam.

The 10th to the 20th, when rain fell over the south of the Peninsula, and

The 23rd to the 28th, when rain fell over the south and west of the Peninsula.

The following table gives comparative rainfall data for the 57 rainfall divisions:—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, November 1905.	Average normal, November.	Average actual, November 1905.	Average normal, November.	Departure from normal November 1905.
				Inches.	Inches.	Inches.
Burma	Tenasserim	1·4	3·4	0·77	2·05	−1·28
	Lower Burma (deltaic)	0·9	2·6	0·73	1·69	−0·96
	Central do.	1·2	1·6	0·68	1·09	−0·41
	Upper do.	0·7	2·2	0·35	1·25	−0·90
	Arakan	0·5	2·2	0·32	1·54	−1·22
Bengal and Assam	Eastern Bengal	0	1·2	0	1·02	−1·02
	Assam (Surma)	0·1	1·6	0·02	1·26	−1·24
	Do. (Hills)	1·0	2·0	0·56	1·11	−0·55
	Do. (Brahmaputra)	0·3	1·1	1·18	0·49	+0·69
	Deltaic Bengal	0	0·9	0	0·76	−0·76
	Central do.	0·2	0·6	0·02	0·43	−0·41
	North do.	0·2	0·4	0·08	0·18	−0·10
	Bengal Hills	0·1	0·8	0·04	0·31	−0·27
	Orissa	0·9	1·6	0·02	1·40	−1·38
	Chota Nagpur	0	0·6	0	0·35	−0·35
	Bihar (South)	0	0·3	0	0·21	−0·21
	Do. (North)	0	0·2	0	0·11	−0·11
United Provinces of Agra and Oudh.	United Provinces (East)	0	0·3	0	0·17	−0·17
	Oudh (South)	0	0·2	0	0·13	−0·13
	Do. (North)	0	0·2	0	0·12	−0·12
	United Provinces (Central)	0	0·2	0	0·15	−0·15
	Do. do. (West)	0	0·1	0	0·05	−0·05
	Do. do. (East Submontane)	0	0·2	0	0·10	−0·10
	Do. do. (West do.)	0·5	0·3	0·01	0·17	−0·16
	Do. do. (Hills)	0·2	0·6	0·06	0·26	−0·20
Punjab	Punjab (South-East)	0	0·2	0	0·08	−0·08
	Do. (South)	0	0·1	0	0·06	−0·06
	Do. (Central)	0	0·3	0	0·14	−0·14
	Do. (Submontane)	0	0·4	0	0·20	−0·20
	Do. (Hills)	0·1	0·8	0·02	0·52	−0·50
	Do. (West)	0	0·2	0	0·11	−0·11
North-West Frontier Province.	North-West Frontier Province	0·1	0·7	0·03	0·52	−0·49
Bombay and Malabar Coast Districts (Madras).	Malabar	3·2	1·5	2·39	3·58	−1·19
	Travancore	6·7	...	3·92	...	...
	Madras (South Central)	5·2	5·8	2·14	3·84	−1·70
	Coorg	3·4	...	1·60	...	...
	Mysore	2·3	3·8	0·94	2·56	−1·62
	Konkan	1·4	1·4	0·70	0·87	−0·17
	Bombay Deccan	1·0	1·8	0·39	1·11	−0·72
	Hyderabad (North)	...	...	...	...	...
	Khandesh	0·9	0·8	0·25	0·48	−0·23

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, November 1905.	Average normal, November.	Average actual, November 1905.	Average normal, November.	Departure from normal, November 1905.
				Inches.	Inches.	Inches.
Central Provinces and Berar.	Berar	0	0·9	0·01	0·58	−0·57
	Central Provinces (West)	0	0·7	0	0·41	−0·41
	Do. (Central)	0	0·7	0	0·41	−0·41
	Do. (East)	0	0·8	0	0·49	−0·49
Bombay (North)	Gujarat	0·5	0·5	0·01	0·25	−0·24
	Kathiawar and Cutch	0	0·4	0	0·32	−0·32
	Sind	0	0·2	0	0·09	−0·09
	Baluchistan Hills	0·1	1·2	0·03	0·51	−0·48
Rajputana and Central India.	Central India (East)	0	0·5	0	0·26	−0·26
	Rajputana (East), Central India (West)	0	0·4	0	0·19	−0·19
	Do. (West)	0	0·3	0	0·20	−0·20
Madras	East Coast (North)	0·4	3·0	0·26	2·81	−2·55
	Hyderabad (South)	...	...	...	...	...
	Madras (Central)	1·3	3·3	0·46	2·19	−1·73
	East Coast (Central)	6·8	7·3	3·84	8·55	−4·71
	East Coast (South)	11·4	9·1	6·71	9·20	−2·49
	Madras (South)	11·5	8·0	6·96	6·27	+0·69

The preceding data show that the rainfall of the month was in defect of the normal in all parts of the Indian land area except the Brahmaputra Valley, and South Madras. The following gives comparative data for these two divisions :—

Division.	Rainfall.			
	Average actual, November 1905.	Average normal, November.	Departure from normal, November 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Assam Brahmaputra	1·18	0·49	+0·69	+141
Madras South	6·96	6·27	+0·69	+ 11

Rain fell during the month in twenty of the rainfall divisions, *viz.*, those in Burma, Assam and the Peninsula, while actually or practically no rain was received in thirty-six divisions. The information for Hyderabad has not been received.

The departure of the general rainfall of the whole country from normal (excluding the hill divisions) as determined from the fifth figure column of the table on pp. 325 and 326 was —0·58″.

In Burma what little rain was received occurred generally during the first ten days though there were some showers in Upper Burma between the 17th and 21st. There were no heavy falls except 3·76″ at Toungoo on the 1st, 3·25″ at Kyaukkyi on the 6th and 3·20″ at Sidaw on the 2nd and the total rainfall of the month of all divisions was largely below the normal average.

The Surma Valley of Assam received practically no rain, but in the Assam Valley there were fair showers between the 1st and the 4th and the 10th and the 15th, and the total rainfall of this division for the month was nearly three times as heavy as usual. The only moderately heavy fall in 24 hours was however 2·00″ at Kerkeriya (Darrang) on the 11th.

On the Assam Hills only half the usual rainfall was received, the showers occurring generally between the 2nd and the 12th. At Cherra Poonjee no rain whatever fell.

In the Bengal divisions the month's rainfall was actually or practically *nil* though showers occurred in North Bengal between the 2nd and 14th and in Orissa on the 23rd and 24th.

In the United Provinces a few light showers were received between the 22nd and 25th and in the Punjab the only rainfall reported was one or two light showers on the hills on the 23rd. In the North-west Frontier Province there were showers between the 7th and 10th and on the 23rd but the amounts were unimportant.

Baluchistan received showers on the same dates as the North-west Frontier Province and of the same amount.

In Kashmir very light showers fell between the 9th and the 14th and 23rd and 28th but the falls were even lighter than usual.

Rajputana, Central India and the Central Provinces were all practically rainless though a few drops of rain were received in Buldana towards the end of the month.

The Konkan division of the Bombay Presidency received showers between the 24th and 29th and the total fall of the month of this division was nearly normal. In the Karnatic division light rain was received on the 13th and again between the 25th and 28th, and in the Deccan showers fell between the 26th and 29th. The total rainfall of the month over these areas was about half the usual amount. Gujarat was practically and Sind altogether rainless during the month.

In Mysore there were two showery periods, *viz.*, between the 11th and the 20th and the 24th and 26th. The total amount received was a little over one-third of the average and the only heavy fall was 2·70″ at Hosdurga (Chitaldroog) on the 12th. In Coorg scattered showers were received throughout the month and the rainfall was generally heavier than in Mysore.

All the Madras divisions received rain, the average actual fall ranging from about 7″ in the south divisions to

0·50″ in the central division. The East Coast (north) division received showers between the 10th and 12th and the 23rd and 26th. There were no heavy falls and the total amount for the month was only one-tenth of the normal. The central division of the East Coast had moderately continuous light rain from the 9th to the 28th. There were, however, no heavy falls and the month's rainfall was less than half the normal. The south division of the East Coast also received steady rain during the same interval and the total fall amounted to about two-thirds of the average. The heaviest falls, exceeding 3″ in 24 hours were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Pudukkottai State .	Ponnamaravati . .	4th Nov. 1905.	3·75
South Arcot .	Bhuvanagiri . .	9th „ .	3·34
	Chidambaram . .	„ „ .	3·31
Tanjore . .	Tiruvalur . . .	13th „ .	3·95
	Tiruvalur . . .	22nd „ .	3·49
South Arcot . .	Kurinjipadi .	25th „ .	3·01

In Malabar there were showers between the 10th and the 14th and again between the 25th and 27th and in this division also the total for the month was about two-thirds of the average.

Over the south-central division of Madras fair rain fell between the 10th and the 27th, and this rain extended into the Cuddapah district of Central Madras but in the Anantapur, Bellary and Kurnool districts the weather was almost rainless throughout the month. The total rainfall of the south-central division was about half and that of the central division about one-fifth of the normal amount. In South Madras more or less steady rain fell daily from the 4th to the 27th, and in this division the month's fall slightly exceeded the average. Falls exceeding 3″ in 24 hours were reported from the following places during the month : —

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Tinnevelly .	Keeranur . . .	15th Nov. .	3·70
	Kayalpatnam . .	„ „ .	3·25

The following shows the month's rainfall at the extra Indian stations :—

Station.	Rainfall.			
	Actual, November 1905.	Normal, November.	Departure from normal, November 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee . . .	14·61	13·57	+1·04	+ 8
Colombo . . .	5·09	13·13	−8·04	− 61
Kabul . . .	0·95	0·72	+0·23	+ 32
Kashgar . . .	0	0·03	−0·03	−100
Meshed	0·11	0·51	−0·40	− 78
Bushire	0·10	1·79	−1·69	− 94
Jask	0·88	0·49	+0·39	+ 80
Muscat	0·21	0·61	−0·40	− 66
Baghdad . . .	0·05	0·92	−0·87	− 95
Aden	0	0·23	−0·23	−100
Perim . . .	0·22	0·04	+0·18	+450
Zanzibar . . .	2·79	9·28	−6·49	− 70
Seychelles . . .	5·38	9·34	−3·96	− 42
Mauritius . . .	4·19	1·89	+2·30	+122

In the South-east Trades region the total fall was very light at the Seychelles and Zanzibar but exceeded the normal at Mauritius. In Persia, Kashgaria, Asiatic Turkey and Arabia the month's rainfall was very light and at Kashgar and Aden none at all was received.

The preceding data show that :—

(1) The rainfall of the month was very light over nearly the whole of the Indian land area.

(2) There was no rain whatever (except at some hill stations) over northern and central India and a large part of the Deccan.

(3) Rainfall over the coasts and south of the Peninsula and in south Madras slightly exceeded the normal.

(4) Rain was received over Burma and Assam but except in the Brahmaputra Valley in smaller amounts than usual.

(5) Rain was in defect of the average over the northern parts of the equatorial belt.

The following table gives comparative rainfall data for the eleven meteorological provinces:—

Meteorological Province.	Rainfall. Mean actual for November, 1905.	Mean normal for November.	Departure from normal, November, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands.	1·35	3·57	− 2·27*	− 64
Burma, Inland . .	0·66	1·51	−0·79*	− 52
Assam	0·97	0·66	+0·31	+ 47
Bengal and Orissa .	0	0·91	−0·91	−100
Gangetic Plain and Chota Nagpur.	0	0·29	−0·29	−100
Upper Sub-Himalayas .	0·01	0·19	−0·18*	− 95
Indus Valley and North-West Rajputana.	0	0·13	−0·13	−100
East Rajputana, Central India and Gujarat.	0	0·24	−0·24*	−100
Deccan . . .	0·07	0·76	−0·69*	− 91
West Coast . . .	1·81	2·78	−0·97	− 35
South India . . .	3·24	6·05	−2·81*	− 46

* A reference to table 1 will show that the means of columns 2 and 3 are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 will not, therefore, agree with the figures in column 1.

Snowfall.

Persia:—At Meshed the snowfall conditions were normal.

I.—Afghan Mountain Districts.

(1) *Kurram*:—The weather was unusually dry on the Samana and Orakzai hills during November, and no snow fell, but about the middle of the month there was an unusual fall of snow on the Sufed Koh and the hills to the north of the Kurram. Snow fell on the Sufed Koh and surrounding hills on the 6th, 7th, 8th, 9th, 13th and 25th.

II.—Kashmir and Punjab Himalayas.

(1) *Kashmir*:—Heavy falls of snow occurred over the western ranges of mountains in Kashmir at the end of November, but generally the weather was unusually fair.

(2) *Leh*:—There was a slight sprinkle of snow on the 28th, and there were one or two falls of snow on the higher hills, but the snow was of no great depth and melted quickly.

(3) *Simla Bashahr Division*:—Some snow fell on the 23rd descending to 7,500 ft. where the depth was 2″.

The depth of snow on the passes was as follows on the 30th November:—

Rupar Pass	2 feet.
Bruin „	2 „
Harang „	1 foot.
Shatul „	2 feet.
Buldar „	2 „
Runang „	1½ inches.

All the passes were closed except the Harang Pass.

(4) *Chamba*:—At Kilar (8,400 ft.) two inches of snow fell on the night of the 27th. On the Sach Pass there was a depth of 1 ft. of snow on the 30th.

III.—United Provinces Himalayas.

(1) *Almora*:—The following snowfall reports have been received:—

Malla Johar.—Very light snow fell on the 11th and 12th.

Malla Danpur.

	ft.	ins.
23rd November	0	2

Malla Darma.

21st November	3	6
22nd „	3	6

Chandans.

8th November	0	6
10th „	0	6
12th „	1	0
14th „	1	0

The accumulation of snow on the 30th November was as follows:—

	ft.	ins.
Unta Dhura	15	0
Ralam Dhura	12	0
Millam „	9	0
Pindari Peak	0	2
Kaunela „	0	2
Nirwe Pass	22	0
Binkara „	15	0

The snowfall was reported to be greater than during November, 1904, but was confined to the highest peaks.

Crop Report.

Burma:—The cultivation of miscellaneous crops was in general progress during the month, and the cultivation of dry weather paddy had commenced at the end of the month in Mandalay and Kyaukse. The state and prospects of the standing crops were generally good, though some crops in Singaing in Kyaukse had failed for want of water.

Eastern Bengal and Assam:—Rain was wanted in Goalpara. Plucking and manufacture of tea were in progress and the outturn was fair. The harvesting of winter rice was in progress and the sowing of spring crops continued during the month.

Bengal:—Spring sowings were practically over and the seeds germinating well, but rain was wanted in Nadia, Patna, the Sonthal Parganas and Puri. Prospects were, on the whole, good. The harvesting of winter rice was progressing and the harvesting of sugar continued in Bihar.

United Provinces:—Rain was required in most districts and crops were withering in the unirrigated parts of Jalaun. Sowings continued and germination was good where moisture was sufficient and irrigation possible. In the famine area spring sowings were practically completed at the end of the month and on unirrigated lands the young crops were withering and large areas unsown.

Punjab:—The harvesting of autumn crops and sowing of spring crops continued during the month. Rain was badly wanted. The outturn of autumn crops was average to below average; that of cotton poor throughout the province. Spring crops at the end of the month were in good condition, except in Rawalpindi and Mianwali, and a fair yield was anticipated should rain fall in time. Spring crops on unirrigated land were drying in Gurgaon for want of rain.

North-West Frontier Province:—Rain was badly wanted to complete unirrigated spring sowings. The state of the standing irrigated crops was good, but of unirrigated crops poor.

Kashmir Jumoo:—The condition of the standing crops was fair.

Rajputana:—The late autumn crops were being harvested during the month. Operations for spring crops continued, but were much restricted owing to the dry season. In Kotah wheat was withering owing to lack of moisture. Pasture and fodder were insufficient in parts of North Mewar, Tonk, Jaipur, Kishangarh, Alwar, Karauli, Bharatpur, Dholpur, Ajmer, Merwara and parts of Kotah and Marwar.

Central India:—Irrigation and sowing of spring crops were in progress. The standing crops were normal in parts of Gwalior, fair to Indore, Bhopal, Malwa and Bhopawar, indifferent in Baghelkhand and withering in Bundelkhand. The crops were suffering from heat in Indore, and had been damaged by want of rain in parts of Indore and Malwa and in most parts of Baghelkhand and Bundelkhand.

Central Provinces:—Harvesting and threshing of autumn crops and picking of cotton continued during the month. With some exceptions the outturn of the important autumn crops was fair to good. Rain was wanted.

Bombay:—Rain was urgently needed in parts of Broach, Surat, the Deccan, the Karnatak and Kolhapur.

Hyderabad:—The early sown spring crops were benefited by rain in five taluks, but there was no improvement in prospects elsewhere. The spring crops were withering or were in bad condition in sixteen taluks and rain was generally urgently needed.

Mysore:—Prospects slightly improved during the month, but more rain was needed.

Madras:—The standing crops were generally fair, but some in parts of Ganjam, Kistna, the Deccan, Coimbatore and Malabar required more rain and some in parts of Vizagapatam and Cuddapah were withering. The harvest outturns ranged from poor to normal and bumper.

W. L. DALLAS.

Table I.—Abstract of Observations taken at 8 A.M. at 229 Stations in India, Burma, etc., in November, 1905.

Tab

Abstract of Observations taken at 8 A.M. at 2.

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet	Pressure, 8 A.M., in inches.								Temperature of Air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during *month*.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	*Departure from* normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	I.—Burma Coast and Bay Islands.			+·079								86·6	−0·3	72·5	0	79·6	−0·2	14·2				
1	Car Nicobar* . .	25	29·937		29·839	30·006	26th	29·886	3rd	·120	81·0	87·0		78·1		82.6		8·9	89·0	2nd	74·1	1st
	Port Blair . .	61	29·959	+·076	29·951	30·029	26th	29·873	4th	·156	80·8	88·2	+1·4	78·3	+1·1	83·2	+1·2	9·9	89·6	7 days	72·9	28th
	Slipper Island . .		30·027			30·110	8th	29·978	4th	·132												
	Mergui* . . .	96	29·947	+·085	29·974	30·023	8th	29·849	4th	·174	78·3	87·2	−0·2	70·6	+0·9	78·9	+0·4	16·6	90·9	16th & 17th.	64·4	21st
	Tavoy . . .	19	30·037	+·073	29·988	30·109	8th	29·931	4th	·178	75·6	87·3	−0·6	68·3	−0·2	77·8	−0·4	19·0	90·0	16th	63·3	22nd
	Moulmein . .	94	29·960	+·074	29·993	30·049	8th	29·823	4th	·226	75·7	87·6	−0·8	70·4	−0·7	79·0	−0·8	17·2	89·5	4 days	65·4	22nd
2	Rangoon . .	57	30·000	+·072	29·986	30·075	8th	29·859	4th	·216	76·1	87·0	−0·6	72·4	+0·1	79·7	−0·3	14·6	89·1	30th	66·8	25th
	Bassein . . .	27?	30·024	+·084	29·969	30·111	8th	29·908	4th	·203	75·1	86·2	0	70·8	−0·7	78·5	−0·4	15·4	88·2	9th & 10th.	65·4	25th
	Diamond Island .	41	30·000	+·068	29·976	30·078	8th	29·884	4th	·194	80·1	85·2	−0·2	76·2	+1·0	80·8	+0·4	9·1	87·4	8th	73·7	28th
5	Akyab . . .	20	30·045	+·075	30·008	30·122	7th	29·919	4th	·203	72·1	84·2	−0·9	69·8	−1·6	77·0	−1·3	14·4	87·9	7th	62·2	25th
3	Toungoo . .	182	29·877	+·074	30·016	29·947	8th	29·740	4th	·207	73·5	86·7	−0·6	70·0	0	78·4	−0·3	16·7	89·3	10th & 25th	64·1	27th
	II.—Burma Inland.			+·061								85·4	−1·5	65·7	0	75·5	−0·8	19·7				
3	Thayetmyo . .	121	29·937	+·064	30·002	30·013	8th	29·799	4th	·214	74·7	87·6	−0·4	66·1	−1·2	76·9	−0·8	21·5	91·0	2nd	57·0	26th
4	Minbu . . .	*165*	29·885	?	29·998	29·970	21st	29·747	3rd	·223	73·2	86·4	−2·2	67·2	−1·0	76·8	−1·6	19·2	89·2	6th	60·0	26th
	Yamethin . .	657	29·334	?	30·009	29·466	8th	29·247	1st	·219	72·6	85·7	−3·1	67·9	+0·9	76·8	−1·1	17·8	88·3	5 days	60·2	26th & 27th.
	Monywa . .	*280*	29·817		30·036	29·901	8th & 21st	29·661	3rd	·240	71·4	86·3		67·3		76·8		19·0	90·8	2nd	60·6	26th
	Mandalay . .	250	29·816	+·060	30·021	29·904	21st	29·663	4th	·241	74·5	88·9	?	68·6	+1·4	78·8	?	20·3	92·5	2nd & 5th.	57·7	13th.
	Myitkyina . .	458	29·615		30·049	29·716	20th	29·456	1st	·260	68·5	81·4		62·2		71·8		19·2	86·3	3rd	56·3	25th & 30th.
	Bhamo . . .	*381*	29·709	+·058	30·061	29·802	21st	29·544	1st	·258	66·1	81·4	−0·4	60·3	+1·1	70·9	+0·4	21·1	87·9	1st	52·2	24th & 26th.
4(a)	Maymyo . . .	3,545	26·564		26·509	26·661	8th	26·455	4th	·206	60·9	73·1		53·8		63·5		19·3	77·4	6th	45·1	25th
	Lashio . . .	*2,751*	27·257	+·020	27·203	27·353	21st	27·111	1st	·242	61·1	78·9	+1·8	54·6	+0·3	66·7	+1·1	24·3	88·6	16th	45·5	25th
	III.—Assam.			+·051								80·7	−0·1	62·0	+0·4	71·4	+0·2	18·7				
7	Silchar . . .	104	29·983	+·064	30·044	30·068	8th	29·849	1st	·219	68·8	84·0	−0·8	63·5	−0·1	73·8	−0·5	20·5	88·5	7th	58·4	19th, 26th & 28th.
9	Sibsagar . .	333	29·761	+·021	30·066	29·851	20th	29·597	1st	·254	64·6	77·1	−1·2	61·1	+1·5	69·1	+0·2	16·0	84·3	1st	53·9	22nd & 24th.
	Dhubri . . .	115	29·976	+·057	30·051	30·064	8th	29·823	4th	·241	69·7	81·6	+1·8	63·2	−0·3	72·4	+0·8	18·4	87·7	1st	53·3	26th & 30th.
	Gauhati . . .	195	29·908		30·067	30·006	21st	29·764	1st	·242	66·3	82·9		60·8		71·9		22·1	89·0	1st	52·6	25th
	Tezpur . . .	252	29·840		30·002	29·848	20th	29·697	1st	·251	66·3	80·5		63·2		71·9		17·3	87·6	1st	56·5	19th & 24th.
	Dibrugarh . .	353	29·740		30·068	29·841	21st	29·584	1st	·257	64·5	78·2		60·4		69·3		17·8	83·2	5th	52·4	20th
	IV.—Bengal and Orissa.			+·065								83·7	+1·1	63·0	−0·4	73·4	+0·3	20·6				
6	Chittagong . .	87	29·993	+·077	30·031	30·073	8th	29·863	4th	·210	70·8	81·9	−1·1	64·2	−1·6	73·1	−1·4	17·7	86·7	6th	58·1	28th
	Noakhali . .	43	30·017		30·008	30·094	8th	29·884	4th	·210	71·7	82·8		63·5		73·2		19·3	85·6	2nd	54·6	28th
	Comilla . . .	36	30·034†		30·019†	30·120	8th	29·900	4th	·220	71·3	84·1		63 8		73·9		20·3	87·9	1st	55·8	28th
	Sirajganj . .	49	30·030†		30·031†	30·133	8th	29·895	4th	·238	69·2	83·2		62·1		72·7		21·1	86·8	3rd, 4th & 14th.	54·9	25th & 27th.
	Narayanganj . .	26	30·061	+·079	30·036	30·155	8th	29·911	4th	·244	71·1	84·4	+0·9	66·7	+0·7	75·6	+0·8	17·7	87·6	2nd	59·3	28th
	Farisal . . .	12	30·006	+·076	30·025	30·157	8th	29·927	4th	·210	73·3	83·7	+0·9	64·6	−0·4	74·2	+0·3	19·1	86·8	13th & 14th.	56·7	28th
	Mymensirgh . .	62	29·997	?	30·015	30·113	8th	29·889	4th	·224	71·1	85·5	+2·0	64·3	+0·6	73·9	+1·3	19·2	87·7	1st	58·0	25th & 27th.
	Faridpur . .	46	30·041		30·038	30·173	8th	29·393	4th	·230	70·7	82·9		62·8		72·9		20·1	86·4	13th & 14th.	55·5	28th
11	Jessore . . .	33	30·046	+·061	30·027	30·129	8th	29·886	4th	·243	71·0	83·0	−0·1	63·4	−0·6	73·2	−0·4	19·6	88·5	13th	56·1	27th & 28th.
	Calcutta (Alipore) .	21	30·068	+·064	30·035	30·153	8th	29·917	4th	·236	69·9	83·3	+1·9	63·6	−0·9	73·5	+0·5	19·7	86·9	6th, 13th & 14th.	56·9	17th
	Saugor Island . .	25	30·063	+·068	30·033	30·147	20th	29·920	4th	·227	73·7	83·6	+1·9	67·9	+0·8	75·8	+1·4	15·7	87·9	5th	60·9	18th

N.B.— Elevations in italics indicate barometrical determinations.

* Observations of 29 days. † Mean of 29 days.

NOTE 1.—When a query is inserted against any reading or in the returns of any station, the data for

NOTE 2.—The data from which divisional means of the figure columns Nos. 40, 42, and 44 are de

NOTE 3.—The barometric readings are not reduced to sea-level in the cases of hill or pl

I.

Stations in India, Burma, etc., in November, 1905.

Wind Direction. Number of winds from: Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May, to 30th November 1905.	Normal rainfall for period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November, 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
			2			1								84	+2	·778	+·003	2·9	−1·8				1·35	3·57	−2·27					I.—Burma Coast and Bay Islands.
5	7								N 56° E	5·31			5·31	79		·838		3·8		3			1·79			54·21			0·93	Car Nicobar.
	2	13	4	1	1	2	3	4	N 32° E	5·7	7·1	−20		81	−4	·854	−·029	4·8	−0·9	4			1·00	9·20	−8·20	86·35	105·86	−19·51	0·36	Port Blair.
	6	15	4			1	1	3	N 31° E																					Slipper Island.
0	3	6	5	2	3				N 74° E	2·7	1·6	+69	2·4	83	+5	·780	+·030	2·0	−2·3	2	5·60	−3·60	1·56	3·70	−2·14	143·73	155·53	−11·80	1·20	Mergui.*
0									Calm	1·1				83	+2	·733	−·005	0·7	−3·3	3	3·90	−0·90	0·67	1·96	−1·29	236·56	203·34	+33·22	0·24	Tavoy.
1	1	2		3	2	1			S 49° E	1·3	2·4	−46	1·4	86	+3	·762	+·012	2·9	−0·8	4	2·50	+1·50	3·15	1·93	+1·22	181·68	179·79	+1·89	1·55	Moulmein.
3	5	11	3				3	2	N 27° E	4·1	4·4	−7	3·7	85	−2	·762	−·006	1·7	−1·5	1	2·80	−1·80	0·65	2·43	−1·78	104·96	94·23	+10·73	0·65	Rangoon.
5	3	10	2	1	1		2	6	N 16° E	5·1	3·1	+65	1·6	87	+1	·757	−·007	1·6	−1·8	0	3·80	−3·80	0	3·51	−3·51	113·42	109·88	+3·54	0	Bassein.
	3	15	8				1	3	N 45° E	8·3	6·6	−3	8·3	75	−3?	·782	−·008	1·6	−2·5	1	7·10	−6·10	0·14	5·41	−5·27	110·09	113·59	−3·50	0·12	Diamond Island.
	24	4						2	N 3° E	4·4	2·2	+100	4·2	91	+2	·724	−·021	0·8	−2·9	1	2·80	−1·80	0·28	2·77	−2·49	225·40	186·52	+38·88	0·28	Akyab.
9	4					1		6	N 34° W	10·3	1·7	+506	10·2	94	+6	·794	+·061	3·9	−0·6	2	2·00	0	4·26	1·20	+3·06	87·65	76·32	+11·33	3·76	Toungoo.
														86	+2	·676	+·027	3·4	−0·1				0·66	1·51	−0·79					II.—Burma Inland.
2	7	2	5	2	12				S 54° E	1·8	3·5	−49		87	+9	·757	+·092	2·6	0	1	2·40	−1·40	0·23	1·74	−1·51	40·18	35·58	+4·60	0·16	Thayetmyo.
3	2			3	2		1	16	N 48° W	3·1			3·7	79	+3	·660	+·007	2·1	−0·5	2	1·30	+0·70	0·59	0·45	+0·14	30·04	30·31	−0·27	0·26	Minbu.
	5			4	2			5	N 12° W	2·8			2·9	86	+2	·693	+·018	4·6	+2·5	0	2·60	−2·60	0·23	0·97	−0·74	34·36	34·88	−0·52	0·09	Yamethin.
	1						1	5	N 45° W	0·6			0·6	93		·729		4·3		1	2·10	−1·10	0·14	1·01	−0·87	33·02	27·30	+5·72	0·14	Monywa.
	5	1	1	1	4	1			N 79° E	1·8			1·8	82	−3	·698	+·011	3·2	−0·6	1	2·90	−1·90	1·17	1·71	−0·54	36·94	30·69	+6·25	0·97	Mandalay.
		2	20	4					S 88° E	3·5			3·6	87		·608		4·6		1			0·13			102·80			0·13	Myitkyina.
	3	8	2		1				N 45° E	1·2			1·4	91	+1	·587	+·019	2·4	−1·8	0	2·00	−2·00	0·06	1·01	−0·95	50·39	69·53	−19·14	0·06	Bhamo.
	1	7	1	1	1	5	4	2	N 47° W	1·5				89		·481		3·2		5	4·90	+0·10	2·77	3·01	−0·24	57·45	55·12	+2·33	0·99	Maymyo.
		5	1	1	1			1	N 60° E	6·8				92	+1	·502	+·019	6·0	−0·9	1			0·58	2·18	−1·60	47·57	57·16	−9·59	0·58	Lashio.
														90	−2	·599	−·014	4·3	+0·2				0·97	0·66	+0·31					III.—Assam.
				4					Calm	0	2·1	−100	0	87	0	·623	−·006	2·9	−1·8	0	2·00	−2·00	0	1·25	−1·25	105·63	99·15	+6·48	0	Silchar.
		11			2				N 32° E	2·6	1·7	+53	2·4	98	0	·609	+·033	8·9	+3·7	6	2·00	+4·00	2·04	0·93	+1·11	71·12	77·74	−6·62	0·61	Sibsagar.
		2	13						N 86° E	1·7	4·9	−65	2·0	82	−6	·607	+·015	0·7	−1·2	0	0·30	−0·30	0	0·22	−0·22	108·57	85·69	+22·88	0	Dhubri.
	2				3				S	1·0			1·1	92		·600		5·0		1	0·80	+0·20	0·49	0·31	+0·18	49·21	53·09	−3·88	0·49	Gauhati.
		6	5						N 66° E	1·8			1·9	90		·591		3·3		4	1·20	+2·80	1·67	0·41	+1·26	66·28	61·11	+5·17	0·93	Tezpur.
	1	1	2						N 57° E	0·6			0·6	92		·563		4·8		3	1·50	+1·50	1·61	0·81	+0·80	67·28	95·00	−27·72	0·70	Dibrugarh.
														80	−2	·591	−·012	1·4	−0·3				0	0·91	−0·91					IV.—Bengal and Orissa.
	12	16		1					N 28° E	2·6	3·0	−13	2·4	86	−3	·654	−·027	1·9	−1·6	0	1·80	−1·80	0	1·48	−1·48	125·08	87·80	+37·28	0	Chittagong.
	4	1						5	S 85° W	1·1			1·2	87		·676		0·9		0	1·39	−1·39	0	1·61	−1·61	123·54	104·45	+19·09	0	Noakhali.
	2	1		3	4				S 45° E	1·2			1·0	85		·662		0·5		0	1·55	−1·55	0	1·19	−1·19	93·84	79·50	+14·34	0	Comilla.
									Calm	0·7			0·7	89		·641		0·7		0	0·84	−0·84	0	0·55	−0·55	84·08	55·68	+28·40	0	Sirajganj.
	2	3	1		2	4	6	7	N 70° W	1·8	1·9	−5	1·5	83	−2	·645	−·014	2·3	−0·1	0	1·33	−1·33	0	1·07	−1·07	82·49	60·52	+21·97	0	Narayanganj.
	4	2			1	1		2	N 11° W	1·0			0·9	81	−2	·670	−·008	0·2	−1·7	0	1·32	−1·32	0	1·26	−1·26	80·32	70·21	+10·11	0	Barisal.
	2	3	7	3	1			2	N 79° E	0·9			0·8	88	−1	·671	+·032	8·0	+5·4	0	0·90	−0·90	0	0·65	−0·65	112·31	78·57	+33·74	0	Mymensingh.
	4				6				S	1·1			0·9	84		·636		0·9		0	1·23	−1·23	0	1·03	−1·03	83·77	60·21	+23·56	0	Faridpur.
									Calm	0·1	1·8	−39	0·1	82	−4	·636	−·011	1·4	−0·6	0	1·10	−1·10	0	1·38	−1·38	79·25	57·11	+22·14	0	Jessore.
	3	2			1	7	2	6	N 73° W	1·9	3·0	−37		86	+4	·631	+·020	1·7	−0·1	0	0·96	−0·96	0	0·68	−0·68	58·74	55·39	+3·35	0	Calcutta, (Alipore).
	8	8	1			2	5	5	N 11° W	6·2	6·4	−3		82	−5	·684	−·004	1·7	−1·4	0	1·35	−1·35	0	1·71	−1·71	62·90	68·39	−5·49	0	Saugor Island.

ons are not utilized in calculating the provincial departures from normal.
ncomplete.
ons, the elevations of which exceed 3,200 feet.

‡ Mean of 28 days.

Tab

Abstract of Observations taken at 8 A.M. at 2

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.							Temperature of air.												
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10	Krishnagar	47	30·034		30·032	30·127	8th	29·867	4th	·260	68·2	84·4		61·4		72·9		23·0	88·6	13th & 14th	53·9	24th	34
	Midnapore	149	29·919†		30·020†	30·019	30th	29·800	4th	·219	70·9‖	85·1‖		64·0‖		74·8‖		21·1	88·8	5th & 13th	58·2	30th	30
11	Bankura	298	29·764		30·040	29·854	8th	29·597	4th	·257	68·5	86·0		61·9		74·0		24·1	91·6	5th & 13th	56·1	30th	35
	Raniganj	334	29·759		30·003	29·818	8th	29·591	4th	·257	65·2	85·1		60·4		72·7		24·7	90·5	14th	54·7	17th	35
	Burdwan	99	29·987	+·055	30·039	30·073	8th	29·821	4th	·252	69·2	85·4	+2·2	63·9	−0·4	74·6	+0·9	21·5	90·4	13th & 14th	58·8	18th	31
	Naya Dumka	489	29·588		30·059	29·684	8th	29·417	4th	·267	66·7	83·5		58·9		71·2		24·6	88·9	13th	52·0	30th	36
	Berhampore	67	30·014	+·051	30·032	30·108	8th	29·846	4th	·262	69·2	83·2	+1·3	63·9	−0·1	73·6	+0·6	19·3	87·3	1st, 13th & 14th	58·7	30th,	28
	Rampur Boalia	70	30·013		30·034	30·108	8th	29·852	4th	·256	69·4	82·6		62·8		72·7		19·8	87·1	1st	56·1	25th & 27th.	31
	Malda	72	29·993*		30·019*	30·086	8th	29·826	4th	·260	69·1	82·6		60·9		71·7		21·7	87·1	1st & 2nd.	54·1	25th	33
	Bogra	61	30·001	+·055‖	30·017	30·075	8th	29·648	4th	·227	67·4	83·6	+1·6	62·1	−0·3	72·9	+0·7	21·5	88·7	2nd	55·2	27th	33
12	Dinajpur	123	29·961	+·060	30·035	30·033	8th	29·796	4th	·237	69·4	83·1	+0·7	59·9	−1·1	71·5	−0·2	23·2	87·3	1st	51·9	27th	35
	Rangpur	123	29·970		30·053	30·051	8th	29·831	4th	·220	69·5	83·1		61·7		72·4		21·4	87·2	1st	52·1	27th	35
	Jalpaiguri	284	29·799	+·049	30·052	29·892	8th	29·626	1st	·266	68·7	81·2	−0·1	61·1	+0·4	71·2	+0·2	20·0	85·9	1st	54·1	25th	31
	Cooch Behar	156	29·938		30·056	30·030	21st	29·787	1st	·243	67·3	82·1		61·9		72·0		20·2	87·3	1st	55·2	25th	32
17	Purnea	125	29·967	+·058	30·053	30·061	8th	29·804	4th	·257	66·8	81·6	−0·3	59·6	+0·4	70·6	+0·1	22·0	86·2	1st	51·6	27th	34
14	Balasore	50	30·046	+·062	30·040	30·128	30th	29·897	4th	·231	68·2	85·3	+1·7	61·6	−1·4	73·5	+0·2	23·7	89·4	14th	54·1	29th & 30th	35
	False Point	21	30·080	+·080	30·043	30·157	29th	29·941	4th	·216	70·2	84·2	+1·8	64·0	−1·5	74·2	+0·2	20·2	88·5	3rd & 4th	56·0	30th	32
	Cuttack	80	30·017	+·075	30·044	30·096	29th	29·879	4th	·217	68·6	85·8	+0·7	65·1	−1·0	75·4	−0·2	20·7	89·4	4 days.	58·1	30th	31
	Puri	24	30·081		30·044	30·162	29th	29·957	4th	·225	74·1	85·1		69·1		77·1		16·0	89·2	4th	61·6	30th	27
	V.—Gangetic Plain and Chota Nagpur.			+·043								84·0	+2·0	57·9	0	71·0	+1·0	26·0					39
15	Hazaribagh	2,007	28·039	+·049	30·049	28·134	8th	27·884	4th	·250	68·8	78·4	+1·1	58·4	+0·5	68·4	+0·8	20·0	84·7	5th	52·2	30th	32
	Ranchi	2,128	27·925	+·059	30·060	28·014	8th	27·772	4th	·242	67·3	79·1	+1·3	58·4	+0·8	68·8	+1·1	20·7	84·7	5th	52·5	30th	32
	Daltonganj	*730*	29·360		30·092	29·453	29th	29·179	4th	·274	59·1	85·0		52·3		68·6		32·7	91·6	5th	45·0	30th	46
	Purulia	*816*	29·253		30·049	29·341	8th	29·088	4th	·256	67·3	85·3		60·3		72·8		25·0	91·5	5th	55·3	17th, 29th & 30th.	36
	Chaibassa	*760*	29·306	+·059	30·054	29·390	8th & 29th	29·156	4th	234	62·4	86·2	+2·7	58·8	−1·6	72·5	+0·6	27·4	92·4	13th	51·5	19th	40
16	Gaya	375	29·710	+·045	30·056	29·800	8th	29·530	4th	·270	66·9	84·6	+1·4	59·7	0	72·2	+0·7	24·9	90·4	13th	51·8	30th	38
	Dehri	351	29·722		30·045	29·813	8th	29·534	4th	·279	65·6	84·7		60·7		72·7		24·0	90·3	4th & 13th.	54·6	30th	35
	Patna	183	29·900	+·035	30·045	29·999	18th	29·700	4th	·299	68·2	83·4	+1·7	61·1	+0·6	72·3	+1·2	22·3	88·5	1st, 2nd & 4th	52·9	30th	35
	Arrah	190	29·894		30·046	29·989	30th	29·705	4th	·284	65·3	84·6		57·6		71·1		27·0	89·9	6th	49·1	30th	40
	Buxar	239	29·837		30·044	29·931	20th	29·644	4th	·287	66·5	85·1		60·0		72·6		25·1	90·5	12th	51·4	30th	39
17	Bhagalpur	160	29·928		30·046	30·024	8th	29·757	4th	·267	70·9	83·6		59·8		71·7		23·8	88·7	1st	52·2	30th	36
	Darbhanga	166	29·907	+·035	30·033	30·006	8th	29·730	4th	·276	67·2	81·8	+0·5	61·1	−0·9	71·5	−0·2	20·7	86·6	1st	52·3	30th	34
	Muzaffarpur	178	29·911		30·052	30·011	8th	29·729	4th	·282	67·9	81·6		60·1		70·9		21·5	85·6	1st & 2nd	51·0	30th	34
	Motihari	224	29·849		30·044	29·956	20th	29·683	4th	·273	62·6	82·8		58·0		70·4		24·8	87·4	1st	49·7	30th	37
	Chapra	181	29·847†		29·992†	29·964	28th, 29 & 30th	29·681	4th	·283	64·2	83·4		58·8		71·1		24·6	88·3	4th	50·1	30th	38
18	Benares	267	29·809	+·039	30·043	29·697	30th	29·623	4th	·274	65·8	85·2	+3·1	54·8	−1·3	70·0	+0·9	30·4	91·6	4th	47·6	30th	44
	Allahabad	309	29·771	+·043	30·049	29·863	8th	29·580	4th	·263	65·4	86·6	+3·5	55·1	0	70·9	+1·8	31·5	93·6	4th	49·0	18th & 30th,	44
23	Gorakhpur	257	29·803	+·033	30·029	29·801	20th	29·619	4th	·282	66·3	80·2	−0·8	58·8	+0·5	69·8	−0·2	22·0	86·2	1st, 2nd & 4th	50·1	20th	36
19	Lucknow	368	29·694	+·032	30·011	29·799	30th	29·495	4th	·304	64·2	86·4	+3·1	54·5	+1·7	70·5	+2·4	31·9	93·8	4th	46·2	30th	47
20	Bahraich	401	29·657	+·032	30·040	29·757	21st	29·452	4th	·305	64·2	83·6	+0·8	55·5	−1·1	69·6	−0·2	28·1	88·6	1st	45·0	30th	43
21	Cawnpore	416	29·654	+·042	30·051	29·741	8th	29·464	4th	·277	64·0	87·4	+3·3	55·0	0	71·2	+1·7	32·4	94·3	4th	45·6	30th	48
	Mainpuri	516	29·564	+·058	30·067	29·652	29th	29·377	4th	·275	63·1	87·2	+3·2	55·5	+1·3	71·4	+2·3	31·7	94·3	4th	45·3	30th	49

N. B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading

Note 2.—The data from which divisional means of the

* Mean of 29 days. ‖ Mean of 17 days. † Mean of 19 days.

continued.

tions in India, Burma, etc., in November, 1905—continued.

Wind Direction. Number of winds from N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November, 1905.	Normal rainfall for period, 1st May to 30th November.	Departure from normal, 1st May to 30th November 1905.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
1					3	5	S 72° W	0·7			0·8	84		·587		1·6		0	0·81	−0·81	0	0·74	−0·74	76·76	49·95	+26·81	0	Krishnagar.
1			1	1		3	N 10° W	1·3*			1·2*	63†		·483†		0·7		0	1·14	−1·14	0	0·80	−0·80	51·57	55·97	− 4·40	0	Midnapore.
1					13	2	N 70° W	1·7			1·5	64		·445		0·3		0	0·79	−0·79	0	0·51	−0·51	43·21	52·10	− 8·89	0	Bankura.
						1	N 27° W	1·3			1·0	74		·466		1·2		0	0·63	−0·63	0	0·54	−0·54	43·49	52·22	− 8·73	0	Raniganj.
1					2	6	N 29° W	0·9	1·9	−53	0·9	71	− 4	·514	−·045	1·4	−0·6	0	0·81	−0·81	0	0·79	−0·79	74·70	52·65	+22·05	0	Burdwan.
							Calm	1·0			1·1	73		·483		0·6		0	0·50	−0·50	0	0·31	−0·31	51·34	55·37	− 4·03	0	Naya Dumka.
			1	4	2	2	N 72° W	0·4	1·7	−77	0·3	79	− 6	·576	−·029	1·9	0	0	0·52	−0·52	0	0·59	−0·59	56·08	51·43	+ 4·65	0	Berhampore.
							Calm	3·7			3·8	81		·588		0·5		0	0·68	−0·68	0	0·31	−0·31	68·43	53·41	+15·02	0	Rampur Boalia.
4				1	3	9	N 82° W	2·6			2·4	79		·569		0·2		0	0·39	−0·39	0	0·22	−0·22	60·37	50·34	+10·03	0	Malda.
							Calm	1·0			0·9	85	0	·579	−·029	0·2	−0·9	0	0·58	−0·58	0	0·78	−0·78	89·14	62·30	+26·84	0	Bogra.
8	2		2	3	3	4	N 2° W	1·1			1·1	80	− 4	·579	+·003	1·5	+0·3	0	0·19	−0·19	0	0·04	−0·04	66·73	67·07	− 0·34	0	Dinajpur.
11	2	2	3				S 54° E	1·3			1·2	82		·599		1·2		0	0·13	−0·13	0	0·24	−0·24	78·94	78·69	+ 0·25	0	Rangpur.
2		1				3	N	0·5			0·6	62	− 2	·580	+·018	0·3	−0·9	0	0·32	−0·32	0	0·13	−0·13	125·28	117·13	+ 8·15	0	Jalpaiguri.
5	3	1					N 67° E	1·1			1·1	81		·549		1·0		0	0·37	−0·37	0	0·14	−0·14	180·33	120·16	+60·17	0	Cooch Behar.
						1	N 18° W	0·9	1·2	−25	0·8	85	− 4	·566	+·011	0·4	−0·6	0	0·16	−0·16	0	0·08	−0·08	60·00	62·09	− 1·49	0	Purnea.
				2	3	11	N 41° W	1·6			1·2	75	− 9	·524	−·076	2·0	−0·8	0	1·48	−1·48	0	1·22	−1·22	41·82	59·35	−17·53	0	Balasore.
					4	14	N 35° W	4·3	6·5	−34	4·4	85	+ 1	·632	−·036	2·9	−0·4	0	2·45	− 2·45	0	2·92	−2·92	46·50	61·71	−15·21	0	False Point.
				2	3	1	N 79° W	0·9	1·7	−47		82	+ 6	·580	−·001	2·3	−0·1	0	1·71	−1·71	0	1·67	−1·67	31·81	56·60	−24·79	0	Cuttack.
3							N 6° E	5·5			5·2	74		·630		1·1		0	2·45	−2·45	0·06	2·77	−2·71	20·89	54·79	− 23·90	0·06	Puri.
												70	−6	·447	−·033	1·2	0				0	0·29	−0·29					V.—Gangetic Plain and Chota Nagpur.
1		2	4	6	9	5	S 79° W	6·2	4·3	+44	5·5	53	−13	·372	−·046	1·3	−0·8	0	0·65	−0·65	0	0·30	−0·30	41·69	50·77	− 9·08	0	Hazaribagh.
3	1			1	10	8	N 56° W	5·8			6·8	54	−12	·360	−·065	1·3	−0·2	0	0·72	−0·72	0	0·39	−0·39	42·89	51·84	− 8·95	0	Ranchi.
							Calm	1·1			0·9	82		·414		1·5		0	0·68	−0·68	0	0·35	−0·35	42·49	42·05	+ 0·44	0	Daltonganj.
				1	17	12	N 73° W	2·9			3·6	61		·414		1·5		0	0·74	−0·74	0	0·24	−0·24	47·65	49·07	− 1·42	0	Purulia.
			1				S	?			?	77	− 1	·443	−·078	1·0	−0·9	0	0·81	−0·81	0	0·77	−0·77	45·48	47·38	− 1·90	0	Chaibassa ‡
			11	6			S 15° W	3·3	1·2	+175	2·6	69	− 2	·460	−·015	1·9	+0·3	0	0·48	−0·48	0	0·47	−0·47	37·36	44·91	− 7·55	0	Gaya.
			10	15	1		S 30° W	3·1			2·9	72		460		1·7		0	0·44	−0·44	0	0·28	−0·28	39·57	41·14	− 1·57	0	Dehri.
4	2	2	2	12	7		S 45° W	2·4	1·5	+60	2·7	69	− 2	·491	−·016	1·0	−0·3	0	0·32	−0·32	0	0·22	−0·22	58·22	46·12	+12·10	0	Patna.
		2	1	8			S 27° W	0·9			0·9	74		·472		0·5		0	0·42	−0·42	0	0·21	−0·21	37·02	43·48	− 6·46	0	Arrah.
1	2	3	3	10	8	2	S 50° W	3·9			3·7	64		·418		2·1		0	0·39	−0·39	0	0·40	−0·40	37·00	39·32	− 2·62	0	Buxar.
4	1	1	2	2	2		N 45° E	1·4			1·2	66		·500		0·9		0	0·23	−0·23	0	0·17	−0·17	50·79	46·74	+ 4·05	0	Bhagalpur.
1	6	1		4	2		S 45° E	1·0	1·8	−44	0·9	85	+ 3	·573	+·021	0·6	−0·1	0	0·19	−0·19	0	0·09	−0·09	69·48	48·71	+20·77	0	Darbhanga.
	1	1			1		S 45° E	3·3				82		·562		0·3		0	0·37	−0·37	0	0·12	−0·12	59·78	43·40	+16·38	0	Muzaffarpur.
3	5	3	1	3	3		S 76° E	1·9			1·7	92		·528		1·8		0	0·18	−0·18	0	0·12	−0·12	66·21	49·39	+16·82	0	Motihari.
2	3	1	6	3	1		S 16° E	1·3			1·2	80		·479		0·8		0	0·39	−0·39	0	0·25	−0·25	41·59	28·87	+ 2·72	0	Chapra.
1	1	2		9			S 23° W	1·3	2·1	−38	1·5	71	− 9	·449	−·030	1·7	+0·3	0	0·30	−0·30	0	0·31	−0·31	44·99	39·27	+ 5·72	0	Benares.
1	1			4	12	3	W	2·4	2·0	+20	2·0	59	−13	·375	−·062	2·2	+0·9	0	0·30	−0·30	0	0·25	−0·25	27·03	38·87	−11·84	0	Allahabad.
1	1			1	2	2	N 45° W	0·4	0·9	−56		73	− 3	·484	−·015	0·7	−0·2	0	0·10	−0·10	0	0·15	−0·15	51·00	49·84	+ 1·16	0	Gorakhpur.
				1	2	3	N 73° W	0·9	1·4	−36	1·0	59	−17	·369	−·075	1·6	+0·6	0	0·20	−0·20	0	0·11	−0·11	27·28	36·74	− 9·46	0	Lucknow.
	2	1		1	1	3	N 34° W	1·5			1·0	73	− 4	·446	−·036	1·1	+0·5	0	0·30	−0·30	0	0·40	−0·40	37·48	45·67	− 8·19	0	Bahraich.
1	2	2		3	7	1	S 70° W	2·1				57	− 9	·343	−·068	1·0	+0·1	0	0·10	−0·10	0	0·44	−0·44	20·47	34·32	−13·85	0	Cawnpore.
	2	1	2	2	6	2	S 75° W	0·7			0·7	74	+ 5	·430	+·056	0·6	−0·8	0	0·10	−0·10	0	0·31	−0·31	10·29	29·21	−18·92	0	Mainpuri.

he returns of any station, the data for that station are not utilized in calculating the provincial departures from normal.
columns Nos. 40, 42 and 44 are derived are incomplete.

* Mean of 13 days. † Mean of 19 days. ‡ Wind observations of 22 days.

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Abstract of Observations taken at 8 A.M. at

Number of District	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	VI.—Upper Sub-Himalayas.			+·048								83·4	+2·3	52·2	+2·0	67·8	+2·2	31·2				
24	Bareilly	568	29·490	+·046	30·055	29·588	8th & 21st.	29·286	4th	·302	60·4	83·9	+2·8	53·4	+0·6	68·6	+1·7	30·5	90·4	4th	43·1	30th
	Dehra Dun	2,233	27·803	+·038	30·095	29·901	8th	27·607	4th	·294	55·9	77·9	+2·9	50·9	−0·9	64·5	+1·0	27·0	83·5	4th	44·0	30th
	Roorkee	899	29·154	+·052	30·080	29·254	20th	28·937	4th	·317	55·8	82·4	+1·9	48·4	−1·4	65·4	+0·2	34·0	88·4	3rd	38·9	30th
22	Meerut	738	29·313	+·042	30·060	29·410	29th	29·108	4th	·302	59·0	85·5	+4·2	52·1	+1·5	68·8	+2·9	33·4	95·1	5th	45·2	17th & 29th.
26	Delhi	718	29·350	+·052	30·067	29·460	28th	29·165	4th	·295	64·8	85·4	+2·5	59·4	+3·2	72·4	+2·9	26·0	91·2	4th & 6th.	51·4	18th & 20th.
28	Lahore	702	29·354	+·040	30·073	29·446	24th	29·155	4th	·291	56·6	84·5	+0·9	51·5	+4·7	68·1	+2·8	33·0	91·4	2nd	42·1	30th
27	Sirsa	662	29·416	+·059	30·083	29·525	29th	29·229	4th	·296	61·0	86·4	+1·5	53·6	+4·1	70·0	+2·8	32·8	95·3	6th	43·1	30th
	Patiala	*818*	29·237		30·067	29·335	21st	29·027	4th	·308	61·0	83·2		52·2		67·7		31·0	89·0	2nd	43·6	29th
29	Ludhiana	812	29·236	+·042	30·067	29·333	22rd	29·054	4th	·279	59·3	83·1	+2·5	54·0	+3·1	68·6	+2·8	29·1	90·1	6th	45·1	30th
	Sialkot	830	29·236	+·060	30·087	29·330	20th	29·038	4th	·292	58·4	83·4	+2·5	54·2	+4·3	68·8	+3·4	29·2	91·1	1st	43·6	30th
	Ambala	892	29·161	+·048	30·074	29·265	21st	28·953	4th	·312	58·3	84·6	+1·3	50·5	−0·4	67·6	+0·5	34·1	91·0	4th	42·3	17th
	Rawalpindi	1,674	28·389	+·048	30·140	28·478	7th	28·203	4th	·275	53·8	80·4	+2·9	46·4	+3·1	63·3	+3·0	33·7	87·9	2nd	35·0	30th
	VII.—Indus Valley and North-West Rajputana.			+·046								87·8	+2·7	57·6	+4·0	72·7	+3·4	30·1				
32	Peshawar	1,110	28·987	+·045	30·149	29·090	28th	28·785	4th	·305	55·7	78·3	+1·2	49·1	+4·0	63·7	+2·6	29·2	87·1	1st	36·9	30th
	D. I. Khan	590	29·504	+·039	30·083	29·608	24th	29·292	4th	·316	57·8	83·7	+1·6	50·8	+3·8	67·3	+2·7	32·9	91·8	1st	42·6	29th
31	Khushab	612	29·479	+·063	30·099	29·578	23rd	29·268	4th	·310	60·9	85·1	+2·3	52·8	+3·1	69·0	+2·7	32·3	92·4	1st	41·5	29th
	Montgomery	558	29·522	+·048	30·077	29·625	24th & 29th.	29·325	4th	·300	63·8	86·0	+1·8	54·5	+3·6	70·3	+2·7	31·5	93·8	3rd	44·0	29th
	Multan	420	29·656	+·031	30·065	29·779	24th	29·427	4th	·352	63·4	87·0	+2·6	57·6	+5·2	72·3	+3·9	29·4	94·3	2nd & 4th.	50·9	29th
47	Jacobabad	186	29·906	+·045	30·062	30·032	29th	29·711	4th	·321	67·1	90·5	+3·7	56·0	+5·2	73·3	+4·5	34·5	100·5	3rd	48·6	29th
	Hyderabad	96	29·991	+·043	30·044	80·098	29th	29·818	4th	·280	72·3	92·5	+4·5	64·1	+4·1	78·3	+4·3	28·4	99·6	5th	52·5	30th
	Kurrachee	30	30·060	+·036	30·042	30·164	29th	29·915	4th	·249	72·3	90·0	+2·6	66·3	+4·5	78·2	+3·6	23·7	95·4	8th & 18th,	59·2	26th & 28th.
51	Bikaner	*771*	29·294	+·048	30·065	29·402	29th	29·111	4th	·291	66·5	88·5	+3·8	62·0	+2·6	75·2	+3·2	26·5	99·2	3rd	52·1	30th
	Pachpadra	*380*	29·709	+·061	30·056	29·786	29th	29·577	4th	·209	67·4	92·4	?	58·2	+4·1	75·2	?	34·2	97·1	8th	49·3	26th
	Jodhpur	782	29·295		30·085	29·388	29th	29·167	4th	·221	70·4	91·4		62·7		77·1		28·7	97·1		52·7	30th
	VIII—East Rajputana, Central India and Gujarat.			+·055								90·2	+3·4	62·8	+3·9	76·5	+3·7	27·4				
50	Jaipur	1,431	28·652	+·051	30·091	28·737	8th	28·512	4th	·225	69·6	89·1	+3·3	60·0	+4·8	74·6	+4·1	29·1	95·2	7th	52·0	30th
	Kotah	819?	29·245		30·092	29·336	24th	29·098	4th	·238	70·8	90·7		64·0		77·4		26·7	96·0	7th & 10th.	55·0	23rd
	Sambhar	1,254	28·826	+·058	30·103	28·912	29th	28·672	4th	·240	62·8	88·6	+4·1	56·6	+3·7	72·6	+3·9	32·0	94·5	4 days	47·4	30th
	Ajmer	1,611	28·480	+·051	30·118	28·561	30th	28·338	4th	·223	64·4	88·6	+4·7	60·0	+9·0	74·3	+6·9	28·6	92·9	4 days	51·8	30th
	Udaipur	1,925	28·162		30·10	28·242	8th	28·044	4th	·198	66·1	87·5		57·4		72·5		30·1	92·5	4th & 10th.	47·2	30th
46	Bhuj	395	29·687	+·059	30·045	29·764	8th	29·579	5th	·185	74·6	92·4	+3·2	66·6	+3·9	79·5	+3·6	25·8	96·3	9th	58·9	27th & 30th.
	Jamnagar	61	30·025		30·031	30·108	29th	29·937	12th	·171	75·0	91·9		65·2		78·5		26·7	96·1	4 days	52·3	24th
	Rajkot	429	29·646	+·061	30·031	29·729	8th	29·561	12th	·168	80·7	94·1	+3·7	63·5	+4·2	78·8	+4·0	30·6	97·9	9th & 11th,	57·0	24th
	Veraval	*18*	30·044	+·051	30·009	30·122	26th	29·855	12th	·167	76·8	89·4	+1·1	70·7	+3·0	80·1	+2·1	19·7	95·6	8th	64·3	21st
	Dwarka	37?	30·047		30·030	30·126	29th	29·958	12th	·168	78·6	87·3		70·9		79·1		16·4	95·4	8th	64·1	30th
	Bhavnagar Para	55	30·031	?	30·030	30·094	29th	29·932	1st & 12th.	·162	74·3	92·4	+2·5	65·6	+1·1	79·0	+1·8	26·8	98·1	8th	56·5	20th
49	Nowgong	757	29·3 4	+·047	30·076	29·412	8th	29·165	4th	·247	63·8	86·2	+3·9	55·5	+2·3	70·9	+3·1	30·7	94·0	4th	48·5	30th
	Indore	1,823	28·259	+·070	30·080	28·333	8th	28·160	4th	·173	70·7	86·3	+3·1	56·5	+2·4	71·4	+2·8	29·8	91·1	3rd	49·1	22nd & 30th.
	Neemuch	1,630	28·458	+·060	30·096	28·542	8th	28·340	4th	·202	69·3	87·4	+2·9	57·7	+2·8	72·6	+2·9	29·7	92·0	4th, 5th & 10th.	49·3	30th
45	Surat	39	30·036	+·060	30·020	30·114	8th	29·942	1st	·172	74·2	93·1	+2·5	67·5	+4·7	80·3	+3·6	25·6	97·7	9 days	62·0	22nd

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any read
NOTE 2.—The data from which divisional means of the

I—*continued.*

Stations in India, Burma, etc., in November, 1905—continued.

Wind Direction. Number of winds from: Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W	Resultant direction	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected	Normal (uncorrected)	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November 1905.	Normal rainfall for period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														64	— 3	·320	—·002	0·8	—0·7				0·01	0·19	—0·18					VI.—Upper Sub-Himalayas.
30									Calm	0·5	1·7	—71	0·5	73	— 4	·389	—·020	1·0	+0·2	0	0·27	—0·27	0	0·18	—0·18	19·49	44·81	—25·32	0	Bareilly.
27				1		1		1	S 45° W	1·7	1·7	0		69	— 2	·317	—·021	1·2	—0·7	0	0·60	—0·60	0·05	0·40	—0·35	44·64	82·27	—37·63	0·05	Dehra Dun.
28			1		1				S 45° E	1·5	1·1	+37		67	—10	·308	—·050	0·6	—0·5	0	0·50	—0·50	0·04	0·28	—0·24	14·79	38·53	—23·74	0·04	Roorkee.
24							5	1	N 83° W	0·5	1·3	—62	0·5	64	— 6	·323	—·003	0·4	—0·5	0	0·20	—0·20	0	0·13	—0·13	14·39	28·52	—14·22	0	Meerut.
11	2		1			1	13	2	N 79° W	2·1	2·3	— 9	1·8	48	— 4	·296	+·009	0·5	—0·9	0	0·30	—0·30	0	0·11	—0·11	9·55	24·91	—15·36	0	Delhi.
26	1	1		2					N 81° E	1·0	1·4	—29		82	+15	·386	+·073	0·7	—0·8	0	0·20	—0·20	0	0·07	—0·07	13·45	16·43	— 2·98	0	Lahore.
29						1			S 45° W	0·1	2·0	—95	0·1	62	+ 3	·338	+·050	1·0	—0·8	0	0·10	—0·10	0	0·01	—0·01	7·68	12·37	— 4·69	0	Sirsa.
	6	2	6	7	2		1	6	N 54° E	3·5			3·6	58		·313		1·0		0			0			15·03			0	Patiala.
27				1				2	N 45° W	1·0	0·8	+25	0·9	57	— 7	·291	—·019	0·6	—1·5	0	0·20	—0·20	0	0·06	—0·06	10·65	23·25	—12·60	0	Ludhiana.
13	4	5	6	1			1		N 53° E	1·2	1·0	+20	1·0	61	— 4	·299	—·005	0·4	—1·1	0	0·30	—0·30	0	0·09	—0·09	18·96	24·98	— 6·02	0	Sialkot.
18			1	2				9	N 36° W	1·8			1·6	66	— 9	·323	—·032	1·0	—0·1	0	0·30	—0·30	0	0·46	—0·46	14·31	27·43	—13·12	0	Ambala.
24		1	1	1	1			2	N 68° E	2·0	1·1	+82	1·8	60	— 5	·253	—·005	1·3	—0·8	0	0·80	—0·80	0	0·29	—0·29	14·83	24·67	— 9·84	0	Rawalpindi.
														54	+ 1	·348	+·049	1·4	—0·4				0	0·13	—0·13					VII.—Indus Valley and North-West Rajputana.
29						1			S 45° W	0·1	2·1	—95	0·1	62	— 3	·285	+·024	2·2	—0·5	0	0·90	—0·90	0	0·47	—0·47	3·63	6·15	— 2·52	0	Peshawar.
30									Calm	0	0·7	—100	0·1	70	+ 5	·336	+·057	1·8	+0·3	0	0	0	0	0·18	—0·18	2·90	5·50	— 2·60	0	D. I. Khan.
7	1	10	4	3	2	1	1	1	N 69° E	3·3			3·2	55	+ 7	·300	+·074	0·8	—0·5	0	0·30	—0·30	0	0·02	—0·02	9·46	10·32	— 0·86	0	Khushab.
6		2	6	14	2				S 59° E	3·9			3·6	48	— 5	·286	0	0·6	—1·2	0	0·20	—0·20	0	0·06	—0·06	7·64	7·84	— 0·20	0	Montgomery.
19	1	4		6					S 87° E	1·1	1·5	—26	1·0	56	— 6	·331	+·007	0·4	—0·8	0	0·10	—0·10	0	0·07	—0·07	2·45	5·74	— 3·29	0	Multan.
16	3	2	1	1		1	1	5	S 18° W	1·8	1·6	+13	1·9	56	+ 2	·377	+·080	0·7	—1·0	0	0·20	—0·20	0	0·11	—0·11	0·46	2·78	— 2·32	0	Jacobabad.
6	9	3			1	6	1	4	N 35° W	4·9	6·1	—20	4·4	61	+11	·505	+·165	1·3	—0·4	0	0·20	—0·20	0	0·12	—0·12	0·54	6·19	— 5·65	0	Hyderabad.
8	8	9				3	2		N 8° E	6·5	7·9	—18	6·4	65	+ 4	·523	+·085	3·0	+1·7	0	0·30	—0·30	0	0·07	—0·07	0·13	6·72	— 6·59	0	Kurrachee.
5		2	2	3	8	8	2		S 8° W	4·7	2·4	+96		45	— 3	·304	+·007	1·4	—0·1	0	0·10	—0·10	0	0·05	—0·05	2·32	10·17	— 7·85	0	Bikaner.
7	2	5	6	3		3	2	2	N 39° E	3·6	2·1	+71	3·4	42	—11?	·298	—·011	0·7	—1·0	0	0·30	—0·30	0	0·08	—0·08	4·51	12·57	— 8·06	0	Pachpadra.
1	5	9	4	3	1	5	2		N 56° E	3·9			3·5	36		·271		2·1		0	0·20	—0·20	0	0·16	—0·16	2·71	12·59	— 9·88	0	Jodhpur.
														49	— 8	·392	—·011	2·3	+1·1				0	0·24	—0·24					VIII.—East Rajputana, Central India and Gujarat.
0	3	7	1	1			2	6	N 2° E	2·7	3·0	—10		41	—13	·301	—·029	1·5	—0·1	0	0·20	—0·20	0	0·20	—0·20	3·68	24·68	—21·00	0	Jaipur.
5	1		1			1	1	1	N 52° W	0·9			0·7	38		·289		1·7		0	0·30	—0·30	0	0·03	—0·02	5·95	29·14	—23·19	0	Kotah.
7		1				1	1		N 38° W	3·0	3·4	—12		51	— 2	·303	+·015	0·9	—0·4	0	0·20	—0·20	0	0·18	—0·18	3·66	19·45	—15·79	0	Sambhar.
6			2		2	2	8		N 70° W	2·7	1·4	+93	2·3	47	—18?	·290	—·039	2·0	+0·7	0	0·40	—0·40	0	0·20	—0·20	6·11	20·58	—14·47	0	Ajmer.
0									Calm	1·0			0·9	54		·360		1·7		0	0·50	—0·50	0			17·27			0	Udaipur.
3	4	1	1	1			4	6	N 35° W	6·5	4·7	+38	5·5	64	+ 5	·549	+·097	1·9	+0·9	0	0·30	—0·30	0	0·12	—0·12	6·30	14·11	— 7·81	0	Bhuj.
6	3	4	9	2	1	2		3	N 67° E	8·9			8·7	52		·467		1·6		0			0			6·70			0	Jamnagar.
5	3	3	7	1				1	N 61° E	2·7	4·9	—45	2·7	40	—15	·393	—·044	3·1	+2·1	0	0·50	—0·50	0	0·33	—0·33	16·93	27·95	—11·02	0	Rajkot.
1	12	10	1	1				5	N 14° E	8·7	5·0	+74	8·7	56	+ 1	·522	+·044	2·9	+1·3	0	0·30	—0·30	0	0·59	—0·59	6·76	18·14	—11·38	0	Veraval.
	7	10	4				2	7	N 12° E	10·5				71		·702		3·4		0			0			2·36			0	Dwarka.
8	2	5				2	3	10	N 35° W	4·0			3·4	47	—19	·405	—·081	2·9	+1·7	0	0·40	—0·40	0	0·47	—0·47	11·22	19·46	— 8·24	0	Bhavnagar Para.
1			3	1	2	9	4		S 36° W	0·4	1·0	—60	0·4	55	—15?	·328	—·072	2·3	+0·9	0	0·70	—0·70	0	0·27	—0·27	14·87	42·95	—28·08	0	Nowgong.
8		2	2	7				1	S 70° E	1·9	2·0	— 5	1·5	41	—16	·314	—·066	3·7	+2·6	0	0·50	—0·50	0	0·35	—0·35	29·66	32·96	— 3·30	0	Indore.
5	7	7	5	1		2	1	2	N 31° E	4·4	7·5	—41	3·7	36	—11	·269	—·049	3·3	+2·4	0	0·50	—0·50	0	0·19	—0·19	16·12	29·29	—13·17	0	Neemuch.
1	3	7	15	3	1				N 78° E	4·5	5·9	—24	3·8	61	— 3	·523	+·015	2·5	+1·2	0	0·40	—0·40	0·02	0·16	—0·14	19·87	43·89	—24·02	0·02	Surat.

In the returns of any station, the data for that station are not utilized in calculating the provincial departures from normal.
Columns Nos. 40, 42 and 44 are derived are incomplete.

Ta

Abstract of Observations taken at 8 A.M. at .

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
45	Ahmedabad	163	29·914	+·049	30·030	29·989	28th & 29th.	29·811	1st	·178	74·9	94·6	+3·2	67·6	+1·8	81·1	+2·6	27·0	98·2	5th, 8th & 9th.	62·1	24th, 28th & 30th.
	Deesa	466	29·609	+·047	30·045	29·683	29th	29·509	1st	·174	71·4	96·3	+4·8	61·3	+3·6	78·8	+4·2	35·0	101·6	8th	54·1	26th & 29th.
22	Agra	555	29·532	+·049	30·075	29·625	29th	29·352	4th	·273	65·9	87·2	+2·8	61·0	+5·1	74·1	+4·0	26·2	95·0	4th	51·9	30th
21	Jhansi	858	29·235	+·058	30·079	29·325	8th	29·061	4th	·264	71·7	90·3	+5·0	64·7	+6·1	77·5	+5·6	25·6	96·7	4th & 6th	57·2	30th
	IX.—Deccan			+·063								86·5	+2·1	60·5	+1·1	73·5	+1·6	26·0				
38	Belgaum	2,539	27·498	+·059	29·996	27·561	8th	27·431	1st	·130	72·1	84·9	+2·8	64·2	+3·1	74·6	+3·0	20·7	90·8	6th	60·4	22nd
	Sholapur	1,590	28·476	+·070	30·043	28·560	8th	28·402	11th	·158	74·4	89·3	+1·8	65·8	+3·5	77·6	+2·7	23·5	92·7	4 days	57·6	21st & 22nd.
	Poona	1,840	28·229	+·066	30·076	28·318	27th	28·137	1st	·181	67·4	86·8	+0·5	59·7	+0·4	73·3	+0·5	27·1	91·0	3rd & 7th	51·5	21st & 22nd.
	Bijapur	*1,948*	28·112	+·058	30·036	28·173	8th	28·031	1st	·142	73·3	88·1	+2·5	64·4	+3·4	76·3	+3·0	23·7	91·4	4 days	55·6	21st
40	Malegaon	1,430	28·645	+·059	30·071	28·715	27th	28·551	1st	·164	69·7	88·1	+1·9	58·9	+1·8	73·5	+1·4	29·2	95·4	2nd	50·7	22nd
	Ahmednagar	2,154	27·934	+·068	30·074	28·016	27th	27·855	12th	·161	71·4	86·6	+1·3	59·4	+3·2	73·0	+2·3	27·2	91·9	3rd	51·6	22nd
41	Akola	930	29·156	+·066	30·070	29·233	8th	29·050	4th	·183	68·9	89·2	+2·2	58·2	+0·8	73·7	+1·5	31·0	93·9	7th	48·9	19th & 20th.
	Amraoti	1,215	28·868	+·068	30·067	28·934	8th	28·759	4th	·175	72·1	87·8	+1·5	62·1	+0·5	75·0	+1·0	25·7	92·2	1st & 5th	56·5	19th
42	Khandwa	1,044	29·031	+·056	30·070	29·097	28th	28·928	4th	·169	68·2	89·9	+3·1	57·3	+1·1	73·6	+2·1	32·6	95·7	1st	49·1	22nd
	Hoshangabad	1,006	29·096	+·067	30·110	29·177	8th	28·975	4th	·202	63·8	84·5	P	56·3	−1·0	70·4	P	28·2	89·7	4 days	50·4	30th
	Nagpur	1,025	29·067	+·079	30·087	29·135	8th	28·944	4th	·191	67·9	87·3	+2·3	60·0	−0·3	73·7	+1·0	27·3	92·6	5th	53·7	20th
43	Chanda	*634*	29·482	P	30·090	29·564	8th	29·368	4th	·196	65·7	87·1	+1·9	56·7	−2·6	71·9	−0·4	30·4	90·7	4th & 5th	48·6	19th
	Seoni	2,033	28·053	+·070	30·098	28·122	8th	27·935	4th	·187	66·3	83·9	+2·6	56·5	+1·1	70·2	+1·9	27·4	89·3	4th	49·0	20th
	Jubbulpore	1,327	28·754	+·063	30·106	28·834	8th	28·623	4th	·211	60·2	84·3	+2·4	51·9	−1·2	68·1	+0·6	32·4	89·9	5th & 7th	46·3	19th & 24th.
	Saugor	1,807	28·268	+·059	30·077	28·353	8th	28·128	4th	·215	69·6	84·7	+2·7	61·1	+3·9	72·9	+3·3	23·6	90·4	6th & 7th	53·1	20th
49	Sutna	1,040	29·028	+·046	30·079	29·112	8th	28·866	4th	·246	63·8	84·6	+3·5	54·6	+0·7	69·6	+2·1	30·0	91·4	4th & 5th	49·3	30th
44	Raipur	970	29·118	+·074	30·076	29·191	8th	28·987	4th	·204	67·8	85·3	+2·1	60·5	−0·2	72·9	+1·0	24·8	90·2	5th	54·4	19th & 21st.
	Pendra	2,123?	28·036		30·085	28·122	8th	27·889	4th	·233	65·8	81·7		56·8		69·3		24·9	86·8	5th, 6th, & 7th.	50·1	24th
	Sambalpur	486	29·625	+·077	30·081	29·707	8th	29·464	4th	·243	66·8	84·8	+1·0	59·6	−2·7	72·2	−0·9	25·2	88·6	6th & 13th.	53·7	4 days
29	Aurangabad	1,905	28·179		30·059	28·285	8th	28·083	1st	·202	73·3	87·2		62·0		74·6		25·2	95·4	2nd	53·2	22nd
	Indur	1,260	28·752		29·993	28·797	20th	27·674	2nd	·123	71·7	86·5		60·2		73·4		26·3	89·8	2nd & 5th	54·1	20th
	Bidar	*2,165*	27·920		30·055	27·985	8th	27·774	11th	·211	74·3	84·7		65·2		75·0		19·5	87·7	5th	59·7	21st
53	Gulbarga	1,503	28·556	+·050	30·038	28·625	8th	28·469	1st	·156	73·0	88·4	+1·4	64·0	+1·5	76·3	+1·5	24·4	91·6	12th	55·6	21st
	Raichur	1,326?	28·721	+·055	30·017	28·788	8th	28·647	1st	·141	75·6	87·5	+1·4	69·5	+2·2	78·5	+1·8	18·0	90·6	11th	66·1	21st
	Hyderabad (Dn.)	1,690	28·376	+·059	30·052	28·447	8th	28·282	4th	·165	71·1	87·1	+3·3	63·5	+1·4	75·3	+2·4	23·6	90·9	11th	57·3	20th & 21st.
	Hanumkonda	871	29·200		30·038	29·276	8th	29·097	4th	·179	73·9	87·9		64·7		76·3		23·2	92·0	6th	58·2	20th
	X.—West Coast			+·047								88·5	+1·3	74·5	+2·0	81·5	+1·7	14·0				
37	Bombay	37	30·009	+·047	29·986	30·105	8th	29·917	1st	·188	77·9	89·1	+2·2	74·9	+1·6	82·0	+1·9	14·2	93·5	1st	68·5	27th
	Ratnagiri	110	29·915	+·057	29·965	30·018	8th	29·842	11th	·176	79·0	90·9	+0·4	71·7	+1·7	81·3	+1·1	19·2	95·8	24th	65·9	27th
	Mormugao	*60*	29·971	+·046	29·966	30·056	8th	29·907	11th	·149	78·2	87·3	+0·3	75·5	+2·7	81·4	+1·5	11·8	89·5	10th, 17th & 18th.	71·4	22nd
	Goa*	199	29·821	P	29·961	29·896	8th	29·755	11th	·141	79·0	88·2	+0·8	75·8	+3·6	82·0	+2·2	12·4	91·0	17th & 20th.	72·0	22nd
	Karwar	44	29·976	+·050	29·954	30·050	8th	29·911	12th	·139	75·2	89·5	+2·1	72·3	+2·9	80·9	+2·6	17·2	92·3	17th, 19th & 21st.	67·5	7th, 8th, & 22nd.
33	Cochin	10	29·991	+·042	29·929	30·041	8th	29·921	12th	·120	80·0	89·7	+2·2	75·5	+1·1	82·6	+1·7	14·2	93·3	21st	72·7	7th, 13th, & 29th.
	Calicut	27	29·984	+·050	29·940	30·038	8th	29·919	11th	·119	79·9	88·7	+1·3	75·4	+2·3	82·1	+1·8	13·3	90·8	25th	70·7	8th
	Mangalore	65	29·947	+·04	29·945	30·003	8th	29·881	11th	·122	80·8	89·3	+1·0	74·2	+1·4	81·7	+1·2	15·1	92·7	18th	70·5	26th
	Trivandrum	198	29·796	+·041	29·927	29·854	26th	29·723	12th	·131	77·5	83·8	+1·2	75·1	+0·7	79·4	+1·0	8·7	85·5	4th	73·0	30th

N.B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any stat
NOTE 2.—The data from which divisional means of the figure columns Nos. 40.

* Mean of 28 days.

-continued.

'ations in India, Burma, etc., in November, 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November 1905.	Normal rainfall for period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
3	9	13	2				2	N 64° E	3·2			2·8	42	− 8	·374	− ·030	3·6	+1·8	0	0·30	−0·30	0	0·38	−0·38	42·19	32·94	+ 9·25	0	Ahmedabad.
3	12	11	3	1				N 69° E	5·5	7·5	−27		40	− 1	·320	+ ·020	2·1	+0·9	0	0·18	−0·18	0	0·17	−0·17	19·62	23·78	− 4·16	0	Deesa.
	1		15		7			S 23° E	2·9	2·5	+16	3·4	48	−11	·308	− ·036	0·8	− 0·2	0	0·10	−0·10	0	0·11	−0·11	8·48	26·92	−18·44	0	Agra.
				3	7	3	2	S 55° W	3·2	1·8	+78	3·9	55	+ 5P	·430	+ ·084	1·1	+0·2	0	0·10	−0·10	0	0·13	−0·13	16·03	36·86	−20·83	0	Jhansi.
													55	− 8	·398	− ·055	2·6	+ 0·8				0·07	0·76	0·68					IX.—Deccan.
		6	9	1				S 59° E	8·1	11·7	−31		67	+ 3	·529	+ ·069	4·0	+1·7	2	2·20	−0·20	0·79	1·76	−0·97	28·00	47·61	−19·61	0·58	Belgaum.
	8	13	8		1			S 85° E	10·5	7·7	+36	10·4	41	−12	·354	− ·075	2·8	0·4	0	1·50	−1·50	0	1·19	−1·19	14·47	29·76	15·29	0	Sholapur.
	1	8	2		1	1	2	E	6·6	5·8	+14		55	− 6	·373	−·055	2·5	+ 0·8	1	1·70	−0·70	0·40	1·06	−0·66	25·09	26·88	−1·79	0·35	Poona.
2	7	14	4	1	1		1	N 81° E	2·8			2·7	65	− 5P	·540	+ ·005	3·5	+ 1·0	0	2·10	−2·10	0·05	1·25	−1·20	11·45	23·19	11·74	0·05	Bijapur.
1	2	1	1	1		5	1	N 61° W	3·7	4·0	− 8	4·3	43	−13	·310	− ·090	1·9	+ 0·2	0	1·00	−1·00	·08	0·50	−0·42	13·27	23·54	−10·27	0·06	Malegaon.
1	1	1	3	5			7	S 61° W	5·6			6·8	43	−21P	·332	− ·128	1·8	+ 0·1	2	1·50	+0·50	0·44	0·59	−0·15	13·39	20·86	−7·47	0·29	Ahmednagar.
		5	3	1				S 66° E	2·7	3·4	−21	2·4	52	− 7	·265	− ·042	2·0	+ 1·1	0	0·80	−0·80	0·03	0·54	−0·51	19·04	32·28	−13·24	0·03	Akola.
4	8	8			1			N 55° E	2·3	3·0	−23	2·1	43	−10	·337	− ·075	1·8	+ 0·3	0	0·60	−0·60	0	0·59	−0·59	24·19	32·95	−8·76	0	Amraoti
1								N	0·9	2·6	−65	0·9	47	−10	·330	− ·040	1·9	+ 0·8	0	0·60	−0·60	0	0·23	−0·23	27·69	30·36	−2·67	0	Khandwa.
	6	12	1					N 78° E	2·0	1·9	+ 5	2·0	61	− 7P	·363	− ·043	2·5	+ 1·2	0	0·50	−0·50	0	0·45	−0·45	49·00	50·69	−1·69	0	Hoshangabad.
15	9	1						N 19° E	4·4	4·0	+10	3·5	54	− 8	·379	− ·060	2·7	+ 0·8	0	0·90	−0·90	0	0·81	−0·81	49·20	47·24	+1·96	0	Nagpur.
4	3	1	1				1	N 27° E	2·2	1·8	+22	2·0	71	− 2	·458	− ·064	2·0	+ 0·6	0	1·00	−1·00	0	0·96	−0·96	38·90	52·84	−13·94	0	Chanda.
6	6	1		1	2	3	4	N 10° W	3·3	2·6	+27	2·8	53	−10	·343	− ·069	2·2	+ 0·9	0	0·90	−0·90	0	0·61	−0·61	42·17	52·36	−10·19	0	Seoni.
		3	13	10	2			S 30° E	1·5	1·8	−17	1·3	71	− 2P	·375	− ·036	1·8	+ 0·6	0	0·60	−0·60	0	0·48	−0·48	42·51	56·92	−14·41	0	Jubbulpore.
	1	2	8	2	9	2		S	3·8	2·3	+65	3·4	37	−17	·272	− ·082	2·5	+ 1·4	0	0·50	−0·50	0	0·33	−0·33	24·66	46·44	−21·78	0	Saugor.
1	1	1				5	4	N 53° W	1·2	3·2	−63	1·1	59	− 4	·350	− ·027	4·0	+ 2·9	0	0·70	−0·70	0	0·34	−0·34	27·21	43·34	−16·13	0	Sutna.
	2			1	1	1		S 45° W	1·2	3·3	−64	1·4	63	− 3	·435	− ·030	2·3	+ 0·3	0	0·90	−0·90	0	0·46	−0·46	43·50	48·67	−5·17	0	Raipur.
2	1			1	1	1	4	N 45° W	2·4			2·0	51		·331		2·6		0			0			31·28			0	Pendra.
	9	7	10	3	1			S 77° E	3·8	1·4	+171	3·7	72	− 4	·478	− ·073	2·4	+ 0·6	0	1·00	−1·00	0	0·59	−0·59	55·43	64·69	−9·26	0	Sambalpur.
2	3	16	4		1			N 88° E	6·8			6·7	41		·349		2·9		1	1·00	0	0·14	0·59	−0·45	11·52	29·25	−17·73	0·14	Aurangabad.
	2				2		2	N 45° W	4·6			3·8	51		·398		1·8		0	1·40	−1·40	0	0·95	−0·95	33·95	38·09	−4·14	0	Indur.
	8	9	9	2	2			S 79° E	5·7			4·8	49		·417		2·9		0	2·20	−2·20	0	1·30	−1·30	27·19	37·51	−10·32	0	Bidar.
	3	18	2					N 87° E	8·8			7·8	57	− 7	·461	− ·039	1·9	− 0·5	0	1·50	−1·50	0	0·47	−0·47	27·92	29·82	−1·90	0	Gulbarga.
	2	19	2	4	2			S 75° E	8·0			7·6	58	−10	·519	− ·049	2·8	+ 0·3	0	1·80	−1·80	0	0·76	−0·76	27·67	29·40	−1·73	0	Raichur.
								Calm.	2·7			2·6	61	−12	·474	− ·065	3·1	+ 0·4	0			0	1·48	−1·48	22·47	29·93	−7·46	0	Hyderabad (Dn.)
2			2	4				S 23° E	2·1			1·8	56		·473		2·8		0	1·90	−1·90	0			21·05			0	Hanumkonda.
													75	− 2	·735	+ ·024	3·8	+ 1·2				1·81	2·78	−0·97					X.—West Coast.
1	12	15	2					N 73° E	9·1	9·9	− 8		68	− 6	·655	− ·024	3·1	+ 1·6	2	0·60	+1·40	1·04	0·49	+0·55	33·58	74·94	−41·36	0·88	Bombay.
	3	17	9					S 81° E	9·5	9·0	+ 6	9·4	58	− 1P	·569	− ·001P	3·0	+ 1·6	1	1·00	0	1·29	0·42	+0·87	56·19	107·03	−50·84	1·25	Ratnagiri.
		1	3	20	4	1		S 2° W	6·5				80	− 1	·772	+ ·043	3·7	+ 2·3	1			0·24	1·16	−0·92	65·69	92·34	−26·65	0·17	Mormugao.
	13	15						N 69° E	5·9				72	+ 2	·719	+ ·051	3·7	+ 2·1	1			0·36	1·14	−0·78	60·97	97·80	−37·53	0·30	Goa.
	5	15	2					N 85° E	4·1				79	− 3	·692	+ ·036	2·6	+ 1·1	0	2·50	−2·50	0·04	2·08	−2·04	88·86	123·05	−34·19	0·02	Karwar.
1	14	8	2	1				N 66° E	4·9				77	− 4	·797	− ·002	4·7	+ 0·9	3	7·70	−4·70	2·38	6·25	−3·87	88·99	105·21	−16·22	1·53	Cochin.
	7	11	3	1				N 85° E	4·9			4·9	80	− 1	·823	+ ·038	4·0	+ 0·6	1	5·50	−4·50	3·37	4·72	−1·35	108·63	108·81	−0·21	3·22	Calicut.
	5	21	1					N 84° E	4·2	3·0	+40		74	− 3	·785	+ ·050	3·8	+ 0·8	2	3·80	−1·80	3·36	2·65	+0·71	140·17	121·69	+18·78	1·82	Mangalore.
4	3	1		3	3	1	3	N 34° W	3·0				84	− 1	·800	− ·001	5·3	− 0·1	7	9·10	−2·10	4·13	6·12	−1·99	68·45	52·75	+15·70	1·74	Trivandrum.

data for that station are not utilized in calculating the provincial departures from normal.
44 are derived, are incomplete.

Tal

Abstract of Observations taken at 8 A.M. at

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	XI.—South India			+·064								86·3	+1·8	70·2	+1·0	78·2	+1·4	16·1				
57	Pamban	37	29·984	+·056	29·949	30·051	26th	29·909	12th	·142	80·0	85·8	+1·5	75·4	−0·7	80·6	+0·4	10·4	90·3	3rd	73·7	17th & 25th.
	Tinnevelly	168	29·873	+·061	29·972	29·929	27th	29·810	12th	·119	77·9	87·2	−1·5	74·2	−0·4	80·7	−1·0	13·0	96·2	4th	70·9	23rd
	Madura	447	29·586	+·076	29·974	29·634	8th & 26th.	29·520	12th	·114	78·8	87·7	+0·4	73·4	+0·9	80·6	+0·7	14·3	92·9	4th	69·1	6th
	Periyakulam	944	29·084		29·982	29·139	26th	29·011	12th	·128	75·7	87·2		70·6		77·9		16·6	92·7	1st & 3rd	62·4	6th
34	Salem	940	29·109	+·061	30·001	29·165	8th	29·041	12th	·124	78·0	90·0	+2·7	70·7	+2·2	80·4	+2·5	19·3	93·9	4th	63·4	6th
	Coimbatore	1,348	28·682	+·065	29·998	28·743	8th	28·620	11th	·123	74·5	87·4	+1·2	70·0	+1·1	78·7	+1·2	17·4	92·4	3rd & 5th.	62·3	6th
35	Mercara	3,781	26·317	+·060	26·250	26·345	27th	26·258	11th	·087	65·0	77·5	+1·6	61·2	+1·1	69·4	+1·4	16·3	80·0	6th & 11th.	55·1	7th
36	Chitaldroog	2,405	27·637	+·042	29·995	27·697	8th	27·574	12th	·123	73·8	85·7	+3·6	66·4	+2·4	76·1	+3·0	19·3	88·6	11th	61·9	7th
	Bangalore	3,021	27·050	+·059	30·023	27·105	8th	26·983	12th	·122	68·8	80·9	+1·6	62·6	+0·7	71·8	+1·2	18·3	85·8	10th	53·9	6th
	Hassan	3,091	26·986	+·051	30·014	27·043	8th	26·926	12th	·117	70·5	83·7	+3·9	61·6	+1·8	72·7	+2·9	22·1	86·4	10th	51·3	7th
	Mysore	2,518	27·534	+·048	30·010	27·587	8th	27·474	12th	·113	72·1	83·8	+1·3	65·7	+1·6	74·8	+1·5	18·1	86·5	4th & 10th.	57·9	7th
56	Negapatam	31	29·986	+·058	29·946	30·044	26th	29·927	12th	·117	79·4	87·2	+3·1	75·7	+1·6	81·5	+2·4	11·5	90·9	7th	73·0	18th
	Cuddalore	37	30·001	+·062	29·968	30·063	8th	29·939	12th	·124	77·6	85·7	+0·9	73·6	+2·0	79·7	+1·5	12·1	88·1	3rd, 4th & 5th.	70·2	5th
	Trichinopoly	255	29·783	+·070	29·975	29·850	8th	29·712	12th	·138	78·2	88·0	+0·9	72·8	+0·8	80·4	+0·9	15·2	95·1	4th	66·9	6th
	Pudukkottai		29·725		29·980	29·772	8th & 26th	29·656	12th	·116	77·5	86·3		72·6		79·9		13·7	92·1	4th	68·7	6th
	Madras	22	30·021	+·064	29·974	30·076	8th	29·957	12th	·119	79·1	86·0	+0·9	73·7	+1·4	79·9	+1·2	12·3	90·0	1st	68·0	5th
	Vellore	707	29·346		30·008	29·424	8th	29·268	12th	·156	75·5	78·1		69·6		73·8		8·5	87·4	4th	61·7	6th
55	Nellore	52	30·002	+·073	29·997	30·061	29th	29·925	4th	·136	77·8	86·8	+0·1	72·5	+0·9	79·6	+0·5	14·3	91·3	1st	64·1	29th.
	Masulipatam	15	30·073	+·093	30·023	30·148	8th	29·976	4th	·172	78·8	88·3	+3·2	71·5	+0·2	79·9	+1·7	16·8	91·6	5th	67·2	20th, 27th & 28th.
54	Cuddapah	433	29·620	+·056	29·999	29·687	29th	29·548	12th	·139	77·6	89·5	+1·0	70·1	+0·8	79·8	+0·9	19·4	93·7	1st	62·9	7th
	Kurnool	923	29·122*	+·050	30·009	29·194	8th	29·041	4th	·153	74·8	89·6	+1·5	67·0	+3·0	78·3	+2·3	22·6	92·2	5th & 11th.	60·5	6th
	Bellary	1,475	28·560	+·050	30·006	28·628	8th	28·490	11th	·138	74·2	90·8	+4·1	67·5	+1·9	79·2	+3·0	23·3	94·0	4 days	63·2	7th
5	Cocanada	26	30·061	+·081	30·023	30·130	29th	29·956	4th	·174	77·1	85·3	+1·8	70·2	−0·3	77·8	+0·8	15·1	91·1	1st	66·0	20th & 27th.
	Waltair (Vizag.)	*226*	29·865	+·089	30·036	29·936	8th	29·749	4th	·187	78·0	85·2		72·2		78·7		13·0	87·9	4th, 5th, & 12th	68·4	27th
	Gopalpur	72	30·026	+·076	30·041	30·110	30th	29·894	4th	·216	72·3	84·4	+1·0	65·7	−1·1	75·1	−0·1	18·7	89·7	4th	59·5	19th
	II.—Hil ions																					
	Pishin											68·4		35·5		52·0		32·9	76·3	2nd	27·0	27th.
	Quetta	5,502	24·820	+·051	24·780	24·889	7th	24·722	5th	·167	45·0	58·0	+3·2	35·7	+3·6	51·9	+3·4	32·3	74·2	1st, 2nd & 3th.	28·9	28th
	Kalat										56·0	68·7	+1·8	27·3	+0·9	48·0	+1·4	41·4	79·6	6th	18·7	27th
	Chaman	4,311	25·886	+·048	25·848	25·987	29th	25·784	5th	·203	51·3	70·9	+1·5	45·6	+0·8	58·3	+1·2	25·3	78·3	1st & 2nd	39·1	28th
30	Leh	11,503	19·807	+·029	19·775	19·981	16th	19·680	27th	·301	26·7	47·8	+0·2	21·3	+0·8	34·6	+0·5	26·5	57·1	1st	13·4	30th
	Srinagar	5,204	25·080	+·046	25·051	25·198	16th	24·944	4th	·254	36·5	62·0	+1·7	32·7	+1·1	47·4	+1·4	29·3	70·6	3rd	24·6	30th
	Sonemarg	*8,764*	21·928		21·896	22·121	7th	21·811	27th	·310	27·4	49·8		22·1		36·0		27·7	57·9	1st, 2nd & 7th.	10·1	28th
	Skardu	*7,505*	23·041		23·011	23·280	16th	22·917	11th	·363	35·2	55·4		31·1		43·3		24·3	62·4	1st & 7th	21·6	30th.
	Dras	*10,059*	20·912		20·880	21·088	16th	20·798	27th	·290	23·3	45·0		18·4		31·7		26·6	55·8	3rd	10·1	14th
	Gilgit	4,890	25·355		25·328	25·584	16th	25·205	4th	·379	49·0	63·6	+1·6	43·5	+0·7	53·6	+1·2	20·1	78·3	1st & 2nd	33·6	30th
32	Chitral	*5,486*									42·1	65·1		36·6		50·9		28·5	77·6	4th	29·0	30th
	Killa Drosh	4,700?									45·9	64·1		43·1		53·6		21·0	79·5	3rd	37·1	14th
	Para Chinar	6,000	24·528		24·495	24·668	24th	24·369	4th	·299	49·3	65·0		41·4		53·2		23·6	75·3	1st	31·4	28th
	Cherat	*4,256*	25·966	+·051	25·834	25·985	7th	25·725	4th	·260	54·8	67·7	+0·5	49·6	+0·5	58·6	+0·5	18·1	77·3	2nd	40·0	28th & 29th

N.B.—Elevations in italics indicate barometrical determinations.

* Mean of 29 days.

NOTE 1.—When a query is inserted against any reading or in the returns o

NOTE 2.—The data from which divisional means of the figure columns No

NOTE 3.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the eleva

-continued.

itions in India, Burma, etc., in November, 1905—continued.

Wind Direction. Number of winds from ...	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November 1905.	Normal rainfall for period 1st May to 30th November.	Departure from normal of period 1st May to 30th November 1905.	Heaviest rainfall during month.	Station.
6	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													78	−1	·707	+·011	4·8	+0·1				3·24	6·05	−2·81					XI.—South India
9	11	2					2	N 25° E	12·3			13·0	91		·926		5·6		17	12·00	+5·00	12·52	11·89	+0·63	28·65	23·48	+5·17	2·09	Pamban.
4	7	1			1	3	3	N 24° W	3·4			3·3	80	+2	·772	+·011	6·9	+1·7	15	9·90	+5·10	7·10	7·79	−0·69	23·50	18·07	+5·43	1·74	Tinnevelly.
5	21	2					1	N 38° E	5·5	3·8	+45	6·3	78	+2	·770	+·039	6·0	+1·5	9	7·00	+2·00	3·02	4·71	−1·69	24·67	27·96	−3·29	0·81	Madura.
3	1		1	4	3	2	2	S 83° W	2·2			2·4	78		·698		5·5		7	7·40	−0·40	2·17	4·81	−2·64	24·43	21·28	+3·15	0·52	Periyakulam.
2	8	12				4	1	N 57° E	4·6	3·3	+39	4·0	77	−1	·751	+·049	4·8	+0·1	2	5·70	−3·70	0·75	3·93	−3·18	25·80	36·13	−10·33	0·50	Salem.
1	16	11					2	N 57° E	6·6	2·6	+154	6·1	83	−2	·714	−·009	5·7	+0·1	5	6·60	−1·60	1·35	3·38	−2·03	18·94	16·96	+1·98	0·30	Coimbatore.
1	11	17	1					N 72° E	5·4	3·7	+46	5·0	86	+5	·541	+·038	6·2	+1·0	4	4·90	−0·90	1·89	2·86	−0·97	101·71	121·79	−20·08	1·09	Mercara.
	2	13	11			1	2	S 76° E	8·8			7·7	70	−1	·588	+·031	3·3	−1·1	2	2·80	−0·80	0·77	2·85	−2·08	16·06	23·85	−7·79	0·44	Chitaldroog.
1	11	14	2	2	1			N 81° E	8·5	3·7	+130	7·6	81	+3	·577	+·034	5·4	+1·2	4	4·20	−0·20	1·15	3·33	−2·18	31·35	32·61	−1·26	0·38	Bangalore.
1	11	9	8	1				N 85° E	3·5			3·1	79	+4	·589	+·044	5·1	−0·2	1	4·00	−3·00	0·32	2·65	−2·33	23·75	31·37	−7·62	0·11	Hassan.
2	9	11	5	1	1		1	N 79° E	9·3			10·0	76	0	·593	+·011	5·8	+0·5	3	4·10	−1·10	0·61	2·28	−1·67	19·93	27·29	−7·36	0·26	Mysore.
	10	1	1			1	14	N 7° W	12·2	5·2	+135	10·7	82	−2	·837	+·019	7·1	+0·3	18	13·30	+4·70	9·35	15·99	−6·64	29·99	39·74	−9·75	1·18	Negapatam.
3	3		1				11	N 16° W	4·3			5·3	87	−3	·827	−·009	4·8	−1·2	14	11·80	+2·20	10·38	12·74	−2·36	48·15	41·75	+6·40	1·80	Cuddalore.
8	5	1					1	N 17° E	7·3	4·2	+74		80	+1	·769	+·019	5·2	+0·6	11	8·00	+3·00	4·57	5·09	−0·52	17·87	26·25	−8·38	1·22	Trichinopoly.
7	7	1			1	1	3	N 5° E	7·2			6·9	81		·765		6·2		10			4·70						1·08	Pudakkattai.
9	8					2	10	N 9° W	6·2	6·8	−9		85	+2	·847	+·051	5·7	+0·2	12	13·00	−1·00	10·99	14·08	−3·09	38·68	43·01	−4·33	2·51	Madras.
	1		1		1	2		S 45° W	2·0			2·0	84		·741		4·5		8	7·50	+0·50	3·79	5·89	−2·10	37·79	34·07	+3·72	0·80	Vellore.
7	3		3	2		1	11	N 21° W	4·3				84	+1	·800	+·014	5·4	+0·6	7	8·60	−1·60	3·67	7·82	−4·15	34·91	27·96	+6·95	1·07	Nellore.
1	9	1						N 23° E	8·0	5·5	+45	7·0	75	−7	·740	−·003	2·7	−0·9	1	3·80	−2·80	0·26	6·30	−6·04	22·45	39·25	−16·80	0·26	Masulipatam
	5	4	10		5		6	N 67° W					75	−1	·708	+·013	4·1	+0·2	2	4·80	−2·80	0·41	4·01	−3·60	23·95	30·74	−6·79	0·21	Cuddapah.
	6	8	1					N 75° E	3·9				72	+1	·623	+·041	2·8	+0·2	0	2·30	−2·30	0·05	1·03	−0·98	26·10	26·84	−0·74	0·04	Kurnool.
3	3	6	12	3				S 69° E	4·1	3·3	+24	3·6	64	−3	·550	+·005	3·6	−0·4	0	2·60	−2·60	0·01	1·98	−1·97	13·75	18·63	−4·88	0·01	Bellary.
6	5			1			4	N 23° E	8·1			6·8	72	−1	·672	+·022	3·2	−0·2	1	3·90	−2·90	0·66	6·10	−5·44	18·70	37·74	−19·04	0·64	Cocanada.
3	19		1	1	2	2		N 39° E	8·9				59	−9	·568	−·082	4·0	+0·6	2	3·70	−1·70	0·39	6·11	−5·72	27·53	40·50	−12·57	0·25	Waltair (Vizag.).
4							15	N 21° W	9·9	7·0	+41	9·7	67	−13	·536	−·089	1·9	−1·8	1	2·80	−1·80	0·20	4·34	−4·14	28·65	44·84	−16·19	0·18	Gopalpur.
																													XII.—Hill Stations.
																			0	1·30	−1·30	0	0·52	−0·52	0·12	1·07	−0·95	0	Pishin.
			1					S 45° E	1·2	2·7	−56	1·3	58	+6	·178	+·025	1·7	−0·3	0	1·60	−1·60	0·07	0·31	−0·24	0·07	2·72	−2·65	0·07	Quetta.
9				8		3		N 15° W					35		·169				0	0·90	−0·90	0	0·31	−0·31	0	2·04	−2·04	0	Kalat.
1	3	14	7	4	1			S 79° E	6·1			6·7	52	+9	·199	−·002	1·8	−0·9	0	1·90	−1·90	0·08	0·26	−0·18	0·08	0·58	−0·50	0·08	Chaman.
	5	4	1	1	1	4		N 72° E	2·5				42	−25	·062	−·041	3·2	−0·9	0	0·20	−0·20	0	0·02	−0·02	1·96	1·77	+0·19	0	Leh.
		1	9	2	1	1		S 32° E	1·8			1·7	88	0	·194	+·003	1·5	−1·4	1	1·20	−0·20	0·17	0·46	−0·29	11·08	11·71	−0·63	0·10	Srinagar.
2	1							N 15° E	1·6			1·5	89		·130		2·0		0			0·26			40·75			0·08	Sonemarg.
		1			3	2		S 56° W	2·6			2·6	73		·145		3·1		0	0·30	−0·30	0	0·08	−0·08	4·81	3·03	+1·78	0	Skardu.
1						1		N 45° W	2·6			3·1	92		·119		1·7		1	2·70	−1·70	0·20	1·14	−0·94	12·64	7·59	+5·05	0·15	Dras.
						4		W	1·6			1·4	40	−12	·143	−·022	4·3	+0·3	0	0·10	−0·10	0	0·05	−0·05	4·88	2·60	+2·28	0	Gilgit.
	1	1	1		1			S 63° E	1·4			1·2	75		·200		2·8		4			1·41			5·34			0·76	Chitral.
1		9		3		1		S 76° E					58		·181		1·5		6			1·82			4·66			0·43	Killa Drosh.
								Calm	2·2			2·0	48		·171		1·9		1	2·00	−1·00	0·41	1·05	−0·64	9·17	13·88	−4·71	0·30	Para Chinar.
9				1		1	15	N 32° W	10·0			9·7	40	−1	·171	0	1·9	−0·5	0	0·40	−0·40	0	0·12	−0·12	7·00	12·04	−5·04	0	Cherat.

on, the data for that station are not utilized in calculating the provincial departures from normal.
id 44 are derived, are incomplete.
ich exceed 3,200 feet.

Tal

Abstract of Observations taken at 8 A.M. at 2

Number of Observat.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
29	Murree	6,833	23·992	+·054	23·960	24·118	7th	23·885	4th	·233	53·98	61·1	+1·8	44·2	−1·4	52·7	+0·2	16·9	68·5	7th	38·0	28th
	Kailang	*10,087*	21·001		20·956	21·025	26th & 29th.	20·925	27th	·100	30·9	54·1	+2·5	25·4	0	39·8	+1·3	28·7	62·8	1st	18·6	30th
	Poo ‡											55·2		35·7		45·5		19·5	65·3	1st	28·5	30th
	Simla	7,224	23·234	+·048	23·196	23·346	8th	23·132	4th	·214	47·7	55·8	−0·3	44·8	−0·2	50·3	−0·3	11·0	61·4	2nd	38·4	29th
	Sarain		23·278			23·380	8th & 18th.	23·165	4th	·215	39·9	57·3		35·0		46·5		22·8	65·9	1st	28·3	29th
	Chakrata	7,022	23·401	+·047	23·361	23·503	8th	23·283	4th	·220	49·0*	63·1*	+3·1*	44·3*	+0·2*	53·7*	+1·6*	18·8*	70·0	1st	34·4	23rd
	Ranikhet	6,069	24·224	+·044	24·183	24·327	8th	24·083	4th	·244	50·8	62·9	+0·4	47·6	+0·4	55·2	+0·4	15·3	72·0	1st	41·5	23rd
25	Muktesar	7,600	22·930		22·889	23·042	8th	22·814	4th	·228	47·9	59·7		43·1		51·4		16·6	67·9	1st	35·9	30th
	Yatung	10,480										49·5		27·5		38·5		22·0	55·1	1st	22·1	5 days
13	Darjeeling†	7,376	23·123	+·023	23·078	23·248	8th	23·032	4th	·216	48·3	54·8	+0·6	42·3	−0·1	48·6	+0·3	12·5	61·2	1st	37·5	24th, 27th & 30th.
	Shillong	4,920	25·302		25·254	25·398	8th	25·200	4th	·198	56·4	66·5		45·8		56·2		20·7	71·6	1st & 8th.	39·0	18th
8	Cherra Poonjee	4,309	25·838		25·789	25·928	8th	25·730	4th	·198	59·5	68·6		52·8		60·7		15·8	71·2	14th	48·5	17th
	Mount Abu	3,945	26·220	+·057	26·170	26·301	8th	26·122	4th	·179	67·9	75·0	+1·5	61·1	+3·2	68·1	+2·4	13·9	80·2	8th & 9th.	55·4	26th
50	Pachmarhi	3,528	26·629	+·076	26·576	26·711	8th	26·535	4th	·176	64·0	76·0	+2·7	49·2	−2·1	62·6	+0·3	26·8	80·1	6 days.	41·8	20th
42	Wellington	6,200	24·336	+·057	24·269	24·393	8th	24·292	11th	·101	59·9	67·4	+0·1	53·1	+1·1	60·3	+0·6	14·3	73·2	3rd	44·2	7th
34	Ootacamund	*7,322*	23·091		23·027	23·159	8th	23·053	11th & 12th.	·106	56·1	63·1		49·6		56·4		13·5	66·0	2nd, 7th & 19th.	41·2	7th & 29th
	Kodaikanal	7,688	22·898		22·833	22·945	8th	22·858	12th	·087	54·0	60·9		49·5		54·3		11·4	65·1	2nd	41·8	6th
57																						
	XIII.—Extra India.																					
	Trincomalee‡	12	29·996	+·066	29·934	30·046	26th	29·926	12th	·120	78·5	85·6	+0·3	75·5	+0·8	80·6	+0·6	10·1	89·0	2nd & 8th.	72·5	15th
	Colombo	40	29·957	+·040	29·923	30·034	25th	·894	12th	·140	79·4	87·4	+1·0	75·1	+1·0	81·3	+1·0	12·3	91·0	7th	73·0	6th
	Meshed	3,104	27·729			28·030	3rd	27·470	19th	·560	47·6	59·4		38·5	+2·4	49·0		20·9	68·9	16th	32·0	24th
	Ispahan(*b*)	*5,817*	24·397			24·460	17th	24·240	5th	·220	41·8	66·2	+4·3	26·2	+0·4	51·3	+2·4	30·0	74·3	1st	31·2	24th & 25th.
	Bushire	14	30·109	+·030	30·078	30·211	9th	29·957	1st	·259	67·4	79·4	+1·3	63·5	+1·2	71·4	+1·3	15·9	91·1	1st	57·2	10th
	Bahrein	18	30·121		30·092	30·257	22nd	29·916	1st	·341	75·4	80·2		70·1		75·1		10·1	87·4	1st	62·3	28th
	Jask	13	30·078	+·005	30·048	30·204	29th	29·922	5th	·288	74·5	83·7	+0·5	69·1	+0·4	76·4	+0·5	14·6	88·3	8th	62·3	28th
	Muscat	20	30·085	+·017	30·053	30·194	29th	·923	5th	·271	77·5	87·5	+7·5	74·9	+0·4	81·2	+3·6	12·6	94·8	6th	67·1	25th
	Baghdad **	220	30·018	+·042	30·227	30·159	9th	29·865	5th	·294	54·3	79·4	+4·7	50·6	+1·2	65·0	+3·0	28·8	83·5	24th	46·5	8th
	Aden	94	29·971	+·020	29·997	30·044	30th	29·865	12th	·179	80·5	85·7	+0·8	75·7	+1·0	80·8	+0·9	10·0	90·3	1st	71·4	26th & 28th.
	Perim	201	29·835	+·033	29·972	29·905	9th	29·747	5th	·158	81·6	87·0	+0·1	77·5‡	+0·4‡	82·3‡	+0·3‡	9·5	90·3	4th	75·2	8th
	Kabul		24·382		24·351	24·514	29th	24·161	15th	·353	42·8	68·2	+0·7	35·3	+0·4	51·8	+0·6	33·0	85·1	3rd	25·9	30th
	Kashgar	4,255	25·800			26·030	15th	25·550	10th	·480	33·6	54·3	+2·3	29·4	+0·6	41·9	+1·5	24·9	75·5	2nd	21·7	30th
	Amini Divi	13									83·3	88·2	+3·2	76·5	+1·0	82·4	+2·1	11·7	90·1	19th	72·3	7th
	Zanzibar	72	29·939	−·025	29·937	30·036	22nd	29·875	18th & 19th.	·161	81·9	88·9	+3·1	78·6	+1·5	82·8	+2·3	8·3	91·7	25th	75·8	2nd & 5th.
	Do. Dunga‡‡	*154*	29·887		29·970	29·941	9th	29·821	23rd	·120	78·9	87·1		72·7		79·9		14·4	90·7	28th	68·6	6th
	Penang (*a*)	20	29·939		29·884	29·957	22nd	29·907	15th	·050	81·5	89·4		74·4		81·9		15·0	92·0	30th	72·0	1st
	Singapore (*a*)	10	29·991		29·922	30·032	27th	29·957	5th	·075	82·5	86·7		73·9		80·3		12·8	91·8	14th	70·5	27th

(*a*) 9 hours' observations.
(*b*) Aneroid uncorrected.

* Mean of 28 days.
† Mean of 27 days.
‡ Observations of 29 days.

** Observation of 25 days.
‡‡ „ 28 „

§ Mean of 19 days.

N.B.—Elevations in italics indicate barometrical determinations.

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,000 feet.

I—*concluded.*

Stations in India, Burma, etc., in November, 1905—concluded.

Wind Direction. Number of winds from Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November 1905.	Normal rainfall for period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November 1905.	Heaviest rainfall during month.	Station.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
24			1	1	2	1		1	S 8° E	3·0	5·1	−41	3·2	37§	+ 1	·157§	+·028	0·9	−1·9	0	2·10	−2·10	0	0·90	−0·90	41·03	39·80	+ 1·23	0	Murree.
			6	17	5	1	1		S 42° E	1·0				54		·094		1·3		0			0	0·51	−0·51	8·58	9·28	− 0·70	0	Kailang.
28			1		2	2			S 7° W									2·0		0			0	0·78	−0·78	3·52	4·55	− 1·03	0	Poo.
8	18	2			1			1	N 2° E	4·6	1·9	+142	4·4	40	− 2	·130	−·011	0·9	− 0·9	0	0·70	−0·70	0·02	0·61	−0·59	36·89	52·88	−15·99	0·02	Simla.
21					5	4			S 21° W	2·4			2·3	55		·130		1·7		0			0			28·42			0	Sarain.
20	10								N	4·7	4·5	+ 4	5·6	45*	− 4	·171*	−·014	1·3	− 0·1	1	0·70	+ 0·30	0·25	0·55	−0·30	39·65	57·88	−18·23	0·25	Chakrata.
26						4			S 45° W	1·7	1·2	+42	1·9	59	− 4	·221	−·024	1·2	− 0·1	0	0·80	− 0·80	0	0·32	−0·32	29·84	45·75	−15·91	0	Ranikhet.
4		1	5	2	1	2	14	1	S 77° W	7·4			6·9	47		·156		1·9		0			0			26·08			0	Muktesar.
																				0	0·86	− 0·86	0	0·29	−0·29	40·37	40·77	− 0·40	0	Yatung.
12		5	2	7			1		S 84° E	2·3	1·7	+35	2·1	80	+ 1	·276	+·014	3·6	+0·2	0	0·68	− 0·68	0	0·36	−0·36	144·54	116·54	+28·00	0	Darjeeling.
24			2			2	2		S 11° E	1·6			1·8	73		·335		1·0		0	1·90	− 1·90	0	0·78	−0·78	87·20	72·01	+15·19	0	Shillong.
8		13	3			3	3		N 45° E	3·0			2·6	73		376		2·6		1	1·20	− 0·20	0·23	0·92	−0·69	473·82	388·98	+84·84	0·19	Cherra Poonjee.
18	1	9				2			N 10° E	4·2	3·7	+14	4·2	40	− 2	·277	+·011	2·4	+0·6	0	0·40	−0·40	0	0·28	−0·28	38·34	60·73	−22·39	0	Mount Abu.
14		1	4	3		5	3		S 3° E	1·9	2·5	−24	2·0	56	+ 2	·345	+·002	2·0	+0·4	0	0·80	−0·80	0	0·56	−0·56	78·40	74·04	+ 4·36	0	Pachmarhi.
16	2	6		4	1			1	N 64° E	2·3	2·7	−15		80	+ 3	·415	+·020	6·0	+1·2	15	10·50	+4·50	10·87	7·34	+3·53	55·44	38·68	+16·76	3·14	Wellington.
3		7	8	7	3	2			S 77° E	5·0			4·7	75		·339		5·5		8	6·30	+1·70	3·79	4·00	−0·21	41·96	39·76	+ 5·20	1·23	Ootacamund.
	3	5	11	7	2			2	N 87° E	11·4				89		·375		6·9		11	11·30	+ 0·30	7·77	8·17	−0·40	51·59	47·72	+ 3·87	1·26	Kodaikanal.
																														XIII.—Extra India.
19		6				4			N 45° E	1·1				89	+ 3	·867	+·005	4·6	+1·1	15			14·61	13·57	+1·04	28·98	35·85	− 6·87	2·37	Trincomalee.
	3	10	6	5		2	4		N 80° E	5·5	5·8	− 5		86	+ 8	·866	+·028	4·7	−0·1	12			5·09	13·13	−8·04	50·46	60·83	−10·37	0·90	Colombo.
					1									76		·253		2·3		0			0·11	0·51	−0·40		1·94		0·06	Meshed.
7	1	1				1			N 8° W	1·0			1·3	62		·166		2·5		0			0·05	0·92	−0·87	0·31	1·30		0·05	Ispahan.
4	2	11	8	3				1	N 67° E	7·5			8·3	76	+ 9	·513	+·055	2·6	−0·5	1			0·10	1·79	−1·69	0·34	1·87	−0·99	0·10	Bushire.
3	7		2	1			6	7	N 39° W	8·3			7·1	81		·715		0·2		0			0			0		− 1·53	0	Bahrein.
8	5	7	5		1			5	N 25° E	8·0			6·9	74	+ 7	·639	+·060	4·0	+2·2	1			0·88	0·49	+0·39	0·88	0·66	+ 0·22	0·88	Jask.
1							2	7	N 54° W	2·7			2·8	65	− 3	·620	−·037	3·6	+2·1	1			0·21	0·61	−0·40	0·22	1·03	− 0·81	0·21	Muscat.
7		1					6		N 45° W	1·5 ††	2·3		1·9 ††	60		·256		1·5		0			0·05	0·92	−0·87	0·10	1·29	− 1·19	0·05	Baghdad.
	4	11	8	3	2	2		2	N 71° E	11·4	11·6	− 2	9·2	73	+ 1	·745	+·059	3·2	−0·6	0			0	0·23	−0·23	1·24	0·74	+0·50	0	Aden.
			20	8					S 73° E	20 6			20·8	70	− 1	·762	+·020	2·5	−0·5	1			0·22	0·04	+0·18	0·24	0·95	−0·71	0·20	Perim.
	6	7	3			1	5	8	N 15° W					62		·173		2·4	+0·7	2			0·95	0·72	+0·23	1·42	2·20	−0·78	0·78	Kabul.
3			2	1	1			4	N 2° W	0·6			0·5	65		·139		4·7		0			0	0·03	−0·03	2·17	3·09	− 0·92	0	Kashgar.
0	3	12	2	1				1	N 45° E					77		·876		5·1		6			3·32	1·58	+1·74	59·97	45·32	+14·65	1·70	Amini Divi.
	2	6	4	11	4	2	1		S 63° E	4·5			4·2	82		·897		5·4		6			27·9	9·28	−6·49	30·25	30·63	− 0·38	0·99	Zanzibar.
	1	3	1	3		2			S 81° E	4·31			4·21	88		·865		6·4		8			1·88			24·52			0·31	Do. Dunga.
9	9	6	1	1	2			8	N 1° E	11·4								0		11			8·20			55·47			2·38	Penang.
		15		9	5		1		S 87° E	4·0								4·9		15			9·18			43·71			1·73	Singapore.

|||| Mean of 26 days.
†† ,, 24 ,,
‖ ,, 20 ,,

TABLE II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 63 Stations in India, Burma, etc., in November, 1905.

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Abstract of Observations recorded at 10 A.M. and 4 P.M.

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of air.										Temperature Wet-bulb.		
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burma Coast and Bay Islands.	Port Blair	61	29·972	29·877	·095	29·927	+·079	29·918	88·2	78·5	9·7	89·8	72·5	17·3	85·3	86·4	82·6	+1·4	74·3	78·4	78·2
	Rangoon	57	30·068	·894	·114	·953	+·068	·918	87·1	72·4	14·7	89·4	66·9	22·5	82·4	85·0	78·1	−0·2	70·8	75·1	74·1
	Diamond Island	41	·018	·904	·114	·963	+·068	·939	85·3	76·2	9·1	87·2	73·7	13·5	83·8	84·5	80·0	+0·4	71·4	75·5	74·8
	Cocos Island	119	29·922	·816	·106	·871		·923	85·0	77·8	7·2	87·8	75·3	12·5	82·6	82·0	80·6		72·2	75·6	75·3
	Akyab	20	30·064	·948	·116	30·008	+·067	·971	84·1	69·7	14·4	87·9	62·2	25·7	78·0	81·6	76·2	−1·3		73·1	73·2
Bengal and Orissa.	Chittagong	87	·003	·893	·110	29·947	+·076	·983	81·8	64·2	17·6	86·5	58·1	28·4	77·3	79·8	72·6	−1·4	62·0	71·3	70·7
	Calcutta (Alipore)	21	·081	·969	·112	30·021	+·057	·988	83·1	63·6	19·5	87·0	57·1	29·9	78·0	81·4	72·8	+0·4	62·3	68·5	68·3
	Saugor Island	25	·039	·932	·107	29·979	+·033	·948	83·4	68·1	15·3	87·7	61·1	26·6	79·4	80·3	74·8	+1·4	64·5	71·2‡	69·5§
	False Point	21	·094	·988	·106	30·034	+·071	·957	84·0	64·0	20·0	88·5	56·0	32·5	79·2	81·2	73·0	0	63·1	70·0	70·4
Chutia Nagpur.	Hazaribagh	2,007	28·050	27·965	·085	28·000	+·041	·982	78·1	58·4	19·7	84·6	52·2	32·4	74·8	75·4	67·5	+0·7	53·3	60·4	60·7
	Allahabad	309	29·791	29·675	·116	29·721	+·040	·989	86·3	55·1	31·2	93·5	48·8	44·7	77·3	84·0	68·7	+1·2	52·8	62·1	63·4
Upper Sub-Himalayas.	Dehra Dun	2,233	27·825	27·733	·092	27·768	+·030	30·004	77·5	50·9	26·6	83·5	44·1	39·4	68·3	72·3	63·4	+0·8	47·4	56·5	58·1
	Roorkee	899	29·171	29·060	·111	29·105	+·031	29·991	82·1	48·4	33·7	88·6	38·7	49·9	71·4	78·7	62·8	+0·1	46·3	58·9	59·6
	Lanore	702	·374	·281	·093	·319	+·033	30·006	84·1	51·5	32·6	91·4	41·9	49·5	72·2	81·4	65·8	+2·6	49·8	62·2	66·5
	Ludhiana	812	·238	·170	·068	·196	+·025	29·997	82·8	53·8	29·0	90·1	45·1	45·0	70·0	81·0	66·0	+2·5	50·6	55·6	56·9
N.-W. Rajputana.	Peshawar	1,110	·092	28·897	·105	28·942	+·043	30·068	77·7	49·1	28·6	85·1	37·1	48·0	69·3	73·6	61·4	+2·3	44·5	56·7	58·9
	Jacobabad	186	·880	29·793	·087	29·833	+·014	29·982	91·2	55·9	35·3	100·5	48·6	51·9	84·6	84·5	72·2	+4·7	51·2	66·7‖	68·7‖
	Kurrachee	30	30·071	·969	·102	30·016	+·038	·996	89·9	66·3	23·6	95·5	59·0	36·5	84·1	85·4	77·4	+3·4	60·8	69·7	71·9
Central India and Gujarat.	Jaipur	1,431	28·668	28·561	·104	28·607	+·045	30·003	88·7	60·1	28·6	95·2	52·2	43·0	81·2	86·0	72·8	+3·9	50·6	61·7	63·3
	Udaipur	1,925	·174	·060	·114	·115		29·993	87·3	57·4	29·9	92·3	47·4	44·9	80·0	85·2	72·0		50·6	63·7	66·7
	Deesa	466	29·623	29·507	·116	29·563	+·050	·980	96·0	61·1	34·9	101·6	53·9	47·7	86·7	93·1	78·3	+4·0	52·1	64·3	65·5
	Jamnagar	61	30·032	·967	·125	·965		·971	91·8	55·2	26·6	96·3	52·3	44·0	85·4	89·5	77·7		57·3	67·3	66·6
Deccan.	Belgaum	2,539	27·502	27·390	·112	27·445	+·055	·895	84·8	64·0	20·8	90·7	60·4	30·3	78·3	82·6	73·7	+2·8	60·4	65·8	66·2
	Sholapur	1,590	28·478	28·345	·133	28·412	+·062	·944	89·1	65·8	23·3	92·8	57·6	35·2	82·6	87·5	77·1	+2·5	55·7	64·8	65·9
	Akola	930	29·164	29·030	·134	29·092	+·059	·974	89·0	58·2	30·8	93·8	48·9	44·9	80·7	87·0	73·2	+1·5	52·4	64·5	65·0
	Buldana	2,132	27·954	27·846	·108	27·893	+·044	·968	83·5	62·5	21·0	88·7	57·9	30·8	79·7	81·1	72·6	+0·9	53·3	61·2	61·3
	Khandwa	1,044	29·038	28·911	·127	28·970	+·052	·974	89·3	57·4	31·9	94·6	49·3	45·3	81·4	86·9	73·0	+1·9	51·2	62·1	62·5
	Nagpur	1,025	·079	·958	·121	29·014	+·077	30·003	87·1	60·0	27·1	92·6	53·9	38·7	78·3	85·2	73·1	+0·9	54·2	63·3	64·2
	Do (Sanitary Commr.'s Office)	1,013	·087	·961	·126	·019		·000	86·5	59·2	27·3	91·5	53·3	38·2	78·9	84·4	72·4		54·3	63·4	64·3
	Hyderabad (Deccan).	1,690	28·383	·264	·119	28·322	+·071	29·962	86·9	63·5	23·4	91·1	57·2	33·9	79·7	83·1	74·5	+2·2	58·4	65·9	65·8
Coast.	Bombay	37	30·012	29·907	·105	29·956	+·043	·932	88·9	74·9	14·0	93·2	68·3	24·9	81·8	84·3	81·1	+1·8	68·9	71·8	75·0
	Karwar	44	29·984	·371	·113	·928	+·054	·906	89·7	72·3	17·4	92·9	67·5	25·4	82·3	87·3	80·2	+2·6	69·5	74·9	77·7

† Mean of 18 days. ‡ Mean of 27 days. § Mean of 28 days.

Stations in India, Burma, etc., for November, 1905.

Vapour Tension.				Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																									%	%						
7	·881	·858	·870	−·071	81	72	68	77	− 8	4·6	4·5	4·6	−1·2		5	32	8	2		1	6	6	N 35° E	N 81° E	60	42	155*	161	1·00	0·36	Port Blair.	Burma Coast and Bay Islands.
3	·778	·703	·743	−·046	88	70	58	78	− 5	3·1	3·5	3·3	−0·7	1	3	19	13	2	12	1	4	5	N 74° E	N 66° E	33	57	53*	94	0·65	0·65	Rangoon.	
2	·774	·735	·749	−·053	78	66	62	72	− 8	2·2	3·0	2·6	−1·9		7	17	11	11	1	3		10	N 55° E	N 60° E	43	57	207*	221	0·14	0·12	Diamond Island.	
2	·797	·792	·795	−·021	76	71	72	77	− 3	3·8	4·4	4·1	−0·5		12	30	9	2		1	2	4	N 38° E	N 69° E	72	37	223		0·26	0·18	Cocos Island	
	·760	·712				78	65			1·0	0·7	0·9	−2·5			26	4					30	N 2° E	N 6° E	67	31	106*	55	0·28	0·28	Akyab.	
2	·694	·641	·622‡	−·051	88	73	62	76	− 4	1·9	1·8	1·9	−1·2		17	16	2	2	1	2	4	16	N 2° W	N 18° W	65	47	63	65	0	0	Chittagong.	Bengal and Orissa.
1	·575	·524	·565	−·013	93	59	48	70	− 4	1·7	1·9	1·8	−0·7	6	8	2		1	2	17	4	20	N 73° W	N 12° W	49	58	45*	60	0	0	Calcutta (Alipore).	
0	·662‡	·583§	·671	+·042	82	65‡	56§	69	− 7	2·0	2·4	2·2	−1·1		24	2			2	11	9	12	N 45° W	N 2° E	57	60	150	168	0	0	Saugor Island.	
5	·610	·603	·595	−·034	95	61	56	72	− 4	3·0	3·9	3·5	0		20	10	8	2	7	3	6	4	N 16° E	N 30° E	33	54	107*	144	0	0	False Point.	
8	·346	·348	·355	−·011	71	40	40	54	− 1	1·8	2·6	2·2	−0·3	1	15	5		3	3	2	9	12	N 36° W	N 30° W	57	43	150	110	0	0	Hazaribagh.	Gangetic Plain and Chota Nagpur.
4	·360	·312	·356	−·046	86	39	27	56	− 8	2·2	2·9	2·6	+1·3	4	5	4	3	2	2	7	16	17	N 66° W	N 51° W	47	24	48*	55	0	0	Allahabad.	
8	·316	·312	·300	−·036	76	45	39	56	− 7	1·3	2·0	1·7	+0·2	10	1		5	9	2	14	13	6	S 50° W	S 84° W	33	19	37	31	0·05	0·05	Dehra Dun.	Upper Sub-Himalayas.
2	·338	·262	·292	−·048	85	44	27	55	− 6	0·5	0·6	0·6	−0·5	24			1	10	1	2	3	19	N 70° W	S 87° W	16	4	34	26	0·04	0·01	Roorkee.	
1	·431	·459	·406	+·090	88	54	42	65	+ 8	0·6	0·9	0·8	−0·7	28	10	2	4	1	2	1	6	6	N 22° W	N 42° W	22	18	22	31	0	0	Lahore.	
5	·257	·150	·242	−·066	79	34	14	46	− 9	0·7	0·8	0·8	−1·1	28				3			10	19	N 62° W	N 45° W	40	30	19*	24	0	0	Ludhiana.	
4	·311	·323	·289	+·019	69	43	39	57	+ 1	1·8	2·6	2·2	−0·1	53	3		2				1	1	N 5° E	N 72° E	7	12	5*	48	0	0	Peshawar.	Indus Valley and N.-W. Rajputana.
6	·421‖	·487‖	·404	+·098	71	36‖	41‖	53	+ 4	0·6	1·1	0·9	−0·5	33	4	2	5	3		2	5	6	N 17° W	N 18° W	12	10	53*	38	0	0	Jacobabad.	
76	·553	·609	·561	+·079	70	48	51	61	+ 3	2·6	2·8	2·7	+1·5	1	3	10	1	2		17	21	5	N 89° W	W	45	18	158*	180	0	0	Kurrachee.	
57	·308	·305	·291	−·006	49	29	24	39	− 8	1·2	2·0	1·6	+0·1	4	5	6	5	2	2	5	13	18	N 51° W	N 24° W	48	35	63	65	0	0	Jaipur.	East Rajputana, Central India and Gujarat.
38	·396	·433	·381		61	38	35	48		1·8	2·5	2·2		42		1	7	4	1	3	2		S 51° E		13		21*		0	0	Udaipur.	
78	·312	·263	·289	+·006	50	24	17	33	− 4	1·4	2·8	2·1	+0·8		4	14	12	8	3	4	7	8	N 56° E	N 60° E	24	47	132	175	0	0	Deesa.	
79	·435	·351	·408		59	35	26	44		1·4	1·7	1·6			18	20	10	1			2	9	N 24° E		69		215*		0	0	Jamnagar.	
36	·480	·442	·473	+·013	81	50	40	58	− 1	4·0	4·7	4·4	+1·2	5		3	16	20	5		2	1	S 61° E	N 75° E	65	63	210†	259	0·79	0·58	Belgaum.¶	Deccan.
20	·387	·373	·368	−·018	50	35	30	39	−13	2·9	4·3	3·6	+0·3			16	12	29	1		2		S 76° E	N 78° E	72	65	250*	202	0	0	Sholapur.	
23	·394	·325	·356	−·049	65	38	26	46	− 8	2·3	2·5	2·4	+0·8	21	4	11	14	3	1	1	1	4	N 61° E	N 60° E	37	49	61*	84	0·03	0·03	Akola.	
01	·316	·301	·306	−·066	53	31	29	45	− 9	2·3	2·2	2·3	+0·1	2	9	18	16	8	2	2		3	N 65° W	N 63° E	57	51	106*	120	0·18	0·13	Buldana.	
04	·324	·265	·307	−·064	64	30	21	41	−10	1·2	1·9	1·6	+0·1	17	2	11	16	7	3	1		3	N 83° E	N 59° E	43	50	24*	67	0	0	Khandwa.	
55	·398	·342	·374	−·055	68	41	28	49	− 8	2·2	2·4	2·3	0	5	3	22	24	2	2	1	1		N 70° E	N 54° E	70	59	84*	89	0	0	Nagpur.	
65	·399	·356	·382		72	40	30	50		2·1	2·6	2·4		33		3		2		3		19	N 45° W		28		14*		0	0	Do. (Sanitary Commrs.' Office).	
31	·467	·424	·452	−·060	73	46	38	55	−11	3·0	3·5	3·3	−0·3	43		4		13					S 62° E	S 75° E	23	63	65*	84	0	0	Hyderabad (Deccan).	
28	·654	·739	·699	−·017	73	60	64	70	− 3	2·7	3·4	3·1	+1·4		2	13	17	3			10	15	N 21° E	N 18° E	35	51	217	230	1·04	0·88	Bombay.	West Coast.
91	·767	·821	·785	+·058	86	69	64	77	0	1·5	2·7	2·1	−0·1	1	1	15	8				19	16	N 27° W	N 30° W	43	45	94	67	0·04	0·02	Karwar.	

‡ Mean of 29 days. ¶ Wind observations 8 less. * Corrected.

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Abstract of Observations recorded at 10 A.M. and 4 P.M.

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure.						Temperature of air.										Temperature, Wet-bulb.		
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
South India.	Periyakulam	944	29·087	28·957	·130	29·030		29·913	87·0	70·6	16·4	92·7	62·4	30·3	81·1	83·9	77·7		68·3	72·7	73·5
	Salem	940	·115	·987	·128	·056	+·059	·934	89·8	70·7	19·1	93·9	63·2	30·7	83·0	86·3	79·2	+2·4	68·8	74·8	76·7
	Chitaldroog	2,405	27·643	27·527	·116	27·585	+·041	·907	85·6	66·6	19·0	88·4	62·1	26·3	78·9	82·9	75·1	+3·0	62·6	67·8	67·8
	Bangalore	3,021	·058	26·951	·107	·004	+·057	·930	80·7	62·6	18·1	85·6	53·9	31·7	74·6	77·1	70·7	+1·1	61·5	66·5	66·9
	Hassan	3,091	26·991	·878	·113	26·934	+·045	·911	83·7	61·6	22·1	86·4	51·3	35·1	76·9	79·4	71·7	+2·9	60·4	67·2	67·2
	Mysore	2,518	27·536	27·416	·120	27·475	+·035	·909	83·3	65·7	18·1	86·7	57·9	28·8	77·4	81·7	73·8	+1·5	63·7	67·6	68·6
	Pudukkottai	318	29·730	29·613	·117	29·672		·923	86·1	72·6	13·5	92·1	68·7	23·4	81·3	82·1	79·4		71·0	74·6	74·4
	Madras	22	30·036	29·938	·098	29·989	+·063	·943	85·8	73·7	12·1	89·5	67·9	21·6	82·9	82·3	79·0	+1·1	72·3	77·0	76·1
	Bellary	1,475	28·570	28·441	·129	28·507	+·045	·923	90·6	67·4	23·2	91·0	63·2	30·8	82·4	86·1	78·1	+2·8	62·8	68·5	68·2
	Waltair	*226*	29·873	29·762	·111	29·813	+·083	·981	85·0	72·3	12·7	87·9	68·2	19·7	82·9	81·8	77·9	+0·3	65·2	68·9	69·5
Station, Baluchistan.	Quetta	5,502	24·831	24·750	·081	24·781	+·052	24·740	67·6	35·9	31·7	74·2	28·6	45·6	59·6	61·8	51·3	+3·3	33·2	45·9	46·4
Hill Stations, Northern India.	Leh	11,503	19·816	19·711	·105	19·762	+·024	19·729	47·0	21·3	25·7	56·6	13·4	43·2	35·8	43·5‡	32·2	+0·1	17·6	26·8	31·6
	Srinagar	5,204	25·091	24·970	·121	25·026	+·030	24·997	61·7	32·7	29·0	70·6	24·4	46·2	47·2	59·7	45·2	+1·2	31·3	44·3	55·1
	Sarain		23·293	23·227	·066	23·250			57·3	35·0	22·3	64·7	28·3	36·4	52·4	45·2	45·7			39·7	37·8
	Kalabagh									Imperfect.											
	Simla (Ridge)	7,224	·255	·195	·060	·215	+·043‡	23·177	55·5 ‡‡	44·8	10·7	61·4	38·4	23·0	50·5	51·6 ‡‡	49·7 ‡‡	−0·4	36·1	39·6	41·4 ‡‡
	Chakrata	7,022	·421	·363	·058	·382	+·041	·342	62·9	44·4¶	18·5	68·5	34·4	34·1	57·3¶	54·7	53·3	+1·8	37·7	46·1¶	44·7
	Ranikhet	6,069	24·246	24·171	·075	24·199	+·037	24·158	62·3	47·6	14·7	70·0	41·5	28·5	57·8	57·6	54·5	+0·1	42·0	46·9	47·2
	Muktesar	7,600	22·952	22·886	·066	22·909	¶¶	22·867	59·2	43·1	16·1	67·1	35·9	31·2	51·5	55·5	50·7	¶¶	36·0	41·6	44·4
	Katmandu	4,388	25·811 **	25·704 ††	·107	25·755	+·057	25·709 **	71·8 ††	47·7 ‡‡	24·1	78·3	39·3	39·0	60·7 **	67·2 ††	59·3 **	+1·5	47·3 ‡‡	55·1 **	58·0 ††
	Darjeeling	7,376	23·131	23·089	·042	23·107	+·024	23·018	54·8	42·4	12·4	59·4	37·5	21·9	51·5	52·8	49·5	+1·7	40·8	48·4	50·1
Stations, C. India.	Mount Abu	3,945	26·236	26·159	·077	26·190	+·052	26·140	74·8	61·1	13·7	80·2	55·6	24·6	71·8	72·6	67·4	+2·2	51·5	55·1	55·8
	Pachmarhi	3,528	·643	·555	·088	·592	+·067	·539	75·8	49·2	26·6	80·3	41·7	38·6	71·5	72·9	62·0	+0·2	45·5	55·4	57·0
	Chikalda	3,642	·517	·427	·090	·465	+·049	·469	77·7	58·0	19·7	82·2	52·1	30·1	72·6	74·0	67·3	+0·8	50·9	57·2	58·7
Stations, S. India.	Kodaikanal	7,688	22·909	22·837	·072	22·873		22·808	60·8	49·5	11·3	65·1	41·8	23·3	57·6	56·7	55·2		47·3	54·7	54·3
	Ootacamund	*7,322*	23·110	23·041	·069	23·073		23·008	63·2	49·7	13·5	66·0	41·3	24·7	59·6	58·5	55·9		47·5	54·2	54·1
	Dodabetta	8,539?	22·110	22·056	·054	22·080		22·017	56·1	47·1	9·0	61·3	43·5	17·8	53·6	52·5	51·1			49·3	49·3
Extra India.	Aden	94	29·985	29·863	·122	29·929	+·033	29·955	85·5	75·7	9·8	89·9	71·3	18·6	82·4	84·4	79·6	+0·8	70·5	75·1	73·8
	Perim	201	·840	·733	·107.	·792	+·040	·928	86·9	77·5‡	9·4	90·3	75·2	15·1	83·1	83·7	81·2‡	+0·2	68·2	74·3	74·6
	Zanzibar	72	·910	·820	·120	·885	−·034	·883	87·0	78·6	8·4	91·7	75·8	15·9		86·5	81·9	+2·5	75·7		78·9
	Port Victoria (Seychelles).	15	·994	·910	·084	·965	¶¶ +·023	·904	84·8	77·4	7·4	86·1	74·6	11·5	83·1	83·4	79·8	¶¶ +2·2	73·7	77·3	77·5
	Mauritius (Pamplemousses).	181				·883	−·005	30·011				89·0	60·5	28·5			74·6	−0·6			

N.B.—Elevations in italics indicate barometrical determinations.

‡‡ *Mean of 27 days.* ¶¶ Departures from old normals.

Note.—The barometr readings are not reduced to sea-level in the cases of hill or plateau stations, the elelevations of which exceed 3,200 feet.

—concluded.

Stations in India, Burma, etc., for November, 1905—concluded.

Vapour Tension.				Humidity.				Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Total number of 10 hours and 16 hours winds from: Calm.	N.	N.E.	E.	S.E.	S. W.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																									%	%						
94	·692	·688	·673		88	66	60	71		5·1	6·6	5·9		8	7	5	10	12	7	4	5	2	S 62° E		23		58*		2·17	0·52	Periyakulam.	South India.
81	·753	·798	·758	+·054	91	67	64	77	− 1	4·8	6·6	5·7	+0·1	10	5	11	25	1			7	1	N 64° E	N 81° E	48	24	98*	74	0·75	0·50	Salem,	
92	·546	·495	·534	+·028	80	55	44	63	− 2	3·9	4·7	4·3	−0·3	1	1	15	28	15					N 89° E	N 72° E	82	69	183*	149	0·77	0·44	Chitaldroog	
87	·561	·545	·561	+·022	94	66	60	76	+ 1	4·7	5·0	4·9			2	14	35	7	1	1			N 81° E	N 60° E	82	68	188*	120	1·15	0·38	Bangalore.	
87	·556	·527	·545	+·022	93	60	53	72	− 1	5·3	5·4	5·4	−0·7	5	2	18	24	11					N 81° E	N 70° E	75	79	76*	72	0·32	0·11	Hassan.	
72	·557	·539	·569	+·066	89	59	50	69	− 2	5·9	5·7	5·8	−0·6		1	10	30	17	1	1			S 83° E	N 39° E	82	22	214*	206	0·61	0·26	Mysore.	
46	·769	·754	·756		93	92	70	78		6·6	6·5	6·6			19	28	7	1	1	2		2	N 33° E		75		167*		4·70	1·08	Pudukkottai.	
79	·850	·820	·836	+·040	91	76	74	84	0	6·2	5·7	6·0	+0·1	·	14	32	11				2	1	N 40° E	N 27° E	81	62	152	156	10·99	2·51	Madras.	
20	·529	·468	·518	−·020	77	48	38	57	− 6	4·1	4·5	4·3	−0·8	2	2	12	27	15	2				S 87° E	N 82° E	77	54	89* §§	77	0·01	0·01	Bellary.	
35	·525	·559	·560	−·082	67	47	51	58	− 9	4·1	3·9	4·0	+0·2			26	26	4	2	2			N 75° E	N 77° E	78	52	220		0·39	0·25	Waltair.	
67	·173	·160	·167	+·010	78	33	29	51	0	1·7	2·7	2·2	+0·5	28	5	1		1	2	1	6	16	N 51° W	N 51° W	35	40	25*	48	0·07	0·07	Quetta,	Hill Station, Baluchistan.
69	·077	·083‡	·076	−·022	59	37	31‡	44	−12	3·3	5·0	4·2	0		1	4	2	2	21	21	8	1	S 28° W	S 27° W	62	37	60	50	0	0	Leh.	
62	·264	·391	·257	+·024	86	80	75	80§	+ 1	1·4	2·3	1·9	−1·1	23	6	1	2	6	6	1	3	12	N 53° W	N 1° E	12	21	41*	62	0·17	0·10	Srinagar.	
	·117	·152				31	51			1·3	1·7	1·5		22		2			13	20	2	1	S 22° W		48		55*		0	0	Sarain,	
																											*				Kalabagh.	
24	·134	·157	·138	−·033	43	37	41	44	− 7	0·9	1·3	1·1	−1·2	18	24	3			7	1	2	5	N 11° W	N 27° W	37	8	108	77	0·02	0·02	Simla (Ridge)	Hill Stations, Northern India.
57	¶ ·199	†† ·194	·187	−·069	¶ 58	¶ 43	†† 45	53	− 4	1·4	1·5	1·5	−0·3	10	1				49				S	S 51° W	80	30	138*	130	0·25	0·25	Chakrata.	
12	·210	·222	·215	−·033	65	45	47	56	− 6	2·1	2·1	2·1	+0·6	27				1		16	16		S 66° W	S 54° W	48	38	50*	41	0	0	Ranikhet.	
41	·163	·182	·162		52	43	42	50		2·9	2·6	2·8		2		1	3	2	5	9	37	1	S 74° W		68		163*		0	0	Muktesar.	
28	·378	·382	·362	+·026	97	70	56	78	+ 3	2·1	2·6	2·4	−0·2	5	1	1	15	1			34	3	N 81° W	N 81° W	33	42	8	14	0	0	Katmandu.	
‡ ** 41	·312	†† ·337	·297	+·033	‡‡ 85	** 81	†† 84	87	+ 4	** 5·5	†† 6·0	5·8	+1·5	21		2	1	4	1	9	6	3	S 55° W	N 54° W	14	10	** 53*	65	0	0	Darjeeling.‡*	
74	·245	·256	·259	+·016	51	31	31	45	0	2·1	3·9	3·0	+1·6		9	8	3	7	2	8	15	8	N 59° W	N 44° E	25	15	103*	106	0	0	Mount Abu.	Hill Stations, C. India.
66	·255	·287	·269	−·039	75	33	35	55	− 6	1·8	1·2	1·5	−0·6	10	5	16	10	6	1		3	9	N 43° E	N 44° E	40	39	43*	67	0	0	Pachmarhi,	
96	·297	·322	·305	−·048	61	37	38	52	− 8	2·0	2·4	2·2	0	27	7	5		4	4	9		4	N 87° W	N 6° W	5	21	188*	120	0	0	Chikalda,	
15	·402	·400	·372		88	85	87	86		6·2	7·4	6·8			7	11	19	11	6			5	N 82° E		53		349		7·77	1·26	Kodaikanal.*	Hill Stations, S. India.
13	·369	·377	·353		87	72	76	78		5·9	7·0	6·5		1	1	11	26	11	9	1			S 78° E		70		113*		3·79	1·23	Ootacamund.	
	·309	·319				75	81			7·1	7·5	7·3			6	16	26	10	2				N 80° E		75		419		3·75	1·33	Dodabetta.	
30	·773	·695	·734	+·059	76	70	59	70	+ 2	1·8	0·6	1·2	−1·1		1	10	8	19	2	15		5	S 45° E	S 87° E	33	67	209*	310	0	0	Aden.	Extra India.
88‡	·734	·739	·698	−·044	69‡	64	64	65	− 4	1·0	1·4	1·2	−0·6				3	33	24				S 29° E	N 89° E	90	74	499*	485	0·22	0·20	Perim,	
54		·886			87		71				1·4				5	5	9	6	4	1			S 89° E	‖S 36° E	54	17	98*	110	2·79	0·99	Zanzibar. †‖	
38	·864	·870	·866		83	76	76	81	− 2	5·6	6·2	5·9	¶¶ −1·0	11		1	10	22	7	2	2	5	S 45° E	S 84° E	47	9	131	140	5·38	2·15	Port Victoria (Seychelles).	
●			·635	+·032				74	+ 6			6·6	+1·0										S 86° E	S 83° E			224	257	4·19	0·88	Mauritius (Pamplemouses)	

§ Mean of three previous columns.
** Mean of 23 days.
†† ,, ,, 24 ,,
*‖ Wind variable 1.
1* ,, Observations 13 less.
†‖ ,, ,, 30 ,,
§§ Mean of 27½ days.
‡ ,, ,, 29 ,,
||| Mean of 28¼ days.
* Corrected.
¶ Mean of 28 days.

G. I. C. P. O.—No. 42 Meteor.—24-5-1906—

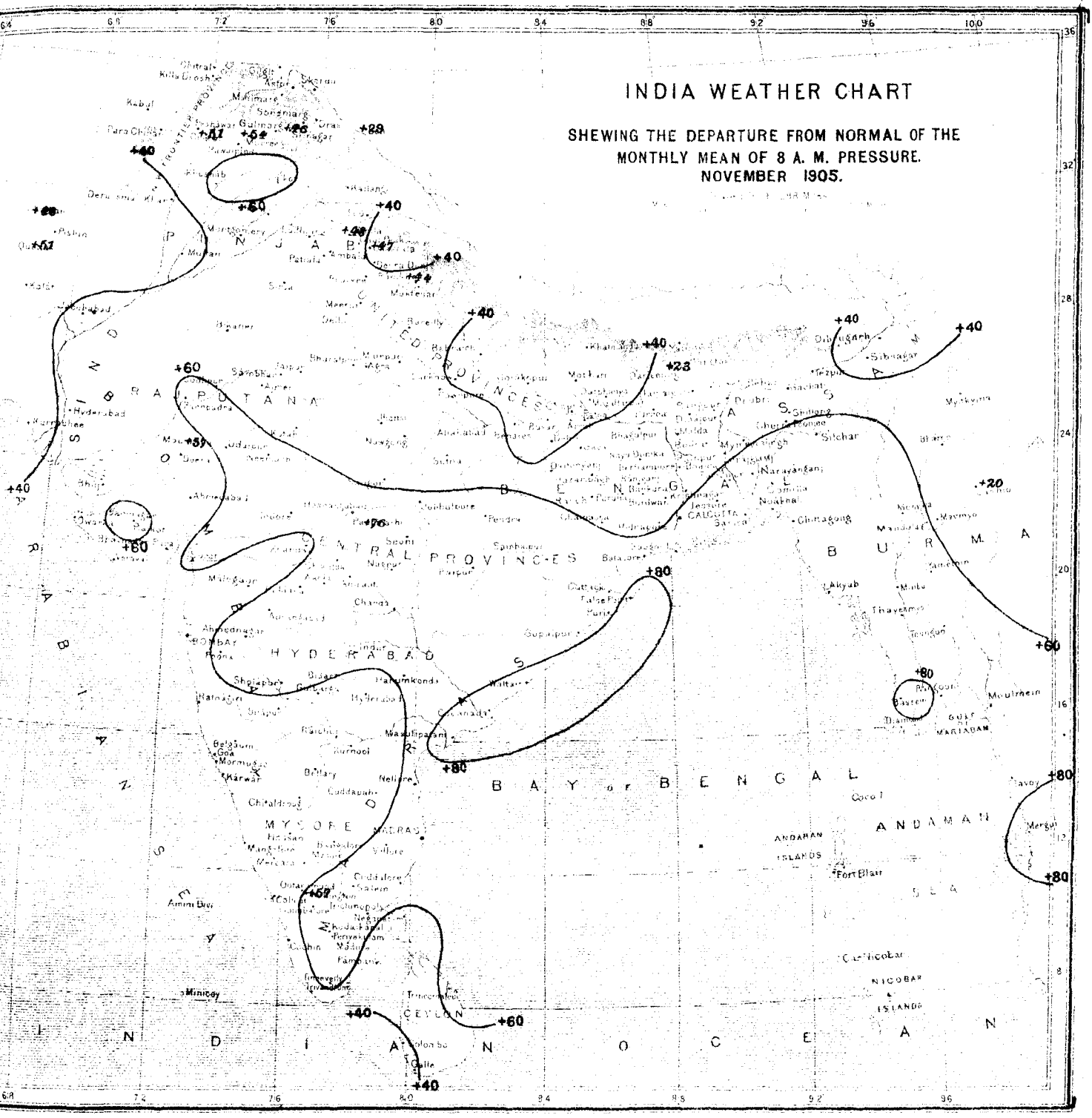
No. 9, W., I.—Jan. 06.—5,600

LITHO BY S.B. MUNDLE

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of Lambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are indicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the month is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added to the wind arrow.					
,,	,, 2 to 5	,,	,,	,,	...	two	feathers	,,	,,	,,	,,
,,	,, 5 to 10	,,	,,	,,	...	three	,,	,,	,,	,,	,,
,,	,, 10 to 20	,,	,,	,,	...	four	,,	,,	,,	,,	,,
	over 20	,,	,,	,,	...	five	,,	,,	,,	,,	,,



LITHO. BY S. S. MUNDLE.

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal mounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020″ or two hundredths of an inch, &c. ontinuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted nes that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continu-s and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative partures.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

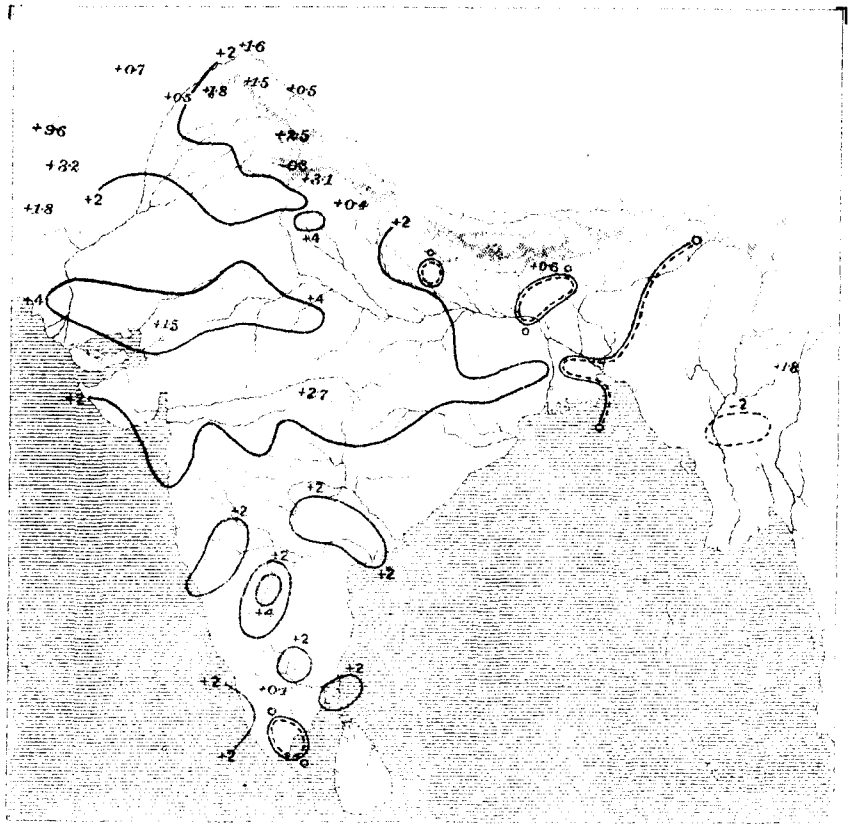
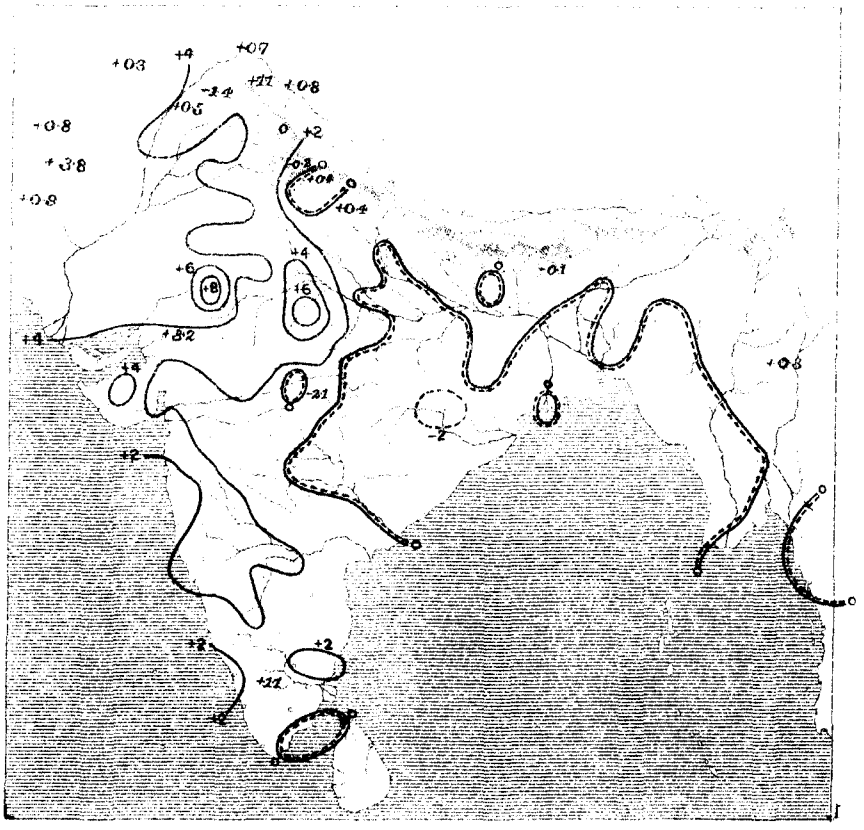


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S. D. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

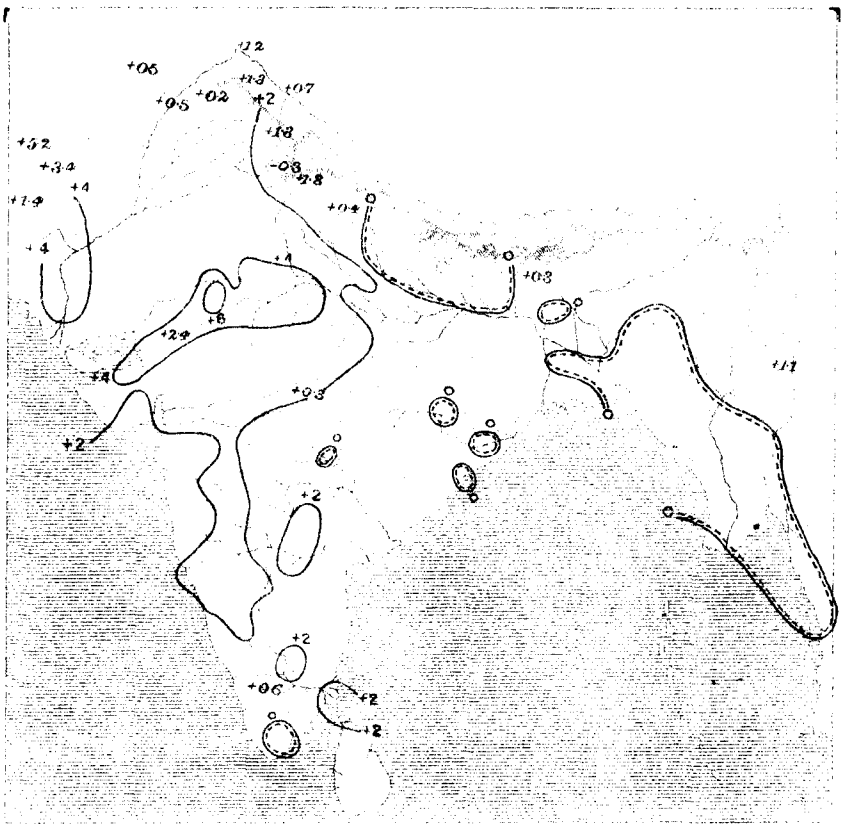
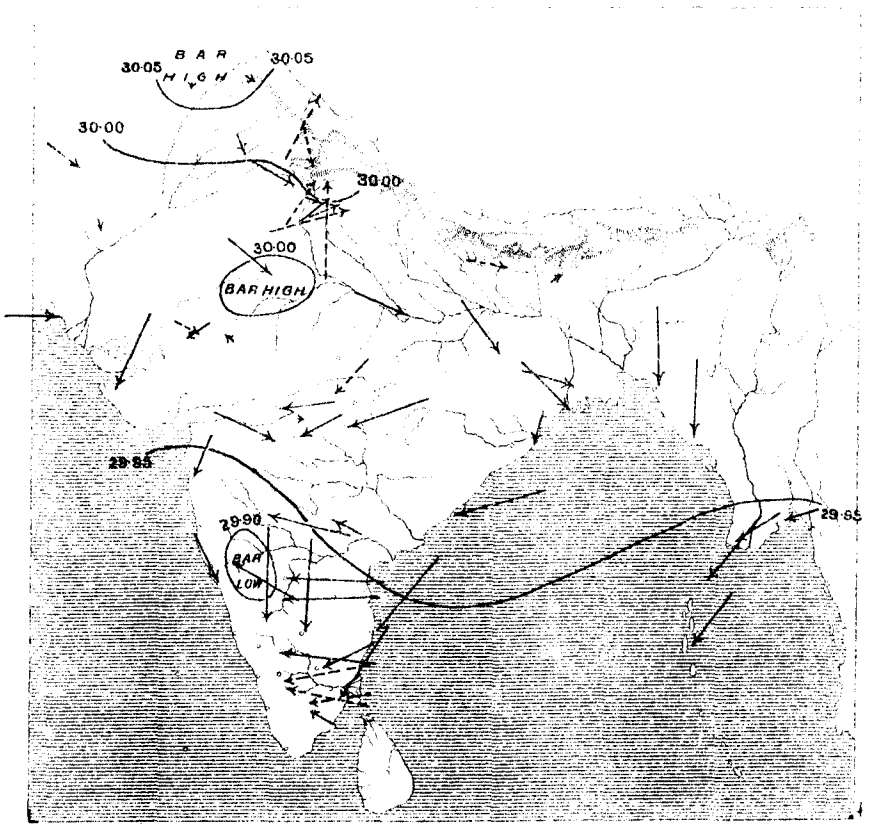


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S.B.MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 A. M.

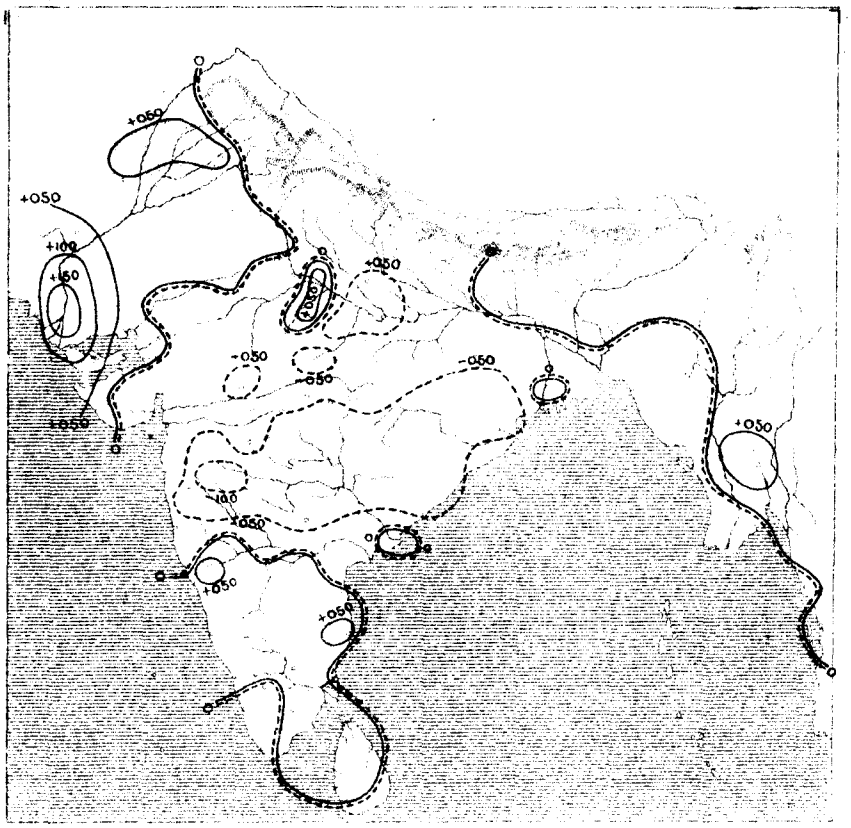
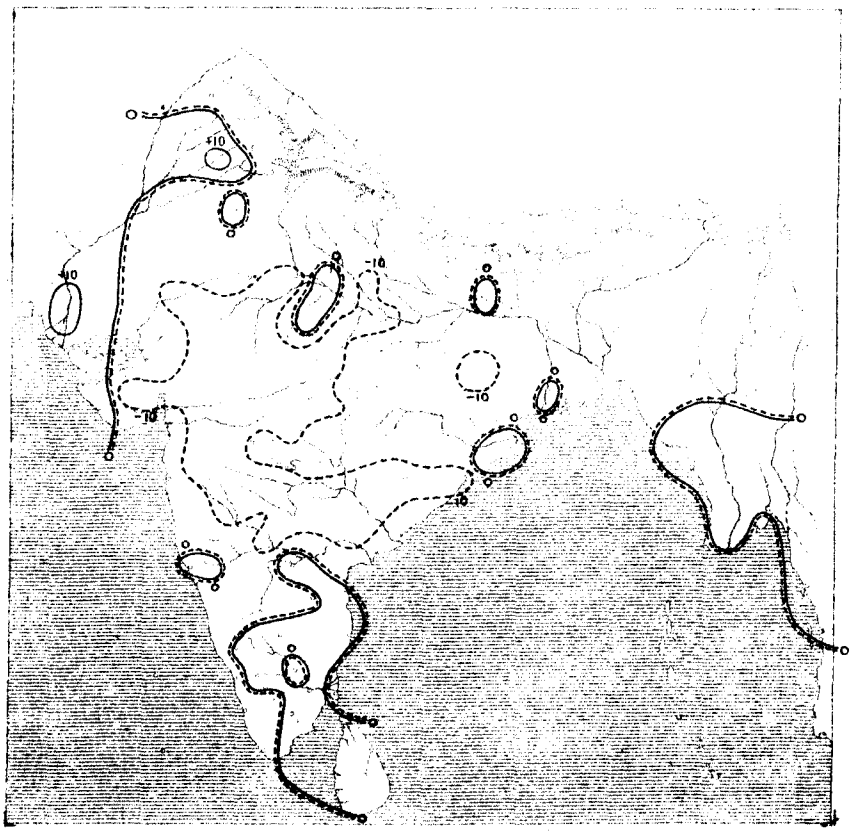


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 A. M.



LITHO. BY G. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 A. M.

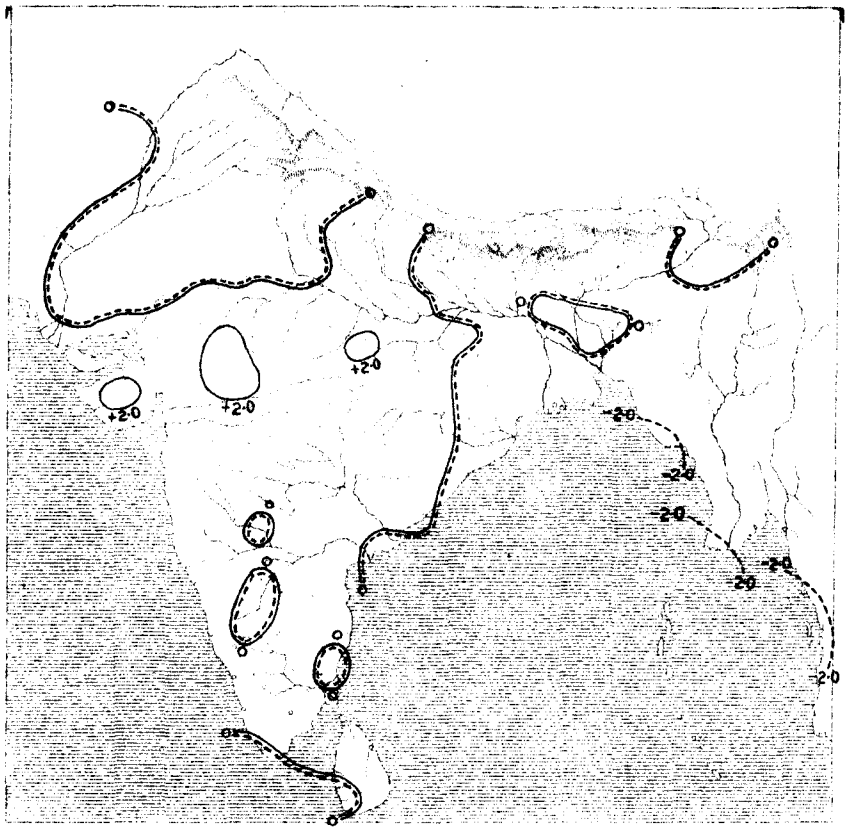
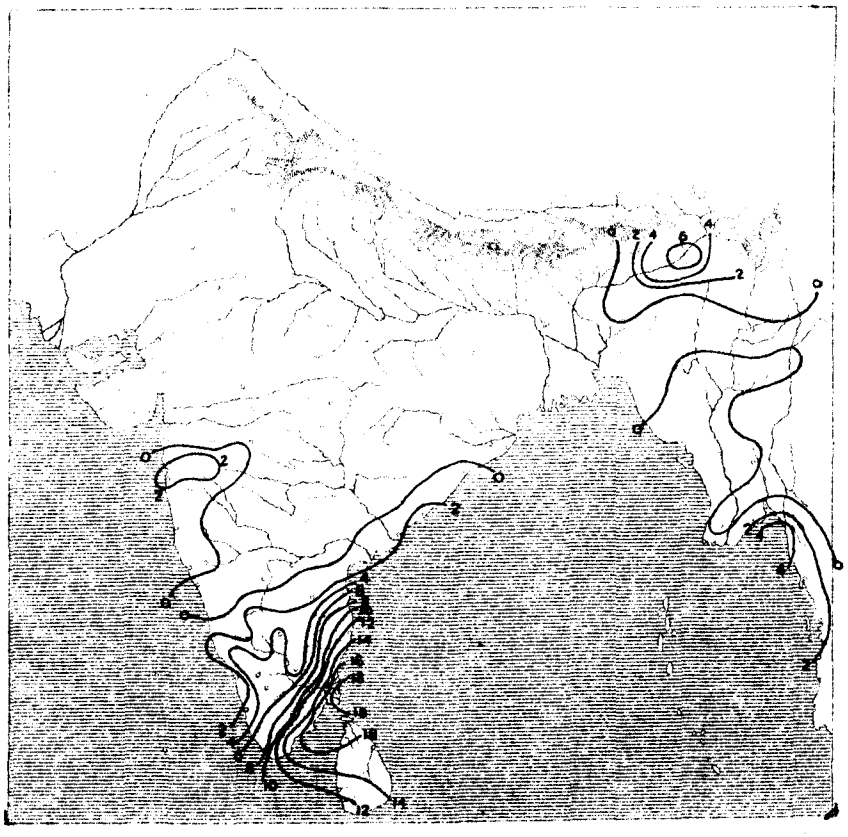


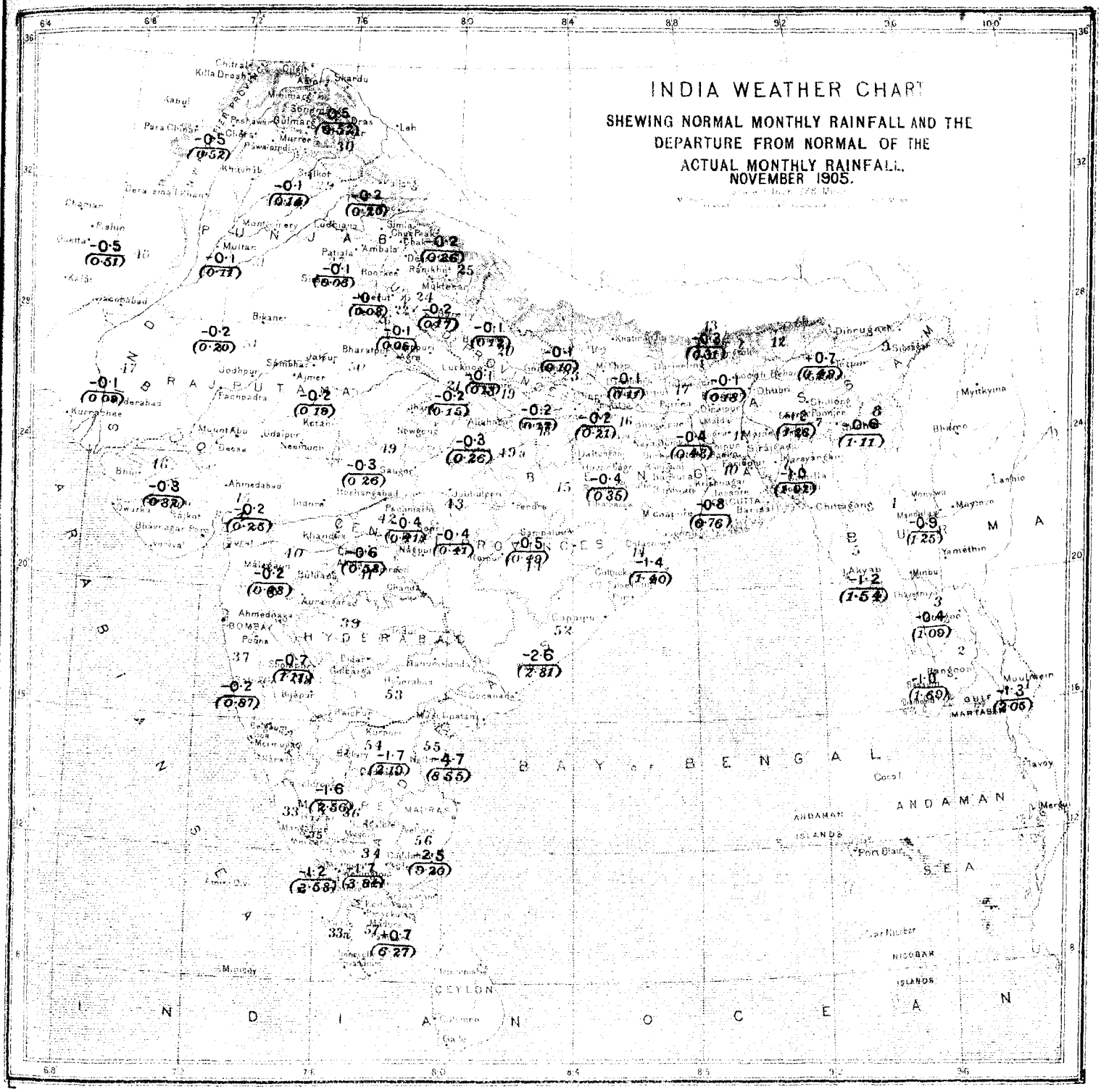
CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.



LITHO. BY G.E. MUNDLE.

No. 9, W., I.—Jan. 05.—5,600. Zinco. S. I. O., Calcutta.

The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 feet in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.



LITHO. BY S.S. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall: the numbers above these give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained by referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province
33. Malabar
33a. Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South

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INTRODUCTION.

THIS review of the weather in India during the month of December, 1905, is based on observations taken daily at 8 A.M. at 233 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 64 stations. In the rainfall summary the data furnished by the meteorological observatories and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review, have been utilized. The brief notes on solar and magnetic disturbances are supplied by the chief observatories.

Summary of the chief features of the weather in India during the month of December, 1905.

Normal conditions for the month of December.

The most important feature in the meteorology of the month of December is the final withdrawal of the south-west humid winds from the south of the Bay and the extension of the north-east monsoon winds over the whole of the Bay. This change usually occurs in the third or fourth week of the month. During the early part of the month the north-east winds, which prevail on the Coromandel coast and in east Ceylon, continue to give light to heavy rain. This rainfall is heaviest in the south Coromandel coast districts and diminishes rapidly westwards from the coast into the interior.

Cyclonic storms are also of occasional occurrence during the month, and the final withdrawal of the retreating south-west monsoon current from the south of the Bay is frequently immediately preceded by the formation of a cyclonic storm in the south-west of the Bay. These storms almost invariably march westwards to the south Coromandel coast between Negapatam and Cuddalore or Pondicherry and usually break up in the Madura, Tinnevelly, or Coimbatore districts. They occasionally give excessive cyclonic rain to the south Coromandel coast districts.

Another important feature is the occasional appearance of shallow depressions in upper India. These depressions originate sometimes in Baluchistan and Persia and sometimes in north-western India. They generally give very little rain if they occur during the early part of December. In the latter part of December and in January and February, these depressions and storms of the cold weather frequently give moderate general rain to northern India and moderate to heavy snow in the hill districts. They usually march in an easterly direction across northern India. When they enter India from Baluchistan they frequently give rise to the formation of secondary or subsidiary depressions in the Punjab. These subsidiary storms are usually much deeper and more intense than the primary storms and give heavy rain in the Punjab and stormy weather and heavy snow in the hills.

Actual conditions in December, 1905.

Quiet weather prevailed over the Indian region during the first week of December, 1905, and the only rainfall reported was a few showers over the south of the Peninsula. The mean temperature was, at the commencement of the week, generally higher than usual except over the north-west and

the north-east, but temperature gradually fell, and on the 6th, 7th, and 8th was below the average except in Burma. The deficiency of temperature was especially marked over the centre of the country. The following gives comparative data of temperature for all divisions for the 8th :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 8th December, 1905.	Mean minimum temperature, 8th December, 1905.	Mean temperature, 8th December, 1905.
	°	°	°
Burma	−1·6	+4·4	+1·4
Assam	+0·7	+1·9	+1·3
Bengal	−0·9	+0·7	−0·1
Orissa	−2·4	−3·0	−2·7
Bihar	−1·5	−3·0	−2·3
Chota Nagpur	−3·8	−4·0	−3·9
United Provinces of Agra and Oudh	−0·5	−3·3	−1·9
Punjab	+0·4	−1·9	−0·8
North-West Frontier Province	+0·4	−2·9	−1·3
Sind	+0·7	−3·0	−1·2
Rajputana	−0·5	−3·1	−1·8
Gujarat	+0·3	−2·5	−1·1
Central India	−1·5	−4·8	−3·2
Central Provinces	−4·1	−6·4	−5·3
Berar	−4·0	−7·0	−5·5
West Coast	+0·2	−2·6	−1·2
Bombay Deccan	−0·4	−1·0	−0·7
Mysore	+3·3	−4·2	−0·5
Madras Coast	+0·3	−4·0	−1·9
Madras Deccan	−0·9	−7·8	−4·4
South India	+4·1	−1·3	+1·4

On this day, the 8th, a barometric depression, which had apparently advanced in a northerly or north-easterly direction from the south of the Bay, was shown over the east of the Bay off the west of the Andamans. It advanced in a north-easterly direction during the next two days and apparently broke up near the Arakan coast. It occasioned rainy, unsettled weather over the Andamans and Burma between the 6th and the 10th and brought about a considerable fall of temperature in the Andamans on the 6th and 7th and in Burma between the 8th and 10th. The following gives comparative data of temperature for Port Blair and the province of Burma from the 6th to the 10th :—

PROVINCE OR STATION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	6th December.	7th December.	8th December.	9th December.	10th December.
	°	°	°	°	°
Port Blair	−4·1	−1·3	+0·3	−0·7	+0·3
Burma	+3·0	+2·9	+1·4	−1·5	−0·7

Between the 8th and the 11th, temperatures lower than usual prevailed over the greater part of the Indian area, but on the 12th a rise set in and by the 14th the mean temperature generally exceeded the normal except over the central districts and along the West Coast. The excess was most marked in the south. The following gives data for the 14th for the more southern divisions :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 14th December, 1905.	Mean minimum temperature, 14th December, 1905.	Mean temperature, 14th December, 1905.
	°	°	°
Mysore	+5·3	+6·3	+5·8
Madras Deccan	+1·1	+6·6	+3·9
South India	+4·6	+3·5	+4·1

Light showers of snow occurred on the north-west Himalayas between the 13th and 15th, and temperature was unsteady in the extreme north-west, but on the 16th, 17th, and 18th a rise took place, and on the 18th, immediately before the appearance of the second storm of the month, the mean temperature was very high over the whole of north-west India. The following gives data for the north-west divisions :—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF		
	Mean maximum temperature, 18th December, 1905.	Mean minimum temperature, 18th December, 1905.	Mean temperature, 18th December, 1905.
	°	°	°
Punjab	+0·9	+7·8	+4·4
North-West Frontier Province	−4·3	+12·8	+4·3
Sind	+1·7	+8·5	+5·1
Rajputana	+4·1	+4·6	+4·4
Gujarat	+6·8	+5·4	+6·1
Central India	+3·0	+1·3	+2·2

On the 19th, a shallow storm was shown over the Punjab and neighbouring regions and moderately heavy rain was falling over the North-west Frontier Province and the Punjab, where the following amounts equalling or exceeding 2″ in 24 hours were registered :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Hazara	Oghi	19th December	3·03
Peshawar	Malakand	" "	3·00
Attock	Attock	" "	2·39
Rawalpindi	Murree	" "	2·26
Peshawar	Swabi	" "	2·25
Hazara	Haripur	" "	2·25
Kohat	Kohat	" "	2·16
Hazara	Abbottabad	" "	2·06
	Mansahra	" "	2·03
Peshawar	Abazai	20th "	2·00
	Lahor (Utman Blok)	" "	2·00
Rawalpindi	Murree	" "	2·00

A slight cold wave succeeded this precipitation and passed slowly across northern India between the 20th and 25th. It was succeeded by very high temperatures in the north-west, which in their turn extended eastward over the central parts of the country. The following gives data for all divisions for the 27th in illustration :—

Province or division.	Departure from normal of		
	Mean maximum temperature, 27th December.	Mean minimum temperature, 27th December.	Mean temperature, 27th December.
	°	°	°
Burma	—1·9	+1·3	—0·3
Assam	—5·0	+4·2	—0·4
Bengal	+0·6	+3·6	+2·1
Orissa	+1·8	+4·2	+3·0
Bihar	+0·7	+2·1	+1·4
Chota Nagpur	+3·7	+2·3	+3·0
United Provinces of Agra and Oudh.	+1·0	0	+0·5
Punjab	—2·4	+1·1	—0·7
North-west Frontier Province.	—1·5	—0·7	—1·1
Sind	+3·2	+12·7	+8·0
Rajputana	+0·3	+2·0	+1·2
Gujarat	+1·3	+3·0	+2·2
Central India	+1·8	+1·6	+1·7
Central Provinces	+3·4	+2·2	+2·8
Berar	+1·6	—1·5	+0·1
West Coast	+0·4	—2·9	—1·3
Bombay Deccan	+3·9	—0·5	+1·7
Mysore	+3·1	—3·9	—0·4
Madras Coast	+1·3	—0·3	+0·5
Madras Deccan	+4·5	—1·1	+1·7
South India	+1·3	—4·6	—1·7

On the 29th, 30th and 31st light showers were received, in the north-west and north-east and temperature was reduced to below the normal in both areas, but over the remainder of India the mean temperature was generally in excess of the normal during this period and in parts of the Deccan, the central districts and Bengal the excess was considerable.

Solar, Seismic and Magnetic Disturbances.

The following notes on solar, seismic, and magnetic disturbances have been supplied by the chief observatories :—

Kodaikanal Observatory :—Solar Observations.

The weather was fine throughout the month and there was no day on which observations of spots and prominences were impossible. There was, however, a very large amount of cirrus almost always present, which greatly interfered with the observations of prominences both by eye and with the spectroheliograph.

Spots.—There were 22 new groups of spots seen during the month and the average daily number of groups was 4·0, as compared with 2·9 and 6·7 in November. The distribution of spots between the two hemispheres was again unequal, there being 13 in the northern and only 9 in the southern. In the northern hemisphere the mean latitude of the groups was 10° and the extremes 5° and 23°; in the southern the mean was 14° and the extremes 6° and 25°. Three of the groups were returns of groups seen during the previous rotation ; 717 and 729 were returns of 696 and 705, while 718 was the return of 699 which was itself the return of 677. The only two groups of more than moderate size were 719 and 730. They were both double spot groups and they underwent little change and showed no striking activity spectroscopically. C was strongly reversed in 708 on the 1st, in 724A on the 23rd, and in 727 on the 25th. It was displaced 1·0A in F to red in 726 on the 22nd and both ways in the same spot on the 24th. D3 was dark in 722 on the 25th.

Prominences.—As stated above, the prevalence of cirrus was unfavourable for prominence work, but there was undoubtedly a very considerable falling off in both the number and the size of the prominences, especially towards the end of the month. Only one prominence was seen of a height exceeding 100″. This was observed on the 17th and consisted of a group of tall slanting jets covering about

20° of the limb and attaining a maximum height of 120." Metallic prominences were observed on 4 days (1st, 6th, 7th, 9th) and on three of these the prominences were associated with spots. The prominence on the 1st showed large radial velocity amounting to about 134 miles per second. The prominence on the 6th also showed a displacement to the violet amounting to 2·0A in the F line.

There were moderate magnetic disturbances on the 4th and 13th. On the former date there was no spot visible near the central meridian, but on the latter No. 715 was a little past the central meridian and No. 717 was approaching it.

C. MICHIE SMITH,
Director,
Kodaikanal and Madras Observatories.

Colaba Observatory, Bombay:—Note on the Magnetic Record.

During the month the traces showed 18 calm days, 12 days of small and 1 day of moderate disturbances.

Movements suspected to be due to seismic causes occurred on the 1st, 15th, and 16th at about 0h., 19h., and 3h. respectively, the strain apparently lasting for about 3 hours in the first case and for about 2 hours in the other two cases.

The selected quiet days of the month were the 1st, 8th, 17th, 22nd, and the 27th.

The mean observed values of the several elements as also the ranges and the summed ranges of the Horizontal Force and Declination for the month were as follows:—

Declination	0° 13′ 55″ East.
Horizontal Force . . .	·37385 C. G. S. unit.
Dip	22° 1′·0.
Horizontal Force range .	·00038 C. G. S. unit.
Horizontal Force summed range	·00241 C. G. S. unit.
Declination range . . .	1′·23
Declination summed range .	4′·02

[NOTE.—Summed range means sum without regard to signs of 24 ordinates of diurnal inequality.]

Three small seismic disturbances were recorded during the month, one on the 4th and two on the 10th.

MAGNETIC DISTURBANCES.

December, 1905.		December, 1905.		December, 1905.	
1	C.	6	C.	11	C.
2	S.	7	C.	12	S.
3	S.	8	C.	13	S.
4	M.	9	S.	14	S.
5	S.	10	C.	15	S.
16	C.	21	C.	26	C.
17	C.	22	C.	27	C.
18	C.	23	C.	28	S.
19	S.	24	C.	29	S.
20	S.	25	C.	30	C.
				31	C.

The magnitudes of the disturbances are determined from horizontal force traces. C.=Calm; S.=Small; M.=Moderate; G.=Great; V. G.=Very great. Days are reckoned from midnight to midnight.

N. A. F. MOOS,
Director,
Government Observatory, Bombay.

Alipore Observatory, Calcutta:—List of displacements recorded by the Seismograph at the Alipore Observatory in December, 1905.

Date 1905.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum Amplitude in M.M.	Duration.	REMARKS.
	H. M.	H. M.	H. M.	H. M.		H. M.	
December 1	21-56·3		22-1·4	22-10·1	0·75	0-13·8	Sensibility 1 m.m-0·38"-of tilt.
„ 4	7-20·1	7-32·3	7-31·9	82-2·1	1·25	1-2·0	„ „
„ 9	14-2·0		14-5·0	14-41·7	2·00	0-39·7	„ „
„ 10	12-59·1	13-23·6	13-26·1	15-21·5	4·00	2-22·4	„ „
„ 10	18-18·5	18-24·6	18-38·7	19-26·5	3·00	1-8·0	„ „
„ 17	6-35·8			7-40·9		1-5·1	Thickening of line.
„ 18	18-57·8	19-0·3	19-1·3	19-5·9	1·50	0-8·1	„ „

The local times of the commencement:—

Date 1905.	H. M.
December 2	3-49·6
„ 4	13-13·4
„ 9	19-55·3
„ 10	18-52·4
„ 11	0-11·8
„ 17	12-29·1
„ 19	0-51·1

J. A. CUNNINGHAM,
Offg. Asstt. Meteorological Reporter to the Govt. of India.

Simla Observatory:—List of earthquakes recorded by the Omori-Ewing Seismograph at the Simla Observatory during the month of December, 1905:—

Date.	Commencement. P. T. G. M. T.	End of P. T. G.M.T.	Beginning of L. W. G. M. T.	Maxima. G. M. T.	End approximately. G. M. T.	Maximum amplitude in M.M.	Duration approximately.	REMARKS.
	H. M.	H. M.	H. M.	H. M.	H. M.	M. M.	H. M. S.	
10th			21-23·3	21-23·8	21-24·3	·05	0 1 0	Local.
13th			11-57·8	11-58·1	11-59·8	·5	0 2 0	,,
13th				12-37		·04	0 0 6	,,
14th			11-23·8	11-54·6	11-54·9	·07	0 1 16	,,
17th				6-11·4		·03	0 0 7	,,
22nd				11-49·7		·1	0 0 47	,,
25th				21- 4·1		·05	0 0 6	,,

J. PATTERSON,
Deputy Meteorologist.

Royal Alfred Observatory, Mauritius:—Groups of sunspots were observed between the 3rd and the 8th, the 12th and the 18th, and the 22nd and the 30th, while single spots were recorded on the 9th, 10th, 11th, and 19th. No spots were observed, the weather having apparently been unfavourable, on the 1st, 2nd, 17th, 20th, 21st, and 31st. The groups of spots were arranged as follows:—

Two groups were observed on the	3rd, 12th, 13th, 14th, 15th, 16th, 18th, and 29th.
Three ,, ,, ,, ,, ,,	4th, 7th, 8th, 22nd, 23rd, 26th, 27th, 28th, and 30th.
Four ,, ,, ,, ,, ,,	5th, 6th, 24th, and 25th.

Magnetic Disturbances.

Day.	Hours.	Disturbance.
4th		Accentuated diurnal variation in H. F. with frequent superposed fluctuations (± ·00013).
5th	6—19	Small superposed fluctuations in H. F.
12th		Accentuated diurnal variation in H. F. with occasional small superposed fluctuations and sudden increase of force (·00017) at 6 hours 40 minutes.
13th	0—15	Irregular decrease of H. F. (·00065) with occasional small superposed fluctuations.
23rd	14—18	Wave in H. F. (—·00019).
28th and 29th	21— 0 5— 0	Occasional small fluctuations.

T. F. CLAXTON,
Director.

On the 9th of December a slight earthquake shock was felt at Mymensingh. It commenced at 7-35 P.M. and lasted half a minute.

On the same day a slight shock of earthquake was felt at Minbu at about 8-30 P.M., the time being only approximate.

On the 19th December at Mount Abu there was a slight shock of earthquake at 23 hours 16 minutes and a second at 23 hours 21 minutes. Both shook doors and windows; the former lasted for 42 seconds, the latter for 33 seconds. The motion was from north to south.

Weather in Indian Monsoon region.

The weather was generally quiet over the Indian monsoon area. The rainfall over north-west India on the 19th and 20th occurred about the time of the passage of a storm from northern Russia southward into the Caspian area, but there are no observations to connect the two events. The European charts show that the barometer was high over the Black Sea and Caspian areas from the 1st to the 8th, but after this date low pressures appeared over the Mediterranean and south-east Europe and continued till the 14th. Pressure then rose, the distribution changed, and a considerable depression passed from northern Russia southward to the Caspian region between the 16th and 18th. Between the 19th and the end of the month pressure was apparently continuously high over south-east Europe and the Caspian area.

The following gives data for the south-east Trades region for the month:—

December, 1905.	Mauritius.	Zanzibar.	Seychelles.
Pressure departure	″ −·039	″ −·054	″ −·018
Actual mean wind direction.	N 80° E	N 74° E	N 37° W
Normal mean wind direction.	N 89° E	N 35° E	N 48° W
Actual mean wind velocity (miles per diem).	192	152	182
Normal mean wind velocity (miles per diem).	259	151	156
Rainfall departure	+3·85	+2·79	+11·44

The mean pressure was below the normal at all stations. The mean wind direction was about normal at Mauritius, while at Zanzibar it was more easterly and at the Seychelles more northerly than the average. The velocity was less than usual at Mauritius, about normal at Zanzibar, and above it at the Seychelles. Heavier rain than usual was received over the whole area.

Depressions and Cyclonic Storms.

Pressure was higher than usual during the first four days of the month. On the 5th pressure was giving way over the Bay area, more particularly on the Madras coast, and on this day a depression apparently formed over the south-west of the Bay. Heavy rain was falling at Port Blair with an east-south-east wind. On the 6th heavy rain continued to be reported from Port Blair and had extended to the east coast of Ceylon, while the barometer was falling briskly over the greater part of the Bay of Bengal. The reports of the 7th showed that the barometer was rising slowly in the south of the Bay and falling in the north, but the coast observations afforded little indication of the continued existence of the storm. On the 8th, however, the storm apparently reappeared, the centre lying to the west of the Andamans. Moderate rain was reported from Port Blair, a strong south-east wind from Slipper Island and a strong easterly wind from Diamond Island. Rainy and overcast weather prevailed over Burma. The storm had hence travelled north-eastward from the south of the Bay. On the 9th the storm was off the Arakan coast where pressure was giving way briskly. The wind at 8 A.M. had shifted to the south-south-westward at Port Blair and Slippery Island and to south-westward at Diamond Island and fairly general rain was falling over Burma. During the day the storm apparently filled up and at 8 A.M. on the 10th the wind returned to north-east on the Burma coast and at Slipper Island.

Between the 10th and the 17th barometric conditions were generally quiet over the Indian area, though very feeble depressions affected the extreme north-west and gave some snow to Kashmir. On the 18th pressure was giving way rapidly in Baluchistan and briskly over the Indus Valley and during the day a shallow depression entered north-west India. This depression gave a general burst of rain on the 19th and 20th to Sind, the North-west Frontier Province, the Punjab, and the north-west Himalayas. The principal falls of rain equalling or exceeding two inches were as follows :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Hazara	Oghi	19th December	3·03
Peshawar	Malakand	" "	3·00
Attock	Attock	" "	2·39
Rawalpindi	Murree	" "	2·26
Peshawar	Swabi	" "	2·25
Hazara	Haripur	" "	2·25
Kohat	Kohat	" "	2·16
Hazara	Abbottabad	" "	2·06
	Mansahra	" "	2·03
Peshawar	Abazai	20th "	2·00
	Lahor (Utman Bolak)	" "	2·00
Rawalpindi	Murree	" "	2·00

By the 20th the storm had disappeared, but a shallow low pressure area was shown over the United Provinces on the 20th and 21st, and over Bengal on the 22nd and 23rd. An unimportant depression passed eastward along the foot of the central Himalayas between the 25th and the 27th, and on the 28th a very shallow low pressure area was shown over Sind, whence it apparently moved eastward across northern India occasioning some rain over the United Provinces on the 29th and over Bengal on the 30th and 31st.

There were thus about the normal number of barometric depressions during the month, but none of them was of much intensity, though both in the Punjab and in the north-east of the Indian area the rainfall was at times considerable.

Pressure.

The mean barometric pressure of the Indian land area for the month of December, 1905, was ·013″ below the normal. Pressure was slightly above the average over the west, south, and east of the Peninsula, east Ceylon, and over the south of the Andaman Sea, and was lower than usual elsewhere, the deficiency having been considerable at some stations along the foot of the central Himalayas and over central Burma.

Relatively to the geographical mean the pressure was above the average over nearly the whole of the Peninsula, in Gujarat and east Rajputana, over the west and south of the Bay, the south of the Andaman Sea, and in Ceylon. It was, on the other hand, below the average over the greater part of Burma and of northern India. The following table gives the principal anomalies and outlines the areas of greatest excess and defect relatively to the general condition :—

Station.	Departure.	Positive pressure anomalies.	Station.	Departure.	Negative pressure anomalies.
	″	″		″	″
Madura	+·023	+·036	Minbu	—·046	—·033
Trichinopoly	+·021	+·034	Dehra Dun	—·043	—·030
Masulipatam	+·014	+·027	Gorakhpur	—·039	—·026
Trincomalee	+·013	+·026	Sibsagar	—·038	—·025
Tinnevelly	+·012	+·025	Patna	—·037	—·024
Madras	+·011	+·024	Yamethin	—·035	—·022
Ahmednagar	+·011	+·024	Jalpaiguri	—·034	—·021
Poona	+·009	+·022	Dinajpur	—·034	—·021
Coimbatore	+·008	+·021	Silchar	—·033	—·020
Salem	+·007	+·020	Burdwan	—·033	—·020
Karwar	+·007	+·020	Cawnpore	—·033	—·020
			Rawalpindi	—·033	—·020

Pressure, on the mean of the month, was below the normal at all the hill stations. The deficiency was exceedingly small at the most southern hill stations (Wellington —·001″), but increased northward and was considerable at the stations in the inner Himalayas (Leh —·068″). On the whole, the pressure deficiency at the level of the hill stations was greater than that on the plains at their foot, and hence the vertical pressure gradient was generally greater than usual, though in most areas by small amounts. The following gives data for eleven pairs of stations :—

HILL STATION.	Departure from normal pressure, December, 1905.	PLAIN STATION.	Departure from normal pressure, December, 1905.	Departure of pressure difference.
	″		″	″
Quetta	—·034	Jacobabad	—·005	+·029
Leh	—·068	Lahore	—·032	+·036
Murree	—·046	Peshawar	—·030	+·016
Simla	—·040	Ludhiana	—·025	+·015
Chakrata	—·029	Roorkee	—·024	+·005
Ranikhet	—·034	Bareilly	—·032	+·002
Darjeeling	—·042	Dhubri	—·021	+·021
Lashio	—·044	Bhamo	—·013	+·031
Mount Abu	—·010	Deesa	—·012	—·002
Pachmarhi	—·010	Khandwa	—·008	+·002
Wellington	—·001	Coimbatore	+·008	+·009

The actual distribution of pressure at 8 A.M. on the mean of the month is shown on Pl. I. Pressure was highest over the extreme north-west of India, relatively high over Rajputana and the central parts of the country and over Assam and upper Burma, and was lowest over the south of Ceylon. As mentioned above, the mean monthly pressure was slightly above the average in the south and more or less below it in the north, hence the pressure differences over India were slighter than usual.

The deficiency of pressure noticed over north-west India extended westward through Baluchistan into the Persian area and south-westward over Arabia, but the excess over the south of the Peninsula did not extend southward to the Equatorial Belt where, on the contrary, pressure was lower than usual.

The following summarises the chief abnormal features of the pressure conditions of the month :—

(1) There was a slight excess of pressure over the west, south, and east of the Peninsula, in east Ceylon, and over the south of the Andaman Sea.

(2) Pressure was more or less lower than usual over Burma, northern India, the Central Provinces, and the Deccan.

(3) The departure from normal, on the mean of the whole area, was —·013″.

(4) Relatively to the general condition, pressure was above the normal over the Peninsula and below the normal over Burma and northern India.

(5) The vertical pressure gradients were generally steeper than usual.

(6) Pressure was lower than usual over the Persian area, Arabia, and the south-east Trades region.

The following table gives the mean pressure departures and anomalies of the month for the eleven meteorological provinces of India :—

METEOROLOGICAL PROVINCE.	Departure from normal of mean 8 A.M. pressure of December, 1905.	Pressure anomaly, December, 1905.
	″	″
Burma Coast and Bay Islands	—·010	+·003
Burma, Inland	—·029	—·016
Assam	—·031	—·018
Bengal and Orissa	—·023	—·010
Gangetic Plain and Chota Nagpur	—·029	—·016
Upper Sub-Himalayas	—·026	—·013
Indus Valley and North-West Rajputana	—·020	—·007
East Rajputana, Central India, and Gujarat	—·009	+·004
Deccan	—·007	+·006
West Coast	+·003	+·016
South India	+·001	+·014

Temperature.

Over the greater part of the Indian land area the departure of mean temperature from normal was small and unimportant.

The mean day or maximum temperature of the month was lower than usual over (1) the extreme north-west of India, (2) parts of north-east India and of Burma, and

(3) parts of the west coast of the Peninsula. The deficiency was moderate to considerable at the stations for which comparative data are given below:—

Area.	Station.	Mean maximum temperature. Actual, Dec., 1905.	Normal, Dec.	Departure from normal, December, 1905.
		°	°	°
First area	Rawalpindi	63·1	67·6	−4·5
	Peshawar	63·8	67·5	−3·7
	Lahore	69·6	73·2	−3·6
	Sirsa	71·3	74·9	−3·6
	D. I. Khan	69·4	72·5	−3·1
	Montgomery	70·6	72·9	−2·3
Second area	Bhamo	72·3	76·3	−4·0
	Yamethin	81·2	85·0	−3·8
	Minbu	80·7	84·0	−3·3
	Gorakhpur	71·5	74·2	−2·7
	Akyab	79·2	81·7	−2·5
Third area	Mangalore	87·3	89·5	−2·2

In all other parts of the country the mean maximum temperature exceeded the average, the excess having been considerable over Tenasserim, over the centre of the south of the Peninsula, and over the Sind coast. At the following places the excess was more than 2°:—

Station.	Mean maximum temperature. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Hassan	83·4	79·4	+4·0
Moulmein	90·6	87·2	+3·4
Bangalore	81·6	78·0	+3·6
Tavoy	90·9	87·7	+3·2
Salem	89·5	86·4	+3·1
Chitaldroog	84·2	81·3	+2·9
Bellary	88·2	85·6	+2·6
Mysore	84·2	81·6	+2·6
Kurrachee	82·8	80·3	+2·5
Trivandrum	85·2	83·0	+2·2
Bhuj	84·3	82·2	+2·1

Except at Wellington (+4°·3), in the south of the Peninsula, the mean maximum temperature was normal or below normal at all the hill stations. The amount of the deficiency increased towards the north-west and was greatest at Murree and Kabul. The following gives comparative data for those stations at which the deficiency was more than 2°:—

Hill station.	Mean maximum temperature. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Kabul	45·1	54·9	−9·8
Murree	46·7	52·8	−6·1
Kalat	53·0	58·1	−5·1
Cherat	51·5	55·5	−4·0
Quetta	53·0	56·6	−3·6
Srinagar	44·6	47·8	−3·2
Chaman	56·5	59·0	−2·5

The distribution of the departures of mean minimum temperature from normal differed considerably from that of mean maximum temperature. All over Burma, Tenasserim, and a large part of north-east India, as well as over the larger portion of north-west India, the mean night temperature was higher than usual. The excess was greatest over Tenasserim, where also the mean maximum temperature was in excess, but it was also moderate to considerable over upper Burma and north-west India, where the mean maximum temperature was in defect. The departures from normal were more than +2° at the following places:—

Station.	Mean minimum temperature. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Mergui	72·0	66·7	+5·3
Tavoy	69·7	64·8	+4·9
Sialkot	46·7	42·5	+4·2
Kurrachee	59·8	55·9	+3·9
Multan	48·1	44·4	+3·7
Jacobabad	47·6	44·0	+3·6
Lahore	43·9	40·3	+3·6
D. I. Khan	43·2	40·1	+3·1
Hyderabad (Sind)	55·0	52·3	+2·7
Peshawar	41·7	39·0	+2·7
Ludhiana	46·7	44·0	+2·7
Jhansi	54·5	51·9	+2·6

STATION.	MEAN MINIMUM TEMPERATURE. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Rawalpindi	39·5	37·1	+2·4
Khushab	44·2	41·9	+2·3
Silchar	57·3	55·0	+2·3
Moulmein	69·2	66·9	+2·3
Bhamo	52·9	50·7	+2·2
Mandalay	61·4	59·3	+2·1
Thayetmyo	60·4	58·3	+2·1
Pachpadra	48·4	46·3	+2·1

Over the remainder of the country the mean minimum temperature was in defect of the average, the deficiency amounting to over 2° at the following stations :—

STATION.	MEAN MINIMUM TEMPERATURE. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Poona	50·0	53·8	−3·8
Hoshangabad	48·2	51·7	−3·5
Chanda	48·3	51·8	−3·5
Sambalpur	50·8	54·0	−3·2
Akola	48·3	51·4	−3·1
Coimbatore	63·2	66·1	−2·9
Hassan	52·6	55·4	−2·8
Bangalore	55·9	58·7	−2·8
Madras	67·1	69·7	−2·6
Benares	45·8	48·2	−2·4
Trichinopoly	67·1	69·4	−2·3
Cuddapah	63·2	65·4	−2·2
Malegaon	49·1	51·3	−2·2
Darbhanga	51·5	53·7	−2·2
Karwar	64·0	66·2	−2·2
Mysore	57·7	59·8	−2·1

There was a large deficiency, relatively to the normal, in the mean night temperatures of Kabul and Murree and a considerable deficiency at Wellington and Pachmarhi, but elsewhere at the hill stations the departures from normal were somewhat irregular. The following gives comparative data of those stations at which the departures exceeded 2° :—

HILL STATION.	MEAN MINIMUM TEMPERATURE. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Murree	33·0	39·0	−6·0
Kabul	22·7	27·7	−5·0
Wellington	43·6	48·1	−4·5
Pachmarhi	42·1	45·7	−3·6
Cherat	40·1	42·6	−2·5
Quetta	31·9	29·7	+2·2

The following table shows the principal low minima recorded on the hills and plains of upper India during the month, together with the lowest readings previously recorded at the stations mentioned in December :—

PROVINCE OR DIVISION.	Station.	Lowest minimum temperature recorded in December, 1905.	Date on which recorded.	Lowest minimum temperature recorded in December previous to 1905.	Year in which recorded.
		°		°	
BURMA	Bhamo	46·2	30th	39·4	1893
ASSAM	Dibrugarh	46·9	24th & 29th	42·4	1902
BENGAL	Dinajpur	45·4	29th	41·5	1896 & 1902
ORISSA	Balasore	47·0	11th	44·4	1897
BIHAR	Motihari	44·7	31st	35·0	1896
CHOTA NAGPUR	Ranchi	45·0	24th	40·9	1897
UNITED PROVINCES OF AGRA AND OUDH.	Roorkee	36·9	7th	29·7	1871
PUNJAB	Khushab	32·4	31st	30·5	1896
NORTH-WEST FRONTIER PROVINCE.	Peshawar	32·4	31st	25·7	1878
SIND	Jacobabad	35·5	30th	31·6	1885
RAJPUTANA	Sambhar	36·5	31st	34·0	1902
GUJARAT	Deesa	40·9	31st	35·5	1903
CENTRAL INDIA	Indore	40·6	12th	36·6	1902
CENTRAL PROVINCES.	Jubbulpore	37·8	10th	32·3	1878
BERAR	Akola	41·9	12th	36·7	1878
WEST COAST	Karwar	56·5	9th	56·4	1883
BOMBAY DECCAN	Malegaon	42·2	10th & 12th	36·6	1879
MYSORE	Hassan	45·3	10th	42·7	1895
MADRAS COAST	Gopalpur	53·5	12th	49·6	1902
MADRAS DECCAN	Aurangabad	44·2	12th, 13th, & 14th.	41·1	1897 & 1902
SOUTH INDIA	Periyakulam	55·0	27th	57·2	1902 & 1904

It will be noticed that the minima recorded in December, 1905, were in no way remarkable.

The mean temperature of the month was, on the whole, nearly normal except in three areas, *viz.*, Tenasserim, Sind, and the drought area over the west of the United Provinces and the east of Rajputana where it was in excess, as is shown below :—

Province.	Station.	Mean temperature. Actual, December, 1905.	Normal, December.	Departure from normal, December 1905.
		°	°	°
Tenasserim	Tavoy	80·3	76·2	+4·1
	Mergui	80·4	77·0	+3·4
	Moulmein	79·9	77·0	+2·9
Sind	Kurrachee	71·3	68·1	+3·2
	Hyderabad	67·8	65·7	+2·1
Rajputana	Ajmer	64·0	60·9?	+3·1?
United Provinces, West.	Jhansi	67·2	65·1	+2·1

Elsewhere on the plains the departures from normal were generally unimportant and comparatively small. At the hill stations the departures were also generally unimportant, though at Kabul and Murree there was a large deficiency, as is shown below :—

Hill station.	Mean temperature. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Kabul	33·9	41·3	—7·4
Murree	39·9	46·0	—6·1

The following gives mean temperature data for the extra-Indian stations :—

Station.	Mean temperature. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°	°
Trincomalee	79·5	78·5	+1·0
Colombo	80·7	79·9	+0·8
Amini Divi	79·5	79·3	+0·2
Kashgar	27·6	26·5	+1·1
Kabul	33·9	41·3	—7·4
Bushire	59·8	62·3	—2·5
Jask	70·2	70·9	—0·7
Muscat	75·5	73·0	+2·5
Baghdad	49·6	53·2	—3·6
Aden	75·5	74·2	+1·3
Perim	79·8	78·7	+1·1
Zanzibar	82·5	81·9	+0·6
Seychelles	79·3	77·9	+1·4
Mauritius	77·2	78·0	—0·8

The heat was somewhat greater than usual over Arabia and the south-east Trades region, but was generally less than the normal over the countries to the west of India.

The following table gives mean comparative data of temperature for the eleven meteorological provinces of India :—

Meteorological province.	Departure from normal of Mean maximum temperature, December 1905.	Mean minimum temperature, December 1905.	Mean temperature, December 1905.
	°	°	°
Burma Coast and Bay Islands	+0·7	+2·1	+1·4
Burma, Inland	—2·5	+1·9	—0·3
Assam	—0·8	+1·2	+0·2
Bengal and Orissa	+0·2	+0·2	+0·2
Gangetic Plain and Chota Nagpur	—0·2	—0·9	—0·6
Upper Sub-Himalayas	—1·5	+1·1	—0·2
Indus Valley and North-west Rajputana.	—1·0	+2·8	+0·9
East Rajputana, Central India and Gujarat.	+1·1	+0·5	+0·8
Deccan	+0·9	—1·4	—0·3
West Coast	—0·1	—1·3	—0·7
South India	+1·7	—1·6	0

The following table gives the mean temperature data of the month for the 57 meteorological divisions of the empire :—

Province.	Division.	Actual temperature.					Departure from normal of month of		
		Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	89·0	72·1	80·5	16·9	28·6	+2·0	+3·3	—1·3
	Lower Burma (Deltaic)	85·2	69·3	77·3	15·9	25·2	0	+1·1	—1·1
	Central do.	83·2	61·0	72·1	22·3	33·6	—1·0	+2·1	—3·1
	Upper do.	78·3	58·2	68·3	20·1	32·2	—2·9	+1·9	—4·8
	Arakan	79·2	64·2	71·7	15·0	25·8	—2·5	+0·2	—2·7
Bengal and Assam	Eastern Bengal	77·6	56·5	67·1	21·1	30·8	+0·3	+1·1	—0·8
	Assam (Surma)	78·8	57·3	68·1	21·5	34·0	—0·9	+2·3	—3·2
	Do. (Hills)	60·9	43·3	52·1	17·6	32·1	...	...	...
	Do. (Brahmaputra)	72·6	53·3	63·0	19·3	29·4	—0·8	+0·7	—1·5
	Deltaic Bengal	78·1	56·3	67·2	21·8	32·2	+0·7	+0·4	+0·3
	Central do.	77·3	54·1	65·7	23·2	33·0	+0·6	+0·5	+0·1
	North do.	75·5	53·5	64·5	22·0	32·4	—0·4	+0·9	—1·3
	Bengal Hills	44·8	29·7	37·3	15·1	35·4	—1·2	—0·5	—0·7
	Orissa	80·2	56·9	68·5	23·3	34·3	+0·2	—1·8	+2·0
	Chota Nagpur	75·2	51·2	63·2	23·9	35·3	—0·9	—0·7	—0·2
	South Bihar	75·4	50·3	62·9	25·1	33·4	—0·1	—1·1	+1·0
	North do.	74·8	49·9	62·4	24·9	33·4	—0·5	—0·8	+0·3
United Provinces of Agra and Oudh.	United Provinces (East)	76·3	46·2	61·3	30·1	40·8	+0·9	—1·8	+2·7
	Oudh (South)	75·9	46·0	61·0	29·9	39·1	+0·2	—0·2	+0·4
	Do. (North)	74·9	47·3	61·1	27·6	38·1	—0·1	—0·7	+0·6
	United Provinces (Central)	77·5	49·4	63·5	28·1	38·8	+0·9	+0·5	+0·4
	Do. (West)	74·4	47·4	60·9	27·1	39·0	—0·1	+0·6	—0·7
	Do. (Submontane, East)	71·5	50·3	61·0	21·2	31·0	—2·7	—0·1	—2·6
	Do. (Submontane, West)	71·1	44·0	57·6	27·1	38·9	—0·2	—1·0	+0·8
	Do. (Hills)	54·6	39·4	47·0	15·2	34·5	—0·7	—0·6	—0·1
Punjab	Punjab (South-East)	72·9	49·5	61·2	23·4	34·3	—0·8	+0·6	—1·4
	Do. (South)	70·7	44·7	57·8	26·0	39·2	—3·6	+1·9	—5·5
	Do. (Central)	69·6	43·9	56·8	25·7	40·7	—3·6	+3·6	—7·2
	Do. (Submontane)	68·1	44·2	56·2	23·9	36·8	—2·1	+2·5	—4·6
	Do. (Hills)	41·6	23·3	32·5	18·2	42·5	—2·6	—1·3	—1·3
	Do. (West)	70·8	45·3	58·1	25·5	44·8	—2·0	+2·2	—4·2
N.-W. F. Province	N.-W. F. Province	66·6	42·5	54·6	24·2	40·6	—3·4	+2·9	—6·3
Bombay and Malabar Coast Districts (Madras).	Malabar	87·2	70·2	78·7	17·1	23·3	+0·1	—1·6	+1·7
	Madras (South Central)	87·9	63·3	75·6	24·6	32·6	+2·1	—2·4	+4·5
	Coorg	77·0	56·0	66·5	21·0	29·4	+1·8	—1·8	+3·2
	Mysore	83·3	56·7	70·0	26·6	35·5	+3·2	—2·0	+5·6
	Konkan	86·9	67·5	77·2	19·4	30·0	—0·2	—1·0	+0·8
	Bombay Deccan	85·5	55·5	70·5	30·0	41·8	+1·6	—0·9	+2·5
	Hyderabad (North)	82·3	54·3	68·4	28·0	39·5	...	...	...
	Khandesh	85·4	50·2	67·8	35·2	47·5	+1·8	—1·2	+3·0
Central Provinces and Berar.	Berar	83·9	51·7	67·8	32·2	43·7	+0·7	—2·5	+3·2
	Central Provinces (West)	81·9	49·9	65·9	32·0	44·1	+0·7	—2·2	+2·9
	Do. (Central)	79·0	48·8	63·9	30·1	43·2	+0·5	—1·1	+1·6
	Do. (East)	78·4	51·2	64·8	27·2	40·3	+0·1	—2·0	+2·1
Bombay (North)	Gujarat	87·7	56·9	72·3	30·9	46·6	+1·5	0	+1·5
	Kathiawar and Cutch	85·4	57·1	71·3	28·2	45·9	+1·3	+0·9	+0·4
	Sind	79·7	54·2	67·0	25·5	44·4	+1·0	+3·4	—2·4
	Baluchistan Hills	54·0	31·6	42·8	22·4	46·6	—3·8	+0·7	—4·5
Rajputana and Central India.	Central India (East)	78·1	47·8	63·0	30·4	43·5	+1·1	—0·3	+1·4
	Rajputana (East), Central India (West)	78·8	49·6	64·2	29·2	41·6	+0·8	+0·1	+0·7
	Do. (West)	79·0	50·7	64·9	28·4	47·8	+0·7	+2·1	—1·4
Madras	East Coast (North)	80·9	64·0	72·4	16·9	26·2	+0·4	—1·1	+1·5
	Hyderabad (South)	84·5	58·4	71·5	26·1	39·6	+0·8	—1·1	+1·9
	Madras (Central)	88·1	60·4	74·3	27·7	42·2	+1·7	—1·3	+3·0
	East Coast (Central)	84·7	65·7	75·2	19·1	27·8	—0·6	—2·0	+1·4
	Do. (South)	85·1	68·2	76·7	16·9	24·9	+0·9	—2·0	+2·9
	Madras (South)	86·6	69·4	77·9	17·2	25·0	+1·7	—0·8	+2·5

The mean temperature was highest (about 80°) in Tenasserim and lowest (on the plains) 54°·6 over the North-west Frontier Province. The highest mean maximum reported was 89° in Tenasserim and the lowest mean minimum 42°·5 in the North-west Frontier Province. The mean daily range of temperature was less than usual over a large part of North-west India and over Burma and Assam, but was generally greater than usual over the central divisions and the Peninsula.

The following summarises the chief features of the mean temperature conditions of the month :—

(1) The day temperature was lower and the night temperature higher than usual over large parts of north-west and north-east India and parts of Burma, so that the range of temperature was smaller than the normal.

(2) Both day and night temperatures and hence also the mean temperatures were above the average over Tenasserim and Lower Burma.

(3) The day temperature was above and the night temperature below the normal over the greater part of the Peninsula, so that the mean daily range of temperature exceeded the normal.

(4) At the extra-Indian stations the departures of the mean temperature from the normal were irregular.

The following gives a brief account of the principal changes of temperature during the month :—

During the first week of the month under review the departures of mean temperature from normal were generally neither large nor important. There was some excess of temperature over parts of north-west India and over Burma and Tenasserim while over the whole of the intervening region the temperature was lower than usual. The following gives comparative data of the 4th December for all divisions nd illustrates the general conditions prevailing at this time :—

Province or division.	Departure from normal of		
	Mean maximum temperature, 4th December.	Mean minimum temperature, 4th December.	Mean temperature, 4th December.
	°	°	°
Burma	+ 1·2	+2·5	+1·9
Assam	+0·8	—0·1	+0·4
Bengal	+0·6	+0·1	+0·4
Orissa	—1·9	—6·3	—4·1
Bihar	—0·4	—1·1	—0·8
Chota Nagpur	—2·0	—2·5	—2·3
United Provinces of Agra and Oudh	0	—2·2	—1·1
Punjab	—0·8	—0·2	—0·5
North-West Frontier Province	—1·3	+1·0	—0·2
Sind	+4·5	+5·1	+4·8
Rajputana	+2·0	+1·1	+1·6
Gujarat	+3·1	—0·1	+1·5
Central India	—0·6	—2·2	—1·4
Central Provinces	—1·1	—3·8	—2·5
Berar	—0·8	—4·9	—2·9
West Coast	+0·7	+1·1	+0·9
Bombay Deccan	+0·1	—1·2	—0·6
Mysore	+2·5	+0·1	+1·3
Madras Coast	+0·5	—1·1	—0·3
Madras Deccan	—0·2	+0·1	—0·1
South India	—0·3	+0·5	+0·1

On the 8th a storm, which had probably advanced to that position from the southward, was shown over the centre of the Bay and rain was reported from Burma from the 8th to the 10th. In consequence temperature fell briskly over that Province and remained low till the 10th. This is shown below :—

Province or division.	Departure from normal of mean temperature of 24 hours preceding 8 A.M. of			
	8th Dec.	9th Dec.	10th Dec.	11th Dec.
	°	°	°	°
Burma	+ 1·4	—1·5	—0·7	+0·7

The deficiency was most marked in the day temperature which was more than 15° below the normal at the following places on the dates named :—

Date.	Station.	Maximum temperature.		
		Actual of date.	Normal of date.	Departure from normal of date.
		°	°	°
9th December 1905	Minbu	68·2	84·3	—16·1
	Yamethin	69·3	85·1	—15·8
10th December 1905	Yamethin	68·3	85·0	—16·7
	Minbu	68·7	84·2	—15·5

On the 11th the mean temperature was very generally lower than usual, more especially in some central districts and in parts of Bombay. The following gives data for the stations where the mean temperature was more than 6° below normal:—

STATION.	DEPARTURE FROM NORMAL OF		
	Maximum temperature of 11th December.	Minimum temperature of 11th December.	Mean temperature of 11th December.
	°	°	°
Poona	−5·7	−11·4	−8·6
Chanda	−3·8	−10·2	−7·0
Sambalpur	−4·4	−9·2	−6·8
Raipur	−4·4	−8·5	−6·5
Hoshangabad	−5·5	−7·4	−6·5
Malegaon	−3·8	−8·7	−6·3
Ahmedabad	−1·6	−10·7	−6·2
Ahmednagar	−4·9	−7·3	−6·1

On the 12th a rise set in and the departures from normal, though in some places large, were somewhat irregular on the 13th and 14th. Showers were reported from Baluchistan and Kashmir on the 14th and 15th and temperature fell briskly over north-west India. The following gives data:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	13th December.	14th December.	15th December
	°	°	°
Baluchistan	−6·0	−3·5	−0·7
North-west Frontier Province	+2·3	−0·1	−3·2
Punjab	−0·3	+1·9	−0·3
Sind	+2·8	+3·1	+2·8
Rajputana	0	+1·4	+3·6

Temperature, though somewhat unsteady, rose generally over the north-west between the 16th and the 18th and on the latter date was considerably to largely above the normal over the whole of north-west India. The following gives data:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	16th December.	17th December.	18th December.
	°	°	°
United Provinces of Agra and Oudh	+1·9	−1·3	−1·0
Punjab	+0·3	+1·0	+4·4
North-west Frontier Province	+1·7	+4·7	+4·3
Sind	+3·2	+2·5	+5·1
Rajputana	+2·0	+1·8	+4·4
Gujarat	+3·5	+5·1	+6·1
Central India	+2·7	+1·9	+2·2

The above rise and excess of temperature proved to be the forerunner of a depression which occasioned moderate to heavy rain over Sind, the North-west Frontier Province and the Punjab, and snow on the hills. This precipitation was followed by a fairly well-marked cold wave which slowly traversed northern India between the 19th and the 25th. The following gives for each day temperature data of the stations best representing the progress of this wave:—

MAXIMUM NEGATIVE DEPARTURE.		MAXIMUM POSITIVE DEPARTURE.	
STATION.	Departure from normal of mean temperature for 24 hours preceding 18 A.M. of date.	Station.	Departure from normal of mean temperature for 24 hours preceding 8 A.M. of date.
	°		°
19th Jacobabad	−0·2	Lahore	+6·6
20th Sirsa	−1·9	Nowgong	+9·1
21st Bikaner	−5·5	Nowgong	+9·9
22nd Bikaner	−6·1	Sutna	+8·9
23rd Jaipur	−5·9	Calcutta	+8·5
24th Hoshangabad	−6·0	False Point	+6·8
25th Sambalpur	−4·2	Barisal	+1·6

On the 25th a very rapid rise of temperature appeared over Sind and Rajputana and thence spread eastward over

northern and central India. The following gives comparative data of all divisions for the 25th to the 28th:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF			
	25th December.	26th December.	27th December.	28th December
	°	°	°	°
Burma	0	−0·4	−0·3	−1·0
Assam	−1·9	+0·3	−0·4	−0·5
Bengal	−0·1	−1·0	+2·1	−0·4
Orissa	−1·9	−1·4	+3·0	+3·1
Bihar	−2·2	+0·7	+1·4	−1·9
Chota Nagpur	−2·7	+0·3	+3·0	+1·0
United Provinces of Agra and Oudh.	−0·4	+2·7	+0·5	−1·1
Punjab	+0·8	+0·5	−0·7	0
North-west Frontier Province	+0·3	−0·7	−1·1	+0·7
Sind	+2·2	+3·7	+8·0	+9·1
Rajputana	+4·6	+2·3	+1·2	+3·2
Gujarat	+0·8	+3·4	+2·2	+3·0
Central India	+0·7	+4·7	+1·7	+2·4
Central Provinces	−2·1	+1·9	+2·8	+3·0
Berar	−0·1	+1·2	+0·1	+2·4
West Coast	−0·4	−1·2	−1·3	−1·1
Bombay Deccan	+0·4	+3·8	+1·7	+2·4
Mysore	+0·6	+0·8	−0·4	+0·5
Madras Coast	+0·7	+0·6	+0·5	+0·4
Madras Deccan	+0·1	+0·3	+1·7	+1·8
South India	−0·9	+1·5	−1·7	−1·0

The excess was throughout greatest in Sind and was greater in the night than in the day temperature. The following gives data for the Sind stations for these four days:—

DATE.	STATION.	DEPARTURE FROM NORMAL OF		
		Maximum temperature of date.	Minimum temperature of date.	Mean temperature of date.
		°	°	°
25TH DECEMBER 1905	Kurrachee	+3·6	+11·8	+7·7
	Hyderabad	+8·0	+10·1	+9·1
	Jacobabad	−3·5	+12·9	+4·7
26TH DO.	Kurrachee	+4·7	+7·4	+6·1
	Hyderabad	+1·0	+3·6	+2·3
	Jacobabad	+0·1	+5·6	+2·9
27TH DECEMBER 1905	Kurrachee	+3·4	+10·8	+7·1
	Hyderabad	+5·6	+12·7	+9·2
	Jacobabad	+0·7	+14·5	+7·6
28TH DO.	Kurrachee	+3·5	+17·8	+10·7
	Hyderabad	+8·7	+10·2	+9·5
	Jacobabad	+1·8	+12·1	+7·0

During the last three days of the month showers occurred over parts of north-west and north-east India and the mean temperature over these areas, as well as over the south of the Peninsula, was lower than usual, though over the central parts of the country and the north-east of the Peninsula the heat exceeded the average. The following gives comparative data of all divisions for the last three days:—

PROVINCE OR DIVISION.	DEPARTURE FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF		
	29th December.	30th December.	31st December.
	°	°	°
Burma	−1·8	−2·4	−0·3
Assam	−3·3	−0·3	−3·4
Bengal	−0·3	+1·7	+0·2
Orissa	+2·1	+4·1	+7·2
Bihar	−2·0	0	−0·4
Chota Nagpur	+1·0	+4·9	+2·6
United Provinces of Agra and Oudh	+1·8	+0·6	−2·1
Punjab	−2·1	−3·2	−5·1
North-west Frontier Province	−4·7	−2·6	−5·3
Sind	+4·4	−3·4	−4·7
Rajputana	+5·6	−3·5	−6·6
Gujarat	+4·9	−1·6	−5·7
Central India	+6·4	+3·5	−3·2
Central Provinces	+4·7	+5·0	+0·5
Berar	+3·6	+2·8	−0·6
West Coast	−1·6	−1·0	−2·2
Bombay Deccan	+3·9	+4·6	+0·9
Mysore	+0·6	+2·5	+2·8
Madras Coast	+0·3	+1·4	+1·1
Madras Deccan	+2·0	+3·3	+3·4
South India	−0·2	−1·3	−1·8

Winds.

The winds were stronger and steadier than usual at the Bay Islands and on the Burma coast, but the directions varied irregularly from the average and except at Port Blair differed considerably from the normal. The following gives direction data:—

Station.	Mean wind direction.	
	Actual, December, 1905.	Normal, December.
	°	°
Port Blair	N 54 E	N 57 E
Cocos Island	N 16 E	N 33 E
Rangoon	N 14 W	N 42 E
Diamond Island	N 15 E	N 54 E
Akyab	N 2 E	N 6 W

At Chittagong and False Point the wind, on the mean of the month, was more northerly and at Calcutta and Saugor Island more westerly than the average. The velocity and steadiness varied irregularly from the normal. In the Gangetic Plain the wind was more westerly and steadier than usual. This is shown below:—

Station.	Mean wind direction.		Mean steadiness.		
	Actual, December, 1905.	Normal, December.	Actual percentage, December, 1905.	Normal, percentage December.	Departure from normal, December, 1905.
	°	°			
Allahabad	N 65 W	N 48 W	55	27	+28

Increased westing was also shown in the winds over the Punjab where also the mean steadiness was above the average. The following gives data:—

Station.	Mean wind direction.			Mean steadiness.		
	Actual, December, 1905.	Normal, December.	Westerly Deflection.	Actual percentage December, 1905.	Normal percentage, December.	Departure from normal, December, 1905.
	°	°				
Lahore	N 49 W	N 36 W	+ 13	43	21	+22
Ludhiana	N 62 W	N 42 W	+ 20	58	28	+30

The wind was light and very unsteady at Peshawar while, on the other hand, it was stronger and steadier than usual at Jacobabad and blew from about the normal direction. The following gives data for these two stations:—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, December, 1905.	Normal, December.	Actual percentage, December, 1905.	Normal percentage, December.	Departure from normal, December, 1905.	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°						
Peshawar	N 16 E	S	3	7	− 4	7	55	− 48
Jacobabad	N 17 W	N 13 W	32	19	+13	57	38	+ 19

At Kurrachee the wind, on the mean of the month, deviated considerably from its normal direction, and at both Kurrachee and Deesa the velocity and steadiness were lower than usual. This is shown below:—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	Actual, December, 1905.	Normal, December.	Actual percentage, December, 1905.	Normal percentage, December.	Departure from normal, December, 1905.	Actual, December, 1905.	Normal December.	Departure from normal, December, 1905.
	°	°						
Kurrachee	S 49 E	N 48 E	10	19	− 9	163	202	−39
Deesa	N 32 E	N 46 E	29	49	−20	183	192	− 9

In East Rajputana, as in the Punjab and the Gangetic Plain, the wind, on the mean of the month, was unusually westerly. The following gives data for Jaipur:—

Station.	Mean wind direction.		
	Actual, December, 1905.	Normal, December.	Westerly Deflection.
	°	°	
Jaipur	N 51 W	N 27 W	+24

The following gives comparative data of the mean air movement over the Bay Islands, Burma and the different divisions of northern India:—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, December, 1905.	Normal percentage, December.	Departure from normal, December, 1905.	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Bay Islands	72	66	+ 6	199	175	+24
Burma	63	49	+14	126	127	— 1
Bengal	54	58	— 4	112	99	+13
Chota Nagpur	56	58	— 2	134	125	+ 9
Orissa	34	56	—22	137	139	— 2
United Provinces of Agra and Oudh.	41	19	+22	43	45	— 2
Punjab	51	25	+26	28	31	— 3
North-west Frontier Province.	3	7	— 4	7	55	—48
Rajputana	24	27	— 3	63	70	— 7
Sind	21	19	+ 2	110	120	—10
Gujarat	29	49	—20	183	192	— 9

The preceding table shows that the steadiness exceeded the normal over the Bay Islands and Burma and in north-west India, while the velocity was low except in the north-east.

The wind, on the mean of the month, was much more northerly than usual over the Deccan, but it was unsteady and the velocity generally lower than usual. The following gives comparative data:—

STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual, December, 1905.	Normal, December.	Actual percentage, December, 1905.	Normal percentage, December	Departure from normal, December, 1905.	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°						
Belgaum	S 70 E	N 88 E	67	70	— 3	182	290	—108
Sholapur	N 75 E	S 85 E	57	66	— 9	207	190	+ 17
Akola	N 27 E	N 60 E	32	52	—20	70	77	— 7
Buldana	N 22 E	N 81 E	23	44	—21	119	132	— 13
Khandwa	N 45 E	N 63 E	31	42	—11	28	65	— 37
Nagpur	N 64 E	N 57 E	47	54	— 7	88	72	+ 16
Hyderabad (D)	N 53 E	S 78 E	11	57	—46	47	77	— 30

Along the West Coast the mean wind directions were irregular. At Bombay the direction was more northerly and at Karwar more westerly than the average and at the latter station the velocity was in excess of the normal. In south India the winds were normal or nearly so.

The following gives comparative data of the mean air movement over the Peninsular divisions:—

PROVINCE OR DIVISION.	MEAN STEADINESS.			MEAN WIND VELOCITY IN MILES PER DIEM.		
	Actual percentage, December, 1905.	Normal percentage, December.	Departure from normal, December, 1905.	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Central Provinces	39	48	— 9	58	69	—11
Berar	28	48	—20	95	105	—10
Bombay Deccan	62	68	— 6	195	240	—45
Madras Deccan	37	64	—27	59	78	—19
West Coast	54	55	— 1	168	153	+15
Mysore	75	82	— 7	150	162	—12
Madras Coast	65	66	— 1	140	175	—35
South India	58	52	+ 6	99	94	+ 5

The above shows that both steadiness and velocity were generally below the average.

At the Himalayan hill stations the mean wind directions varied irregularly from the average, but the steadiness was, on the whole, above the small normal amount. The following gives data:—

HILL STATION.	MEAN WIND DIRECTION.		MEAN STEADINESS.		
	Actual, December, 1905.	Normal, December.	Actual, percentage December, 1905.	Normal, percentage December.	Departure from normal, December, 1905.
	°	°			
Leh	S 10 E	S 18 W	50	40	+10
Srinagar	N 30 W	S 36 E	23	3	+20
Simla	S 3 E	S 12 E	23	7	+16
Chakrata	S 6 E	S 51 W	32	16	+16
Ranikhet	S 70 W	S 57 W	29	22	+ 7
Katmandu	S 87 W	N 72 W	29	43	—14
Darjeeling	S 74 W	N 48 W	26	5	+21

At Mount Abu the wind was more westerly and stronger and steadier than usual while at Pachmarhi the mean direction was slightly more northerly than the average and the

steadiness and velocity low. In south India the winds at the level of the hills were fairly steady from east-north-east.

In the Gulf of Aden the wind was more southerly than the normal and at Perim it was exceptionally steady. The following gives data for Aden and Perim :—

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	December, Actual, 1905.	Normal, December.	Actual percentage, December, 1905.	Normal percentage, December.	Departure from normal, December, 1905.	December, Actual, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°						
Aden . . .	S 60 E	S 87 E	52	71	—19	213	310	—97
Perim . .	S 24 E	N 89 E	92	75	+17	458	463	— 5

The Trades were weak at Mauritius and about normal at Zanzibar and the Seychelles. The mean direction was more easterly than usual at Zanzibar.

Station.	Mean wind direction.		Mean steadiness.			Mean wind velocity in miles per diem.		
	December, Actual, 1905.	Normal, December.	Actual percentage, December, 1905.	Normal percentage, December.	Departure from normal, December, 1905.	December, Actual, 1905.	Normal, December.	Departure from normal, December, 1905.
	°	°						
Zanzibar . .	N 74 E	N 35 E	48	65	—17	152	151	— 1
Seychelles . .	N 37 W	N 48 W	71	54	+17	182	156	+26
Mauritius . .	N 80 E	N 89 E				192	259	—67

The principal abnormal features of the wind circulation over India were the increased westing in the winds direction and its increased steadiness over a large part of northern India. Elsewhere the departures of the mean winds from the normal were generally unimportant and in south India the mean wind direction was approximately normal. On the hills the winds were steadier than usual. The Trades were light at Mauritius and more easterly than usual at Zanzibar.

Humidity and Cloud.

The absolute humidity at 8 A.M. was, on the mean of the month, in excess of the normal over Burma, Assam, East Bengal and the extreme north-west of India while local cases of excess were reported from some stations over the east and south of the Peninsula. The excess was considerable to large over Tenasserim, part of Burma and in Sind and amounted to more than ·050″ at the stations for which comparative data are given below :—

Province or division.	Station.	Absolute humidity.		
		Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
		″	″	
Tenasserim .	Mergui . . .	·803	·666	+·137
	Tavoy . . .	·748	·649	+·099
	Moulmein . .	·726	·645	+·081
Burma . .	Thayetmyo . .	·609	·494	+·115
	Akyab . . .	·623	·572	+·051
Gujarat . .	Bhuj . . .	·429	·341	+·088
Sind . . .	Jacobabad . .	·317	·241	+·076
	Hyderabad . .	·321	·266	+·055
	Kurrachee . .	·380	·329	+·051
Madras . .	Coimbatore . .	·577	·497	+·080

Over the whole of the remainder of the Indian land area the mean 8 A.M. absolute humidity was in defect of the average, the deficiency having been greatest and considerable to large over the central parts of the country. At the following places the deficiency amounted to over ·070″ :—

Station.	Absolute humidity.		
	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	″	″	
Malegaon	·197	·331	—·134
Ahmednagar	·248	·378	—·130
Sholapur	·220	·346	—·126
Bhavnagar Para	·255	·371	—·116
Hyderabad (Deccan)	·350	·452	—·102
Raichur	·398	·486	—·088
Chanda	·310	·398	—·088
Jubbulpore	·268	·353	—·085
Cochin	·611	·696	—·085
Bellary	·399	·482	—·083
Nagpur	·272	·353	—·081

Station.	Absolute humidity. Actual, December 1905.	Normal, December.	Departure from normal, December, 1905.
	"	"	
Seoni	·263	·344	—·081
Allahabad	·273	·353	—·080
Cuddalore	·688	·766	—·078
Poona	·254	·331	—·077
Nowgong	·243	·318	—·075
Saugor	·220	·294	—·074

The departures of mean temperature from normal having been generally small the distribution of the departures of mean relative humidity from the average agreed generally with that of mean absolute humidity. The mean relative humidity was in excess of the normal over Burma and Assam, over parts of Bengal and of the east and south of the Peninsula, in the neighbourhood of Mainpuri and Bareilly and over the extreme north-west of India. The excess amounted to 5 per cent. or more at the following places:—

Province or division.	Station.	Relative humidity. Actual, December, 1905.	Normal, December.	Departure from normal, December 1905.
		%	%	
Tenasserim	Mergui	82	74	+ 8
	Tavoy	88	81	+ 7
	Moulmein	88	83	+ 5
Burma	Thayetmyo	90	77	+13
	Minbu	83	77	+ 6
	Yamethin	89	84	+ 5
	Akyab	94	89	+ 5
United Provinces	Mainpuri	81	73	+ 8
	Jhansi	63	57	+ 6
	Bareilly	86	81	+ 5
North-west India.	Lahore	91	78	+13
	Bhuj	66	55	+11
	Jacobabad	72	63	+ 9
	D. I. Khan	78	71	+ 7
	Sirsa	76	69	+ 7
	Khushab	66	60	+ 6
	Hyderabad (Sind)	60	54	+ 6
	Peshawar	75	70	+ 5
	Rawalpindi	79	74	+ 5

Over the remainder of India the mean relative humidity was in defect of the normal and the deficiency was especially large over parts of Gujarat, of the west Deccan of Rajputana and of the United Provinces and Central India. At the following stations the deficiency was 10 per cent. or more:—

Province or division.	Station.	Relative humidity. Actual, December, 1905.	Normal, December.	Departure from normal, December 1905.
		%	%	
Gujarat	Bhavnagar Para	83	62	—19
	Rajkot	43	54	—11
Deccan	Ahmednagar	43	63 ?	—20?
	Malegaon	38	58	—20
	Sholapur	34	49	—15
	Hyderabad (Deccan)	61	73	—12
	Raichur	54	66	—12
	Belgaum	47	57	—10
Rajputana	Ajmer	62	74	—12
	Jaipur	52	62	—10
United Provinces.	Allahabad	65	77	—12
	Cawnpore	65	77	—12
Central India	Indore	49	59	—10
Central Provinces.	Saugor	44	58	—14
	Seoni	55	67	—12

The mean relative humidity exceeded the normal at most of the northern and north-western hill stations, the excess having been particularly large at Quetta and Chaman. This is shown below:—

Hill Station.	Absolute humidity. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.	Relative humidity. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	"	"		%	%	
Quetta	·187	·155	+·032	85	74	+11
Chaman	·210	·175	+·035	76	59	+17

At the central hill stations the mean relative humidity was nearly normal while at Wellington in the south it was in large defect. The following gives data:—

Hill Station.	Absolute humidity. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.	Relative humidity. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
	"	"		%	%	
Wellington	·238	·329	—·091	52	71	—19

The following table shows the stations at which the mean relative humidity of the month at 8 A.M. exceeded 90 per cent. or was below 45 per cent. and hence outlines the areas of greatest and least dampness:—

Station.	Mean relative humidity over 90%	Station.	Mean relative humidity less than 45%
Sibsagar	100	Saugor	44
Gauhati	97	Ahmednagar	43
Bhamo	95	Bhavnagar Para	43
Motihari	95	Rajkot	43
Dibrugarh	94	Aurangabad	42
Akyab	94	Deesa	42
Myitkyina	94	Malegaon	38
Tezpur	93	Indur	37
Sirajganj	91	Bidar	36
Narayanganj	91	Sholapur	34
Lahore	91		

Both absolute and relative humidities, on the mean of the month, were above the average at Aden and both were below at Perim. The following gives data:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Aden	·723	·641	+·082	74	70	+4
Perim	·661	·680	—·019	64	69	—5

In the south-east Trades region the humidity was normal or in excess:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Seychelles	·864	·832	+·032	83	83	0
Mauritius	·725	·676	+·049	78	71	+7

The following table gives comparative data of the mean aqueous vapour pressure and of humidity for the nine meteorological provinces:—

Meteorological Province.	Mean absolute humidity.		Mean relative humidity.	
	Average actual, December, 1905.	Departure from normal, December, 1905.	Average actual, December, 1905.	Departure from normal, December, 1905.
	"		%	
Burma Coast and Bay Islands	·743	+·010	76	— 1
Bengal and Orissa	·478	—·014	70	— 3
Gangetic Plain and Chota Nagpur	·285	—·021	58	— 4
Upper Sub-Himalayas	·272	—·002	65	+ 2
Indus Valley and North-West Rajputana.	·341	+·057	63	+ 8
East Rajputana, Central India and Gujarat.	·235	—·024	41	— 5
Deccan	·281	—·077	43	—10
West Coast	·571	—·063	65	— 6
South India	·468	—·057	60	— 7

The following summarises the principal abnormal features of the humidity conditions:—

The absolute humidity exceeded the normal over Burma Assam, East Bengal and the extreme north-west of India, the excess having been greatest over Tenasserim and part of Central Burma. Over practically the whole of the remainder of the Indian land area the mean absolute humidity was in defect of the normal. The departures of mean temperature from normal having been small the mean relative humidity conditions with respect to the normal were generally similar to those of absolute humidity. There were areas of great dryness over the west Deccan and parts of Rajputana and of the United Provinces.

The sky at 8 A.M. was, on the mean of the month, more cloudy than the average over the extreme north-west of India, over the greater part of north-east India, over part of Burma and at various stations in the Peninsula. The excess was large over the upper Assam valley and over part of north Bengal. It amounted to more than 1·0 at the following places:—

Province or division.	Station.	Mean cloud amount.		
		Actual, December 1905.	Normal, December.	Departure from normal, December, 1905.
Extreme north-west of India.	Jacobabad	3·9	2·8	+1·1
	Multan	3·5	2·5	+1·0
	Rawalpindi	4·6	3·6	+1·0
North-east India.	Sibsagar	9·6	5·3	+4·3
	Dinajpur	3·7	0·7	+3·0
	Darbhanga	2·4	0·5	+1·9
	Berhampore	3·0	1·4	+1·6
	Bogra	1·3	0·2	+1·1
	Chittagong	3·5	2·5	+1·0
Burma	Yamethin	3·0	1·1	+1·9
Central India	Sutna	2·1	1·0	+1·1
Peninsula	Belgaum	2·6	1·6	+1·0

Over the remainder of India the sky was even clearer than usual, the deficiency in the mean cloud amount having been particularly noticeable over Tenasserim, the south-east of the Peninsula, part of the Western Desert and Gujarat and over the drought area round Jaipur, Agra and Delhi. The deficiency in the mean cloud amount exceeded 1·0 at the following places :—

Province or division.	Station.	Mean cloud amount. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Tenasserim	Tavoy	0·5	2·7	−2·2
	Mergui	2·3	3·4	−1·1
Burma	Diamond Island	2·1	3·4	−1·3
	Bhamo	2·5	3·7	−1·2
Peninsula	Cuddalore	3·2	6·0	−2·8
	Madras	3·5	5·1	−1·6
	Bangalore	2·4	3·8	−1·4
	Chitaldroog	1·8	3·0	−1·2
Western Desert.	Pachpadra	0·7	2·5	−1·8
	Hyderabad (Sind)	1·1	2·3	−1·2
	Sambhar	0·6	2·2	−1·6
	Jaipur	0·8	2·2	−1·4
Gujarat	Deesa	0·5	1·8	−1·3
	Veraval	0·8	2·0	−1·2
United Provinces.	Mainpuri	0·6	2·3	−1·7
	Agra	0·3	1·5	−1·2
Punjab	Ludhiana	2·0	3·8	−1·8
	Delhi	0·3	2·4	−1·6
Central Provinces.	Hoshangabad	0·5	1·6	−1·1
	Jubbulpore	0·5	1·6	−1·1
	Amraoti	0·6	1·7	−1·1

At the hill stations in the extreme north-west and at Darjeeling, as on the neighbouring plains, the mean cloud amount was above the average, but at the central Himalayan stations and also at Mount Abu, Pachmarhi, Wellington and Lashio the sky, was clearer than usual. At the following stations the departures from average were ± 1·0 or more :—

Hill Station.	Mean cloud amount. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Darjeeling	4·9	3·1	+1·8
Srinagar	7·7	6·0	+1·7
Kabul	4·6	2·9	+1·7
Quetta	4·8	3·2	+1·6
Cherat	4·7	3·7	+1·0
Lashio	5·3	6·3	−1·0
Ranikhet	1·4	2·7	−1·3
Wellington	1·7	3·7	−2·0

The following table shows the clearest and cloudiest places in India as determined from the mean 8 A.M. cloud amounts of the month :—

Station.	Mean cloud amount over 5·0	Station.	Mean cloud amount less than 0·6
Sibsagar	9·6	Tavoy	0·5
Mymensingh	9·2	Chaibassa	0·5
Gauhati	8·8	Surat	0·5
Negapatam	5·7	Deesa	0·5
Tinnevelly	5·4	Khandwa	0·5
Pudukkottai	5·4	Hoshangabad	0·5
Myitkyina	5·2	Jubbulpore	0·5
		Puri	0·4
		Bhuj	0·4
		Jhansi	0·4
		Gulbarga	0·4
		Agra	0·3
		Arrah	0·2

At both Aden and Perim the cloud, on the mean of the day, was less than usual and at the latter station the mean cloud amount was very small. The following gives data :—

Station.	Mean cloud amount. Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Aden	2·1	3·4	−1·3
Perim	0·3	1·6	−1·3

In the south-east Trades region the cloud amount, on the mean of the month, apparently exceeded the normal. This is shown below :—

Station.	Mean cloud amount.		
	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.
Seychelles	8·3	6·8	+1·5
Mauritius	6·9	6·1	+0·8

The preceding data show that the distribution of the departures of cloud amount from normal over India agreed roughly with that of the departures of vapour tension from normal except in Tenasserim and Lower Burma where the absolute humidity was in excess and the cloud amount in defect. The mean cloud amount was in excess over north-east and the extreme north-west of India while it was generally in defect over the central parts of the country. The deficiency was considerable over the drought areas.

The following table gives comparative data of the mean cloud amount for the nine meteorological provinces :—

Meteorological province.	Mean cloud amount.	
	Average actual, December, 1905.	Departure from normal, December, 1905.
Burma Coast and Bay Islands	2·4	−1·1
Bengal and Orissa	2·3	−0·1
Gangetic Plain and Chota Nagpur	1·4	−0·4
Upper Sub-Himalayas	2·9	0
Indus Valley and North-West Rajputana	3·3	+0·6
East Rajputana, Central India, and Gujarat	1·0	−1·1
Deccan	1·3	−0·9
West Coast	1·3	−0·4
South India	3·4	−0·8

Rainfall.

December is usually the month of least rainfall in India. The normal rainfall is less than an inch in amount for the whole month over all parts of the country with the exception of the south, south-central and coast districts of Madras. The normal rainfall exceeds 10 inches at the East Coast (south) stations, but diminishes in amount rapidly both towards the interior and towards the north, and is less than 1 inch to the west of a line running from Cochin to Nellore while it is less than half an inch over the Deccan, central and northern India and in Burma.

During the month under review the weather was somewhat more unsettled and rainy than usual over Burma and the north-east and extreme north-west of India, but was very dry elsewhere.

The principal periods of rainfall were :—

(1) The 8th to the 10th when Burma received general rain.

(2) The 12th to the 15th when showers were reported from the north-west Himalayas.

(3) The 19th and 20th when general rain fell over the Punjab and neighbourhood.

(4) The 29th to 31st when showers fell in the north-west and north-east.

The total rainfall of the month measured at the meteorological observatories is shown in Pl. VII. These returns show that rain was received during the month over the greater part of Burma, Tenasserim, Assam, a large part of Bengal, the west submontane districts of the United Provinces, the Punjab, the North-west Frontier Province, Sind and at a few stations in the extreme south-east of the Peninsula and Ceylon. The total falls received amounted to 2·54″ at Peshawar, 3·02″ at Rawalpindi, 1·30″ at Dibrugarh, 1·89″ at Chittagong, 2·66″ at Bassein, 6·12″ at Trincomalee and 13·57″ at Port Blair. Except in the above areas the weather was rainless throughout the month.

The following table gives comparative rainfall data of the month for the 57 rainfall divisions of the empire :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, December, 1905.	Average normal, December.	Average actual, December, 1905.	Average normal, December.	Departure from normal, December, 1905.
				Inches.	Inches.	Inches.
Burma	Tenasserim	1·2	0·3	0·40	0·11	+0·29
	Lower Burma (Deltaic)	1·1	0·3	0·70	0·08	+0·62
	Central do.	1·4	0·4	0·89	0·14	+0·75
	Upper do.	2·4	0·7	1·18	0·36	+0·82
	Arakan	2·3	0·5	1·75	0·39	+1·36

Province.	Division.	Number of rainy days.		Rainfall.		
		Average *actual*, December, 1905.	Average normal, December.	Average *actual*, December, 1905.	Average normal, December.	Departure from normal, December, 1905.
				Inches.	Inches.	Inches.
Bengal and Assam	Eastern Bengal	1·3	0·3	0·65	0·25	+0·40
	Assam (Surma)	2·1	0·5	0·98	0·35	+0·63
	Do. (Hills)	2·9	1·1	0·96	0·49	+0·47
	Do. (Brahmaputra)	3·5	1·1	1·07	0·46	+0·61
	Deltaic Bengal	0·6	0·3	0·21	0·15	+0·06
	Central do.	0·5	0·2	0·16	0·09	+0·07
	North do.	1·0	0·3	0·43	0·12	+0·31
	Bengal Hills	4·9	0·6	1·53	0·21	+1·32
	Orissa	0·1	0·4	0·03	0·23	−0·20
	Chota Nagpur	0·6	0·3	0·11	0·20	−0·09
	Bihar (South)	0·1	0·3	0·03	0·17	−0·14
	Do. (North)	0·1	0·3	0·01	0·09	−0·08
United Provinces of Agra and Oudh.	United Provinces (East)	0	0·4	0	0·22	−0·22
	Oudh (South)	0·2	0·6	0·05	0·33	−0·28
	Do. (North)	0·5	0·6	0·11	0·31	−0·20
	United Provinces (Central)	0	0·7	0·01	0·34	−0·33
	Do. do. (*West*)	0·2	0·8	0·08	0·37	−0·29
	Do. do. (East Submontane)	0·3	0·4	0·08	0·15	−0·07
	Do. do. (West do.)	1·1	1·1	0·38	0·55	−0·17
	Do. do. (Hills)	1·9	1·4	0·67	0·82	−0·15
Punjab	Punjab (South-East)	0·4	0·8	0·09	0·40	−0·31
	Do. (South)	0·9	0·8	0·29	0·36	−0·07
	Do. (Central)	1·7	0·8	0·82	0·46	+0·36
	Do. (Submontane)	2·6	1·1	1·06	0·71	0·35
	Do. (Hills)	3·3	1·8	1·39	1·37	+0·02
	Do. (West)	1·5	0·5	0·81	0·22	+0·59
N.-W. F. Province	North-west Frontier Province	3·2	1·1	2·50	0·55	+1·95
Bombay and Malabar Coast Districts (Madras).	Malabar	0	1·1	0	0·63	−0·63
	Travancore	*0*	...	*0·03*	...	...
	Madras (South, Central)	0·1	2·3	0·02	1·34	−1·32
	Coorg	*0*	...	*0*	...	...
	Mysore	0·1	1·1	0·02	0·59	−0·57
	Konkan	0	0·2	0	0·07	−0·07
	Bombay Deccan	0	0·4	0	0·23	−0·23
	Hyderabad North	0	0·7	0	0·41	−0·41
	Khandesh	0	0·4	0	0·22	−0·22
Central Provinces and Berar.	Berar	0	0·4	0	0·29	−0·29
	Central Provinces (West)	0	0·6	0	0·39	−0·39
	Do. (Central)	0·1	0·5	0·03	0·30	−0·27
	Do. (East)	0	0·4	0	0·21	−0·21
Bombay (North)	Gujarat	0	0·1	0	0·04	−0·04
	Kathiawar and Cutch	0	0·2	0·01	0·06	−0·05
	Sind	0·4	0·3	0·09	0·11	−0·02
	Baluchistan Hills	6·0	2·3	2·63	0·96	+1·67
Rajputana and Central India.	Central India (East)	0·1	0·9	0·04	0·39	−0·35
	Rajputana (East), and Central India (West)	0·1	0·9	0·04	0·40	−0·36
	Do. (West)	0·1	0·4	0·02	0·15	−0·13
Madras	East Coast (North)	0	0·6	0	0·57	−0·57
	Hyderabad South	0	0·3	0	0·18	−0·18
	Madras (Central)	0	0·8	0·01	0·44	−0·43
	East Coast (Central)	0·4	2·5	0·11	2·35	−2·24
	Do. (South)	0·7	5·2	0·22	4·97	−4·75
	Madras (South)	0·4	4·5	0·23	3·55	−3·32

The preceding table shows that actually or practically no rain was received during the month over Orissa, Bihar, the United Provinces (except the hill, north Oudh, and west submontane divisions), the Central Provinces, Central India, Rajputana, Gujarat, Kathiawar, Sind, and the whole of the Peninsula except the extreme south. The average actual amount received varied from 0·11″ in the East Coast (central), north Oudh and Chota Nagpur divisions to 1·75″ in Arakan, 1·53″ in the Bengal Hills, 1·39″ in the Punjab Hills and 2·50″ in the North-west Frontier Province. The month's rainfall was normal or in excess of the normal over the North-west Frontier Province, the greater part of the Punjab, the greater part of Bengal, Assam and Burma and was more than 100% in excess in the divisions for which data are given below :—

Division.	Rainfall.			
	Average actual, December, 1905.	Average normal, December.	Departure from normal, December, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Tenasserim	0·40	0·11	+0·29	+264
Lower Burma Deltaic	0·70	0·08	+0·62	+775
Central Burma	0·89	0·14	+0·75	+536
Upper Burma	1·18	0·36	+0·82	+228
Arakan	1·75	0·39	+1·36	+349
Eastern Bengal	0·65	0·25	+0·40	+160
Assam Surma	0·98	0·35	+0·63	+180
Assam Brahmaputra	1·07	0·46	+0·61	+133
North Bengal	0·43	0·12	+0·31	+258
Bengal Hills	1·53	0·21	+1·32	+629
West Punjab	0·81	0·22	+0·59	+268
N.-W. F. Province	2·50	0·55	+1·95	+355
Baluchistan Hills	2·63	0·96	+1·67	+174

The departure from normal of the rainfall of the whole country (excluding the hill divisions) as determined from the fifth figure column of the table on pages 351 and 352 was—0·20″.

In Burma general rain fell between the 7th and the 10th due to the first storm of the month and the following amounts exceeding 2″ in 24 hours were registered :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Kyaukpyu	Myebon	8th Decr. 1905	3·76
Thayetmyo	Minhla	" "	2·31
Minbu	Aingma	" "	2·16
Minbu	Ngape	9th "	2·54
Kyaukpyu	Kyaukpyu	" "	2·26
Bassein	Bassein	" "	2·18

Further showers occurred between the 20th and the end of the month in Upper Burma, but were not of much importance. The general rain for the month for the whole province exceeded the normal.

In the Surma Valley of Assam there were showers between the 22nd and the close of the month. The falls were not generally heavy, but the total for the month for the division considerably exceeded the average. Similar conditions prevailed in the Assam Valley where the total fall was more than twice as heavy as usual. On the hills showers occurred on the 2nd and 3rd, the 8th to the 10th and from the 22nd to the end of the month, and the average actual fall was about twice the normal amount.

In Bengal there were occasional showers between the 22nd and 31st, the days of most general rain having been the 22nd and 23rd and the 30th and 31st. Falls of over 1·50″ in 24 hours were registered at the following places on the dates named :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Tippera	Laksam	23rd Decr.	1·60
Noakhali	Harishpur	24th "	1·74
Noakhali	Raniganj	31st "	2·35

In Bihar and Orissa, though some showers were received on the same days as in other parts of Bengal, the amounts were unimportant and in Chota Nagpur the total for the month was little more than half the average.

Over the United Provinces showers were received on the 20th and between the 29th and 31st, but the amounts were unimportant except in the submontane districts, and over the whole region the month's fall was considerably lighter than usual.

Rain was received in all parts of the Punjab on the 19th and 20th and showers in the submontane, hill, north-west and west divisions, between the 24th and the end of the month. The total rainfall of the month was normal in the south and hills divisions, in defect in the south-east division, and in excess elsewhere—particularly in the west. The principal fall of rain was that of the 19th and 20th when the following amounts exceeding 1·50″ in 24 hours were registered :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Attock	Attock	19th Decr.	2·39
Rawalpindi	Murree	" "	2·26
Attock	Fatehjang	" "	1·80
Rawalpindi	Rawalpindi	" "	1·65
Rawalpindi	Kahuta	" "	1·55
Rawalpindi	Murree	20th "	2·00
Rawalpindi	Kahuta	" "	1·68

Over the North-west Frontier Province showers occurred between the 13th and 15th, a general fall of rain between the 17th and 20th and showers again between the 24th and 30th. On the 19th the fall was both heavy and general and the following amounts of 2″ or more in 24 hours were registered:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Hazara	Oghi	19th Decr.	3·03
Peshawar	Malakand	„ „	3·00
Peshawar	Swabi	„ „	2·25
Hazara	Haripur	„ „	2·25
Kohat	Kohat	„ „	2·16
Hazara	Abbottabad	„ „	2·06
Hazara	Mansahra	„ „	2·03
Peshawar	Abazai	„ „	2·00
Peshawar	Lahore (Utman Bolak)	20th „	2·00

The total fall for the month was over four times as heavy as usual.

Baluchistan received constant showers between the 11th and the 28th and the month's rainfall was nearly three times as heavy as usual. In Kashmir similar conditions prevailed and, so far as can be judged, the rainfall was nearly as heavy, relatively to the average, as in Baluchistan.

In Rajputana there were a few light scattered showers about the 19th and 20th and the 29th and 30th, but the total fall was quite unimportant. In Central India the only disturbed period was the 29th and 30th and at the time only a few trifling showers were received.

Light showers were reported over the Saugor, Damoh and Jubbulpore districts of the Central Provinces on the 30th, but with these exceptions the whole of the Central Provinces was rainless throughout the month.

The Peninsular districts of the Bombay Presidency were rainless throughout December, but in the Ahmedabad, Rewa Kantha and Cutch districts and in Sind there occurred a few light showers about the middle of the month. Mysore was also practically rainless though light showers were received in Bangalore and Kolar on the 14th.

There was no rain over the Malabar, south-central, central and East Coast (north) divisions of Madras throughout the month with the exception of a few unimportant showers in Salem and Cuddapah on the 14th. The central division of the East Coast reported rain on the 13th and 14th, but the average actual fall was only 0·11″ or under 5% of the normal. The south division had rain between the 1st and the 5th as well as on the 13th and 14th, but the average actual fall was only 0·22″ the normal fall being 4·97″. The only moderately heavy amounts in 24 hours in this division were 1·70″ on the 3rd at Shiyali and 2·69″ on the 5th at Tiruppundi, both in the Tanjore district. South Madras reported scattered showers on different dates during the month, the only heavy fall in 24 hours having been 3·34″ at Pamban on the 3rd. The total rainfall of the division was much less than the normal.

The following gives the rainfall at the extra-Indian stations:—

Station.	Rainfall.			
	Actual, December, 1905.	Normal, December.	Departure from normal, December, 1905.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Trincomalee	6·12	15·90	—9·78	— 62
Colombo	0·51	6·79	—6·28	— 92
Minicoy	0	4·66	—4·66	—100
Amini Divi	0	0·32	—0·32	—100
Bushire	1·35	3·24	— 1·89	— 59
Jask	3·37	0·73	+ 2·59	+332
Muscat	0·09	0·26	— 0·17	— 65
Baghdad	0·23	1·64	— 1·41	— 86
Kabul	1·84	0·29	+ 1·55	+534
Kashgar	0	0·19	— 0·19	—100
Aden	0·03	0·37	— 0·34	— 92
Perim	0·01	0·08	— 0·07	— 88
Zanzibar	5·56	2·77	+ 2·79	+101
Seychelles	25·71	14·27	+11·44	+ 80
Mauritius	8·73	4·88	+ 3·85	+ 79

Summarising the rainfall information the data show:—

(1) That rain was received over the Indian region in three areas, *viz.*:—Burma and north-east India, north-west India and Ceylon, and the extreme south-east of the Peninsula.

(2) That the month's rainfall was heavier than usual over Burma, Assam and part of Bengal as well as over the greater part of the Punjab, the North-west Frontier Province and Baluchistan and was much lighter than usual elsewhere.

(3) That over the whole of the central parts of India and the larger portion of the Peninsula there was actually or practically no rain during the month.

(4) That the rainfall was heavier than usual over Afghanistan.

(5) That the rainfall was in considerable excess in the south-east Trades region.

Snowfall.

I.—AFGHAN MOUNTAIN DISTRICTS.

(1). *Kabul*:—Snow fell as under:—

		Inches.
December	12th	2½
„	13th	1½
„	14th	3¾
„	17th	3
„	18th	3½
„	19th	2¾
„	28th	1¼
	Total	18¼

At the end of the month snow was lying to a depth on about 6 inches, a considerable portion having melted. The snowfall was earlier than usual.

(2). *Wano*:—Snow fell as follows during the month on the higher ranges:—

		Inches.
December	11th	3
„	12th	2½
„	14th	4
„	19th	4¼
„	28th	4

The snowfall was about normal during the month.

(3). *Kurram*:—The first fall of snow occurred on the 3rd December, on the Sufed Koh and surrounding hills, but was not very heavy. Heavy snow fell on thirteen days during the month and descended as low as Parachinar on the 13th, 15th, 19th, 24th and 29th.

The passes were still open at the close of the month, but snow was believed to be 3 feet deep on the Parros pass. The fall was heavier than last year:—

(4). *Kohat*:—Snow fell on the Samilzai hills as follows:—

			Feet.	Inches.
December	18th—	Mahura	1	0
„	„	Mazcoghar	1	0
„	„	Landoka	1	0
„	„	Maula Ghar	1⅓	0
„	„	Okhi Ghara	1⅓	0
„	„	Kurram	0	2

Fort Lockhart, Samana, December		12th	2	
„	„	„ 13th	1½	
„	„	„ 16th	4	
„	„	„ 18th	4	
„	„	„ 23rd	3	
„	„	„ 28th	1⅓	

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Leh*:—Snow fell in Leh:—

		Inches.
December	13th	¼
„	25th	2
„	26th } 29th }	Sprinkle.

Snow, at the close of the month, was lying in Leh to a depth of about 1 inch. In Sheh (about 500 feet lower) on December 31st, there was less snow than in Leh, but the ground was covered. The Chang La (18,000 feet) was still open, but the Kurdong La was apparently closed.

(2.) *Simla District*, Bashahr:—Snow fell as follows:—

			Inches.
December	11th at	11,000 feet	1
„	18th „	9,000 „	2
„	19th „	7,000 „	½
„	25th „	9,000 „	1
„	29th „	8,000 „	1½
„	30th „	6,000 „	2
„	31st „	6,000 „	2

The accumulated snow measured:—

			Feet
Rupan	Pass	*nil.*	3
Bruin	„	16,000 feet	3
Harang	„	12,000 „	1
Shatul	„	15,000 „	3
Buldar	„	16,000 „	3
Runang	„	14,000 „	2½

All the passes were closed at the end of the month. The snowfall of the month was lighter than usual.

(3) *Hazara*:—Snow fell as follows in the Hazara Forest Division:—

		Narang, 8,000 ft.		Kagan, 6,700 ft.		Malkandi, 4,500 ft.	
		feet.	inches.	feet.	inches.	feet.	inches.
December	12th	0	3	—	—	—	—
„	13th	0	4	0	1½	—	—
„	14th	0	9	0	3	0	1
„	18th & 19th	3	9	1	6	0	7
„	22nd	3	0	1	9	0	5
„	29th	1	9	0	7	0	2½

(3*a*). *Hazara*:—Snow fell as follows:—

			Feet.	Inches.
December	12th	Panjal (6,500 ft)	1	2
„	18th	„ „	0	10
„	28th	„ „	1	9
„	29th	„ „	0	5

(4). *Chamba*:—Snow fell over the Chamba Forest Division between the 11th and 14th, the 17th and 21st, on the 24th, and between the 27th and 30th. Snow descended to about 7,000 feet on the 19th and 24th, and to about 4,000 feet on the other dates.

The accumulated snow measured:—

Dalhousie	Kalatop	24	inches.
„	Kainthli	5	„
„	Surkhigalli	1	„
Chamba—	Barmour	24	„
„	Ulansa	21	„
„	Chatrari	15	„
„	Darkund	18	„
„	Bakani	8	„
„	Sano	4	„
Bhandal—	Langera	18	„
„	Bhert	12	„
„	Bhandal	9	„
„	Padri Pass	4	feet.
Tisa—	Chatri	18	inches.
„	Khangu	17	„
„	Alwas	29	„
„	Tisa	8	„
Pangi—	Kilar	2 ft. 3 ins.	

The Sach Pass was closed at the end of the month.

The snowfall of the month was lighter than usual.

(5). *Dalhousie*:—Snow fell as follows:—

		Inches.
December	29th	2
„	30th	7

The fall at Kalatop, Dainkund, Bakrotta and Khajjiar was about twice as heavy as at Dalhousie.

III.—UNITED PROVINCES HIMALAYAS.

(1). *Almora*:—The snowfall of December was as follows:—

			Feet.	Inches.
Malla Johar,	10th	December	0	6
„	19th	„	1	0
„	20th	„	0	6
„	24th	„	1	0
„	29th	„	1	0
„	30th	„	0	6
Malla Danpur,	19th	„	1	0
„	21st	„	0	6
„	28th	„	0	8
„	30th	„	0	4
„	31st	„	0	6
Malla Darma,	8th	„	2	6
„	10th	„	2	6
Malla Darma,	19th	December	2	6
„	23rd	„	2	9
„	28th	„	2	9
„	29th	„	2	3
„	30th	„	2	0
Chandans,	8th	„	2	0
„	10th	„	2	0
„	19th	„	2	0
„	23rd	„	3	0
„	28th	„	2	0
„	30th	„	2	0

The accumulated snow on the 31st December measured:—

	Feet.	Inches.
Unta Dhura	18	0
Ralam „	15	0
Milam „	12	0
Pindari Peak	3	0
Kaphini „	3	0
Kantela „	3	0
Nirwe Pass	34	0
Binkaru „	29	0

(2) *Garhwal*:—Snow fell on the higher peaks in the district between the 19th and 30th December. On the peaks the fall varied between 1 foot and 1 foot 6 inches, and in the higher valleys between 2 and 4 inches.

Crop Report.

Burma:—The general condition of the standing crops was good at the close of the month.

Eastern Bengal and Assam:—The plucking and manufacture of tea were almost completed during the month and the outturn was fair. Harvesting of winter rice was in progress, and the sowing of spring crops continued. The outturn of winter rice and the prospects of other crops were generally fair.

Bengal:—The harvesting of winter rice proceeded during the month and sugarcane pressing continued in Bihar, Orissa and Chota Nagpur. The spring crops were doing well and prospects were generally good.

United Provinces:—Any rain which fell was too slight to be of much use. The pressing of sugarcane continued, and the condition of agricultural stock was fairly good except in Jalaun, where the cattle were reported to be starving. Prices were high and the spring crops were failing and steadily deteriorating.

Punjab:—Cotton picking was finished, but sugarcane pressing and the sowing of spring crops continued during the month. The condition of the standing irrigated crops was good to fair and that of unirrigated crops below average to bad. The outturn of the autumn crops was average to poor. Fodder was very scarce and cattle were weak (for want of sufficient and proper nourishment) in Rohtak, Gurgaon, Delhi and Amritsar.

North-west Frontier Province:—Rain during the month benefited the standing crops and facilitated further spring sowings which were likely to be much above the normal.

Rajputana:—The spring crops were watered and weeded during the month; but the cultivated area was much restricted, especially in north Mewar, Jaipur, Kishengarh, Alwar, Karauli, Bharatpur and Ajmer-Merwara, where prospects were very poor. The standing crops in north and central Kotah were withering for want of rain. Elsewhere the condition of the crops was fair to good.

Central India:—The irrigation of spring crops was in progress in Gwalior, Indore and Bundelkhand, and the harvesting of autumn crops in Bhopal, Baghelkhand and Malwa. The condition of the standing crops was good in parts of Gwalior and Indore, fair in Bhopal and Bhopawar and parts of Malwa, average in Bundelkhand and indifferent in Baghelkhand. The probable outturn is good in parts of Indore, fair in Bhopal, average in Bundelkhand and below average in Baghelkhand and Malwa.

Central Provinces:—The standing crops were generally in fair to good condition.

Bombay:—The standing crops were withering in parts of Broach, the Deccan, the Karnatak, Baroda and Kolhapur.

Hyderabad:—The early rice harvest was nearly completed during the month. The spring crops had suffered more or less in 31 taluks and in a few others it was estimated that the outturn would be less than half the normal.

Mysore:—Crops were harvested during the month and the outturn was fair.

Madras:—The standing crops were generally fair, but required more rain in parts of Ganjam, Bellary, Chingleput, Salem, Coimbatore, Tinnevelly and Malabar, while some in parts of Kurnool, Cuddapah, Tanjore and Madura were withering.

W. L. DALLAS.

TABLE I.—Abstract of Observations taken at 8 A.M. at 233 Stations in India, Burma, etc., in December, 1905.

Tab

Abstract of Observations taken at 8 A.M. at

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	I.—Burma Coast and Bay Islands.			—·010								86·0	+0·7	70·2	+2·1	78·0	+1·4	15·8				
1	Car Nicobar . .	25	29·910		29·862	29·948	24th	29·849	8th	·099	80·3	86·1		77·9		82·0		8·2	87·9	25th	74·1	27th
	Port Blair . .	61	29·921	+·001	29·913	29·984	24th	29·811	8th	·173	79·6	85·4	—0·5	79·3	+0·6	81·3	+0·1	6·1	88·6	1st	70·4	29th
	Slipper Island .		29·985			30·056	1st	29·824	8th	·232												
	Mergui . .	96	29·904	+·002	29·932	29·962	24th	29·842	9th	·120	78·7	88·8	+1·5	72·0	+5·3	80·4	+3·4	16·8	92·4	10th	65·4	29th
	Tavoy . . .	26	29·992	—·007	29·943	30·050	24th	29·917	9th	·133	74·2	90·9	+3·2	69·7	+4·9	80·3	+4·1	21·2	96·5	16th	61·8	29th & 30th.
	Moulmein . .	94	29·915	—·027	29·948	29·995	1st	29·803	9th	·192	73·4	90·6	+3·4	69·2	+2·3	79·9	+2·9	21·4	94·5	15th	60·9	29th
2	Rangoon . .	57	29·972	—·008	29·968	30·055	1st	29·852	9th	·203	72·0	88·5	+1·2	68·5	+1·2	78·5	+1·2	20·0	91·1	15th	61·8	29th
	Bassein. . .	27?	30·005	—·004	29·968	30·083	1st	29·875	8th	·208	69·2	84·1	—0·3	66·0	+0·9	75·1	+0·3	18·1	88·2	6th & 7th.	57·0	30th
	Diamond Island .	41	29·966	—·020	29·942	30·050	24th	29·810	8th	·240	76·6	83·5	—0·4	73·4	+1·2	78·5	+0·2	10·1	86·4	2nd & 3rd.	71·2	6 days
5	Akyab . . .	20	30·011	—·020	29·975	30·104	1st	29·831	9th	·273	66·5	79·2	—2·5	64·2	+0·2	71·7	—1·2	15·0	83·9	5 days	58·1	27th
3	Toungoo . .	183	29·849	—·010	29·981	29·924	1st	29·749	8th	·175	65·5	82·8	—1·2	61·5	—0·67	72·1	—0·9?	21·3	86·3	5 days	54·1	30th
	II.—Burma Inland.			—·029								79·1	—2·5	58·6	+1·9	68·8	—0·3	20·5				
3	Thayetmyo .	121	29·917	—·019	29·984	29·993	1st	29·828	9th	·165	67·3	83·6	—1·0	60·4	+2·1	72·0	+0·6	23·2	89·0	1st	54·1	29th
4	Minbu . .	*165*	29·872	—·046	29·885	29·948	1st	29·784	9th	·164	65·9	80·7	—3·3	61·4	+1·4	71·1	—1·0	19·3	86·2	1st, 2nd & 3rd.	54·0	26th, 28th & 30th.
	Yamethin . .	657	29·363	—·035	29·999	29·435	1st	29·260	9th	·175	64·2	81·2	—3·8	59·2	+2·0	70·3	—0·9	22·0	85·3	5 days	52·2	30th
	Monywa . .	*280*	29·808		30·027	29·894	1st	29·723	9th	·171	63·9	79·3		60·6		70·0		18·7	84·8	2nd	51·6	30th
	Mandalay . .	250	29·796	—·021	30·008	29·880	1st	29·719	9th	·161	65·8	81·8	—0·5	61·4	+2·1	71·6	+0·8	20·4	89·0	3rd	54·2	30th
	Myitkyina . .	458	29·611		30·052	29·719	1st	29·520	20th	·199	61·8	74·6		53·9		64·2		20·7	79·1	1st	49·1	19th
	Bhamo . .	*381*	29·697	—·013	30·057	29·799	1st	29·616	14th	·183	57·5	72·3	—4·0	52·9	+2·2	62·6	—0·9	19·4	78·8	1st	46·2	30th
4(a)	Maymyo . .	3,545	26·508		26·453	26·597	3rd	26·421	9th	·176	52·2	68·8		46·5		57·7		22·3	76·9	1st	37·6	30th
	Lashio . . .	*2,751*	27·211	—·044	27·157	27·304	3rd	27·143	27th	·161	53·6	74·1	+0·4	47·8	—0·1	61·0	+0·2	26·3	80·6	4th	39·1	29th
	III.—Assam.			—·031								73·7	—0·8	54·0	+1·2	63·8	+0·2	19·7				
7	Silchar . . .	104	29·948	—·033	30·013	30·037	1st	29·796	9th	·241	61·7	78·8	—0·9	57·3	+2·3	68·1	+0·7	21·5	84·9	2nd & 10th.	50·9	29th
9	Sibsagar . .	333	29·747	—·033	30·059	29·842	24th	29·658	9th	·184	55·4	69·9	—1·6	52·3	+1·6	61·1	0	17·6	75·3	1st & 2nd,	48·9	10th & 11th.
	Dhubri . . .	115	29·961*	—·021*	30·039*	30·047	1st	29·855	9th	·192	61·1	74·3	0	54·9	—0·2	64·6	—0·1	19·4	78·6	13th	49·8	29th
	Gauhati. . .	195	29·886		30·050	29·986	1st	29·789	9th	·197	57·3	75·0		53·2		64·1		21·8	81·1	2nd	49·1	10th
	Tezpur . .	252	29·817		30·044	29·921	1st	29·722	9th	·199	57·0	73·0		54·6		63·8		18·4	78·5	1st & 3rd.	50·0	25th
	Dibrugarh . .	353	29·718		30·057	29·828	1st	29·624	9th	·204	55·0	70·9		51·4		61·2		19·5	78·1	1st & 2nd.	46·9	24th & 29th.
	IV.—Bengal and Orissa.			—·023								77·6	+0·2	55·3	+0·2	66·5	+0·2	22·3				
6	Chittagong . .	87	29·960	—·016	29·999	30·049	1st	29·788	9th	·261	63·6	77·2	—0·9	58·8	+0·8	68·1	—0·1	18·4	80·6	11th	51·6	18th
	Noakhali . .	43	29·988		29·980	30·070	1st	29·826	9th	·244	62·9	77·5		56·2		66·9		21·3	81·6	10th	50·6	19th
	Comilla . .	36	30·005		29·990	30·091	1st	29·851	9th	·240	62·0	78·8		55·8		67·3		23·0	82·9	10th	51·3	17th, 28th & 29th.
	Sirajganj . .	49	30·018†		30·019†	30·102	24th	29·925	8th	·177	60·4	76·8		55·1		66·0		21·7	81·3	10th	48·9	29th
	Narayanganj. .	26	30·034	—·012	30·009	30·125	1st	29·895	9th	·230	61·6	78·1	+0·1	58·3	+1·0	68·2	+0·6	19·8	82·1	10th	54·8	28th & 29th,
	Barisal . .	13	30·043	—·021	30·002	30·124	1st	29·897	9th	·227	65·0	78·2	+0·6	57·0	+1·1	67·6	+0·9	21·2	83·3	23rd	52·2	17th & 18th.
	Mymensingh .	63	30·006	—·024	30·023	30·098	1st	29·870	9th	·228	61·5	77·5	+1·3	55·9	+1·3	66·7	+1·3	21·6	82·2	10th	50·0	28th
	Faridpur . .	46	30·015		30·013	30·107	1st	29·880	9th	·227	60·5	76·8		55·0		65·9		21·8	80·4	23rd	48·5	28th
10	Jessore . .	33	30·028	—·022	30·009	30·122	1st	29·903	9th	·219	61·7	76·7	—0·9	55·5	+0·6	66·1	—0·2	21·2	81·6	23rd	49·6	28th
	Calcutta (Alipore) .	21	30·051	—·022	30·019	30·159	1st	29·941	9th	·218	61·2	78·0	+1·5	56·1	+0·1	67·1	+0·8	21·9	82·9	23rd	51·9	19th
	Saugor Island .	25	30·047	—·019	30·017	30·159	1st	29·940	30th	·219	64·3	77·7	+1·4	59·5	+0·4	68·6	+0·9	18·2	0·5	23th	53·9	25th

* Mean of 28 days. † Mean of 30 days.

N.B.—Elevations in italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any

Note 2.—The data from which divisional means of the

Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the elevations of which exceed 3,200 feet.

Stations in India, Burma, etc., in December 1905.

Wind Direction. Number of winds from									Resultant direction.	Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.							Heaviest rainfall during month.	Station.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December 1905.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December 1905.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														86	+4	·716	+·057	3·0	−0·7				2·75	0·99	+1·37					I.—Burma Coast and Bay Islands.
4	7	10	2	1					N 38° E	5·3			5·3	82		·843		9·4		9			6·05			6·05			3·00	Car Nicobar††
	2	18	3	3	1	1		3	N 49° E	6·6	7·2			86	+5	·869	+·050	4·6	−0·7	9	7·50	+1·50	13·57	6·62	+6·95	13·57	6·62	+6·95	3·93	Port Blair.
	21	5	1	3		1			N 16° E	14·4																			Slipper Island
23	1	5	1		1				N 37° E	2·7	1·8	+50	2·4	82	+8	·803	+·137	2·3	−1·1	3	0·70	+2·30	0·45	0·38	+0·07	0·45	0·38	+0·07	0·20	Mergui.
31									Calm	1·2				88	+7	·748	+·099	0·5	−2·2	0	0·20	−0·20	0·05	0·06	−0·01	0·05	0·06	−0·01	0·05	Tavoy.
15	4	8	1			1		2	N 24° E	1·1	2·6	−58	1·2	88	+5	·726	+·081	2·1	−0·4	0	0·20	−0·20	0	·0·05	−0·05	0	0·05	−0·05	0	Moulmein.
1	10	13				3		4	N 12° E	3·9	4·9	−20	3·5	81	−2	·631	+·012	1·5	−0·8	0	0·40	−0·40	0·02	0·09	−0·07	0·02	0·09	−0·07	0·02	Rangoon.
10	4	10	2	1			1	3	N 28° E	5·3	2·7	+96		88	+3	·634	+·029	2·5	−0·4	2	0·50	+1·50	2·66	0·13	+2·53	2·66	0·13	+2·53	2·18	Bassein.
	6	19	5				1		N 43° E	9·4	7·5	+25	9·4	77	+3?	·708	+·041	2·1	−1·3	3	0·90	+2·10	2·22	0·70	+1·52	2·22	0·70	+1·52	1·54	Diamond Island.
	29	2							N 3° E	4·5	2·2	+105	4·3	94	+5	·623	+·051	2·8	+0·5	2	0·70	+1·30	2·27	0·70	+1·57	2·27	0·70	+1·57	1·33	Akyab.
9	2							20	N 41° W	8·9	2·3	+287	8·8	90	+1	·579	+·014	2·5	+0·2	0	0·40	−0·40	0·22	0·17	+0·05	0·22	0·17	+0·05	0·22	Tourgoo.
														90	+5	·536	+·048	2·9					1·38	0·36	+1·10					II.—Burma Inland.
22	5	1	1					2	N 2° E	3·8	3·2	+19		90	+13	·609	+·115	1·6	−0·1	2	0·40	+1·60	1·13	0·15	+0·98	1·13	0·15	+0·98	0·89	Thayetmyo
4	1			1			1	24	N 45° W	3·4			4·0	83	+6	·534	+·040	2·6	+0·5	1	0·30	+0·70	2·10	0·63	+1·47	2·10	0·63	+1·47	1·98	Minbu.
8	9			3				11	N 21° W	3·1			3·3	89	+5	·535	+·028	3·0	+1·9	2	0·70	+1·30	0·36	0·49	−0·13	0·36	0·49	−0·13	0·19	Yamethin.
23							1	7	N 50° W	1·1			1·1	90		·539		3·7		3	0·30	+2·40	1·26	0·15	+1·11	1·26	0·15	+1·11	0·69	Monywa.
12	11				3	2		3	N 22° W	2·0			2·0	88	+1	·563	+·029	1·9	−0·5	3	0·70	+2·30	1·92	0·29	+1·63	1·92	0·29	+1·63	0·83	Mandalay.
	6	4	10	9				2	N 77° E	3·7			3·8	94		·525		5·2		4			0·92			0·92			0·32	Myitkyina.
22		7	2						N 54° E	1·4			1·6	95	+2	·448	+·026	2·5	−1·2	4	1·00	+3·00	1·97	0·42	+1·55	1·97	0·42	+1·55	0·57	Bhamo.
27		2				1	1		N 23° W	1·7				89		·355		2·7		3	0·80	+2·20	1·54	0·45	+1·09	1·54	0·45	+1·09	0·65	Maymyo.
19	1	3	3	1		1	1	2	N 41° E	2·8				94	+1	·390	+·007	5·3	−1·0	4			2·30	0·66	+1·64	2·30	0·66	+1·64	1·52	Lashio.
														93	−1	·450	+·024	5·8	+1·8				0·91	0·42	+0·49					III.—Assam.
31									Calm	0	1·9	−100	0	90	0	·502	+·030	4·6	+0·6	4	0·80	+3·20	1·11	0·46	+0·65	1·11	0·46	+0·65	0·43	Silchar.
16	1	7		1	1			5	N 15° E	2·1	1·6	+31	1·9	100	+1	·440	+·022	9·6	+4·3	5	1·90	+3·10	1·26	0·57	+0·69	1·26	0·57	+0·69	0·30	Sibsagar.
		4	24	2		1			S 89° E	5·1	4·5	+13	6·0	86	−5	·467	+·020	2·2	+0·6	0	0·20	−0·20	0	0·07	−0·07	0	0·07	−0·07	0	Dhubri.
25	2	2		1	1				N 51° E	1·0			1·1	97		·456		8·8		2	0·70	+1·30	0·45	0·24	+0·21	0·45	0·24	+0·21	0·17	Gauhati.
25		2	4						N 76° E	1·4			1·5	93		·430		4·7		3	1·00	+2·00	1·33	0·43	+0·90	1·33	0·43	+0·90	0·57	Tezpur.
31									Calm	0·7			0·7	94		·402		4·6		5	1·40	+3·60	1·30	0·76	+0·54	1·30	0·76	+0·54	0·25	Dibrugarh.
														82	−2	·437	−·005	2·4	+0·7				0·40	0·22	+0·18					IV.—Bengal and Orissa.
6	8	12	1	3				1	N 36° E	2·9	3·2	−9	2·6	87	−3	·517	+·004	3·5	+1·0	3	0·81	+2·19	1·89	0·85	+1·04	1·89	0·85	+1·04	1·61	Chittagong.
16							1	14	N 48° W	1·9			2·0	90		·516		2·5		2	0·48	+1·52	1·55	0·38	+1·17	1·55	0·38	+1·17	1·15	Noakhali.
25	4				2				N	1·3			1·1	89		·503		2·7		3	0·45	+2·55	1·24	0·22	+1·02	1·24	0·22	+1·02	0·51	Comilla.
31									Calm	0·2			0·2	91‡		·482‡		1·9		1	0·39	+0·61	0·45	0·11	+0·34	0·45	0·11	+0·34	0·45	Sirajganj.
13	4	4	1			2	1	6	N 17° W	1·5	1·9	−21	1·3	91	+4	·504	+·018	3·2	+0·9	2	0·44	+1·56	0·70	0·16	+0·54	0·70	0·16	+0·54	0·50	Narayanganj.
19	2	2			2	1		5	N 37° W	1·4			1·3	84	−3	·519	+·012	1·4	+0·2	2	0·52	+1·48	0·53	0·60	−0·07	0·53	0·60	−0·07	0·42	Barisal.
19	1	2	5	2		1		1	N 81° E	0·8			0·7	87	−4	·479	+·010	9·2	?	0	0·26	−0·26	0·07	0·05	+0·02	0·07	0·05	+0·02	0·03	Mymensingh.
19	7		1		1			3	N 7° W	1·0			1·2	88		·473		2·2		2	0·26	+1·74	0·32	0·08	+0·24	0·32	0·08	+0·24	0·21	Faridpur.
29	1							1	N 45° W	1·0	1·7	−41	1·0	84	−2	·462	+·004	1·4	+0·2	2	0·35	+1·65	0·40	0·18	+0·22	0·40	0·18	+0·22	0·21	Jessore.
2	5	3			1	2		18	N 35° W	3·8	3·0	+27		77	−4	·421	−·021	2·0	+0·9	0	0·38	−0·38	0	0·22	−0·22	0	0·22	−0·22	0	Calcutta (Alipore).
	16	5			1	2		7	N 8° W	7·7	6·0	+28		84	−4	·504	−·019	2·9	+0·4	1	0·58	+0·42	0·46	0·33	+0·13	0·46	0·33	+0·13	0·46	Saugor Island.

the data for that station are not utilized in calculating the provincial departures from normal.
columns Nos, 40, 42, and 44 are derived are incomplete.

†† Wind variable 7.

‡ Mean of 30 days.

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Abstract of Observations taken at 8 A.M. at 233 Stati

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
10	Krishnagar*	47	30·016†		30·015†	30·123	1st	29·995	9th	·218	59·2	78·5		54·2		66·4		24·3	86·6	17th	49·4	15th
	Midnapore	149	29·920		30·025	30·030	1st	29·816	30th	·214	61·8	79·8		56·4		68·1		23·4	86·3	23rd	52·1	18th
11	Bankura	298	29·750		30·033	29·856	1st	29·659	30th	·197	59·8	78·7		54·1		66·4		24·6	85·1	22nd	50·1	18th
	Raniganj	334	29·739		30·050	29·849	1st	29·626	30th	·223	56·3	78·5		52·7		65·7		25·8	85·0	22nd	49·2	10th & 18th.
	Burdwan	99	29·969	—·033	30·023	30·079	1st	29·874	9th	·205	60·5	79·5	+1·3	56·2	+0·2	67·9	+0·8	23·3	83·2	23rd	51·8	15th
	Naya Dumka	489	29·571		30·052	29·690	1st	29·473	30th	·217	58·3	76·2		51·4		63·8		24·8	81·4	22nd	47·0	18th
	Berhampore	67	29·999	—·031	30·019	30·108	1st	29·897	9th	·211	59·6	76·9	+0·4	55·7	+0·4	66·3	+0·4	21·2	80·2	23rd	50·7	28th
	Rampur Boalia	70	29·992		30·015	30·091	1st	29·881	9th	·207	59·9	76·4		54·6		65·5		21·8	79·6	2nd	48·1	28th
	Malda	72	29·974‡		30·002‡	30·091	1st	29·875	9th	·216	59·0	75·2		53·4		64·3		21·8	79·1	2nd	46·1	28th
	Bogra	61	29·982	—·031	29·999	30·078	1st	29·853	9th	·225	59·1	77·1	+0·2	54·9	+0·9	66·0	+0·6	22·2	80·8	2nd	47·7	28th
12	Dinajpur	123	29·932	—·034	30·018	30·035	1st	29·828	9th	·207	58·1	76·7	—0·2	51·9	+0·5	64·3	+0·2	24·8	80·3	1st, 2nd & 3rd.	45·4	29th
	Rangpur	123	29·948		30·034	30·040	1st	29·845	9th	·195	59·8	75·6		54·0		64·8		21·6	80·7	1st & 2nd	49·1	16th
	Jalpaiguri	284	29·780	—·034	30·037	29·890	1st	29·658	27th	·202	61·0	74·7	—0·5	54·1	+1·2	64·4	+0·4	20·6	79·9	2nd	47·6	29th
	Cooch Behar	156	29·914		30·036	30·010	1st	29·813	9th	·197	58·0	75·1		54·0		64·6		21·1	80·3	2nd	49·7	9th
17	Purnea	125	29·956	?	30·044	30·065	1st	29·872	9th	·193	56·6	75·1	—0·7	50·3	+0·6	62·7	—0·1	24·8	78·7	2nd, 3rd & 4th.	45·6	29th
14	Balasore	50	30·029	—·028	30·024	30·140	1st	29·885	30th	·255	59·5	80·2	+0·2	53·4	—1·6	66·8	—0·7	26·8	87·4	23rd	47·0	11th
	False Point	21	30·058	—·014	30·022	30·177	1st	29·935	30th	·242	61·0	79·0	+1·1	55·5	—1·8	67·3	—0·4	23·5	82·4	24th & 28th.	48·5	11th
	Cuttack	80	30·007	—·005	30·034	30·119	1st	29·872	30th	·247	60·7	81·1	—1·0	56·7	—2·0	68·9	—1·5	24·4	86·9	31st	51·1	11th
	Puri	24	30·067		30·030	30·184	1st	29·939	30th	·245	66·9	80·3		61·9		71·1		18·4	83·2	1st & 2nd	56·1	11th & 12th.
	V.—Gangetic Plain and Chota Nagpur.			—·029								75·2	—0·2	49·3	—0·9	62·3	—0·6	25·9				
15	Hazaribagh	2,007	28·005	—·023	30·051	28·122	1st	27·899	30th	·223	59·3	71·5	—0·7	50·0	—0·5	60·8	—0·6	21·5	78·7	22nd	46·2	18th & 24th.
	Ranchi	2,128	27·885	—·023	30·060	27·999	1st	27·771	30th	·228	57·5	72·3	—1·4	50·8	+0·2	61·6	—0·6	21·5	80·1	22nd	45·0	24th
	Daltonganj	*730*	29·345		30·091	29·465	1st	29·226	29th	·239												
	Purulia	*816*	29·235		30·046	29·349	1st	29·127	30th	·222	58·5	77·6		53·5		65·6		24·1	85·5	22nd	50·8	9th, 25th & 26th.
	Chaibassa	*760*	29·280	—·031	30·045	29·394	1st	29·168	30th	·226	53·1	79·2	—0·5	50·6	—1·8	64·9	—1·2	28·6	85·9	22nd	47·0	11th, 18th & 19th.
16	Gaya	375	29·702	—·026	30·057	29·808	1st	29·580	30th	·228	56·0	75·8	—0·4	50·0	—1·5	62·9	—1·0	25·8	79·9	22nd	45·9	10th
	Dehri	351	29·714		30·045	29·836	1st	29·595	30th	·241	56·4	76·2		52·7		64·5		23·5	81·2	22nd	48·6	18th
	Patna	183	29·895	—·037	30·043	30·016	1st	29·792	30th	·224	56·8	74·4	+0·2	50·9	—0·7	62·7	—0·3	23·5	79·0	1st	46·4	24th & 28th.
	Arrah	190	29·886		30·044	30·012	1st	29·784	30th	·228	54·1	75·3		48·1		61·7		27·2	78·8	1st	45·1	3rd & 13th.
	Buxar	239	29·832		30·045	29·961	1st	29·722	30th	·239	55·8	75·6		49·9		62·8		25·7	79·1	2nd	44·9	18th
17	Bhagalpur	160	29·922		30·042	30·041	1st	29·842	9th	·199	61·8	76·1		50·8		63·5		25·3	78·3	1st, 2nd & 5th.	45·7	28th, 29th & 31st.
	Darbhanga	166	29·899	—·032	30·029	30·012	1st	29·815	27th	·197	56·5	74·2	—0·3	51·5	—2·2	62·9	—1·3	22·7	79·1	5th	47·3	27th
	Muzaffarpur	178	29·902		30·048	30·020	1st	29·801	27th	·219	57·6	73·6		50·2		61·9		23·4	77·6	2nd	46·0	28th
	Motihari	224	29·837		30·039	29·958	1st	29·713	21st	·245	51·4	75·0		47·9		61·5		27·1	82·3	2nd	44·7	31st
	Chapra	181	29·862§		30·011§	29·953	3rd	29·774	30th	·179	53·2	74·8		48·8		61·8		26·0	78·3	1st & 5th.	45·7	3rd & 28th.
18	Benares	267	29·805	—·029	30·047	29·924	1st	29·693	30th	·231	54·8	75·5	+0·5	45·8	—2·4	60·7	—1·0	29·7	80·0	1st	40·0	18th
	Allahabad	309	29·767	—·027	30·054	29·880	1st	29·639	29th	·241	53·7	77·0	+1·3	46·6	—1·2	61·8	+0·1	30·4	83·1	22nd	41·5	8th, 9th & 11th.
23	Gorakhpur	257	29·791	—·039	30·023	29·916	1st	29·676	27th	·240	56·1	71·5	—2·7	50·3	—0·1	61·0	—1·4	21·2	75·1	4 days.	44·1	28th
19	Lucknow	368	29·694	—·028	30·051	29·818	1st	29·591	29th	·227	51·8	75·9	+0·2	46·0	—0·2	61·0	0	29·9	79·7	3rd	40·6	12th
20	Bahraich	401	29·645	—·032	30·038	29·775	1st	29·528	27th	·247	53·1	74·9	—0·1	47·3	—0·7	61·1	—0·4	27·6	80·1	3rd	42·0	28th
21	Cawnpore	416	29·645	—·033	30·053	29·766	1st	29·522	29th	·244	52·6	76·5	+0·2	47·0	—0·6	61·8	—0·2	29·5	79·9	22nd	41·1	13th
	Mainpuri	516	29·554	—·015	30·068	29·662	1st	29·438	29th	·224	52·3	76·0	+0·9	46·7	—0·6	61·4	+0·2	29·3	81·3	22nd	41·3	31st

* Observations of 30 days. ‡ Mean of 30 days.
† Mean of 29 „ § „ 21 „
N.B.—Elevations in Italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any sta
NOTE 2.—The data from which divisional means of the f

-continued.

India, Burma, etc., in December 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, Instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December 1905.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
6				1		4	11	N 43° W	1·2			1·3	83		·418		2·3		1	0·16	+ 0·84	0·28	0·10	+ 0·18	0·28	0·10	+ 0·18	0·28	Krishnagar.
15	1		1		1		4	N 7° W	2·3			2·1	60		·329		0·9		1	0·28	+ 0·72	1·04	0·20	+ 0·84	1·04	0·20	+ 0·84	1·04	Midnapore.
						10	8	S 69° W	2·1			1·8	65		·333		1·1		1	0·34	+ 0·66	0·37	0·13	+ 0·24	0·37	0·13	+ 0·24	0·31	Baukura.
1						5	7	N 59° W	2·0			1·5	70		·321		1·9		1	0·26	+ 0·74	0·22	0·08	+ 0·14	0·22	0·08	+ 0·14	0·20	Raniganj.
4	1					4	10	N 40° W	1·8	1·9	− 5	1·8	71	0	·378	−·007	1·7	+0·3	1	0·23	+ 0·77	0·63	0·11	+ 0·52	0·63	0·11	+ 0·52	0·56	Burdwan.
								Calm	1·0			1·1	69		·342		1·2		0	0·33	− 0·33	0·06	0·16	− 0·10	0·06	0·16	− 0·10	0·06	Naya Dumka.
2				1	1	4	7	N 63° W	1·2	1·6	− 25	1·0	81	− 5	·417	−·019	3·0	+1·6	1	0·34	+ 0·66	0·48	0·11	+ 0·37	0·48	0·11	+ 0·37	0·48	Berhampore.
								Calm	0·4			0·4	85		·439		1·5		0	0·22	− 0·22	0·09	0·06	+ 0·03	0·09	0·06	+ 0·03	0·09	Rampur Boalia.
4	3		1		2	3	17	N 41° W	4·4			4·8	83		·415		1·8		0	0·19	− 0·19	0·06	0·24	− 0·18	0·06	0·24	− 0·18	0·06	Malda.
	1					5	3	N 63° W	1·1			1·0	85	0	·432	+·001	1·3	+1·1	9	0·23	− 0·23	0·06	0·02	+ 0·04	0·06	0·02	+ 0·04	0·04	Bogra.
6	5	3	1		1	4	9	N 15° W	1·3			1·2	88	+ 2	·427	+·017	3·7	+3·0	0	0·32	− 0·32	0·03	0·04	− 0·01	0·03	0·04	− 0·01	0·03	Dinajpur.
1	17	1			1			N 45° E	1·3			1·3	86		·440		4·9		0	0·23	− 0·23	0	0·09	− 0·09	0	0·09	− 0·09	0	Rangpur.
4		2	2	1			4	N 14° E	0·6			0·8	85	− 4	·458	+·026	1·9	+0·9	1	0·23	+ 0·77	0·11	0·04	+ 0·07	0·11	0·04	+ 0·07	0·11	Jalpaiguri.
1	3	4						N 63° E	1·0			1·1	86		·415		3·0		2	0·27	+ 1·73	0·43	0·08	+ 0·35	0·43	0·08	+ 0·35	0·28	Cooch Behar.
	1					3	7	N 49° W	0·9	1·3	− 31	0·8	89	− 27	·411	+·028	0·9	0	0	0·23	− 0·23	0	0·10	− 0·10	0	0·10	− 0·10	0	Purnea.
8					2	1	19	N 39° W	2·6			2·0	72	−10	·367	−·080	1·9	−0·2	1	0·52	+ 0·48	0·14	0·18	− 0·04	0·14	0·18	− 0·04	0·14	Balasore.
9					2	2	17	N 37° W	5·6	6·3	− 11	5·8	86	+ 2	·477	−·038	3·4	+0·9	1	0·68	+ 0·32	0·25	0·69	− 0·44	0·25	0·69	− 0·44	0·25	False Point.
		1				1	1	N 45° W	1·2	1·3	− 8		79	+ 4	·426	−·021	2·0	+0·1	0	0·58	− 0·58	0	0·27	− 0·27	0	0·27	− 0·27	0	Cuttack.
18	2				4		1	N 6° W	7·3			6·8	72		·488		0·4		0	0·67	− 0·61	0	0·65	− 0·65	0	0·65	− 0·65	0	Puri.
													74	− 4	·325	−·031	1·3	−0·1				0·07	0·18	−0·11					V.—Gangetic Plain and Chota Nagpur.
4	1		1	7	4	5	8	S 1° W	6·4	4·6	+ 39	5·7	57	− 8	·285	−·025	1·1	−0·3	0	0·52	− 0·52	0·03	0·20	− 0·17	0·03	0·20	− 0·17	0·03	Hazaribagh.
3				1	2	7	13	N 61° W	6·0			7·1	57	− 8	·270	−·039	1·6	+0·4	1	0·48	+ 0·52	0·30	0·09	+ 0·21	0·30	0·09	+ 0·21	0·30	Ranchi.
			2					S 45° E	1·4			1·1					0·9		1	0·55	+ 0·45	0·11	0·29	− 0·18	0·11	0·29	− 0·18	0·11	Daltonganj.
2			1			11	15	N 60° W	3·5			4·3	66		·328		1·6		1	0·29	+ 0·71	0·25	0·18	+ 0·07	0·25	0·18	+ 0·07	0·22	Purulia.
								P	P				79	+ 2	·329	−·046	0·5	−0·9	0	0·65	− 0·65	0	0·10	− 0·10	0	0·10	− 0·10	0	Chaibassa.
			2	6	1	2		S 7° E	3·8	1·3	+193	3·0	72	+ 1	·325	−·017	1·3	−0·2	0	0·35	− 0·35	0·05	0·17	− 0·12	0·05	0·17	− 0·12	0·05	Gaya.
	1			11	13	4	1	S 34° W	4·4			3·9	73		·334		1·3		0	0·44	− 0·44	0·04	0·32	− 0·28	0·04	0·32	− 0·28	0·04	Dehri.
	1	1			8	11	4	S 84° W	2·8	1·7	+ 65	3·2	72	− 3	·334	−·038	1·5	+0·6	1	0·35	+ 0·65	0·19	0·10	+ 0·09	0·19	0·10	+ 0·09	0·19	Patna.
	3		2	1	6	2		S 31° W	1·2			1·2	75		·321		0·2		0	0·35	− 0·35	0·04	0·13	− 0·09	0·04	0·13	− 0·09	0·02	Arrah.
		2	2	2	15	8	1	S 51° W	4·8			4·5	64		·288		1·6		0	0·45	− 0·45	0·08	0·20	− 0·12	0·08	0·20	− 0·12	0·08	Buxar.
1			1	3	3	6	2	S 72° W	1·7			1·4	64		·352		1·0		0	0·26	− 0·26	0·05	0·07	− 0·02	0·05	0·07	− 0·02	0·05	Bhagalpur.
1	1	2	1	1	3	6	2	S 81° W	1·2	2·0	− 40	1·6	88	+ 2	·406	−·003	2·4	+1·9	0	0·23	− 0·23	0	0·07	− 0·07	0	0·07	− 0·07	0	Darbhanga.
								Calm	0·2				85		·403		0·7		0	0·19	− 0·19	0	0·07	− 0·07	0	0·07	− 0·07	0	Muzaffarpur.
	1	3		1	4	2		S 18° W	2·1			1·9	95		·368		3·7		0	0·47	− 0·47	0	0·14	− 0·14	0	0·14	− 0·14	0	Motihari.
	1	1	1	5	10	1		N 72° W	2·0			1·8	80		·325		2·7		0	0·29	− 0·29	0·04	0·09	− 0·05	0·04	0·09	− 0·05	0·04	Chapra.
		1			11	4		S 57° W	1·6	2·4	− 33	1·8	74	−10?	·324	−·031	1·1	−0·2	0	0·40	− 0·40	0	0·21	− 0·21	0	0·21	− 0·21	0	Benares.
	2	2	1		4	12	4	N 87° W	3·3	2·5	+ 32	2·7	65	−12	·273	−·080	1·2	−0·1	0	0·50	− 0·50	0	0·24	− 0·24	0	0·24	− 0·24	0	Allahabad.
					2	4		S 75° W	0·5	0·9	− 44		78	− 3	·355	−·019	1·0	0	0	0·40	− 0·40	0	0·14	− 0·14	0	0·14	− 0·14	0	Gorakhpur.
		1		1	1	4	2	S 87° W	1·0	1·6	− 38	1·1	73	− 9	·281	−·053	0·9	−0·7	0	0·80	− 0·80	0·03	0·38	− 0·35	0·03	0·38	− 0·35	0·03	Lucknow.
2	1	1			3	3	6	N 57° W	1·8			1·7	81	− 1	·330	−·021	1·5	+0·7	1	0·70	+ 0·30	0·35	0·34	+ 0·01	0·35	0·34	+ 0·01	0·35	Bahraich.
1	2	1	2		4	12	2	S 88° W	2·7				65	−12	·261	−·063	0·7	−0·6	0	0·60	− 0·60	0·03	0·17	− 0·14	0·03	0·17	− 0·14	0·03	Cawnpore.
3	1		1	1	3	5	4	N 72° W	1·8			1·8	81	+ 8	·324	+·033	0·6	−1·7	0	0·60	− 0·60	0	0·34	−0·34	0	0·34	− 0·34	0	Mainpuri.

e data for that station are not utilised in calculating the provincial departures from normal.
lumn Nos. 40, 42 and 44 are derived, are incomplete.

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Abstract of Observations taken at 8 A.M. at 233 Sta

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	VI.—Upper Sub-Himalayas.			−·026								70·3	−1·5	44·7	+1·1	57·5	−0·2	25·6				
24	Bareilly	568	29·469	−·032	30·048	29·602	1st	29·354	27th	·248	49·6	75·3	+0·5	45·3	−0·7	59·3	−0·1	28·0	78·3	15th	39·1	28th
	Dehra Dun	2,233	27·760	−·043	30·072	27·901	1st	27·629	27th	·272	46·1	69·0	+0·3	44·9	−0·7	57·0	−0·2	24·1	74·0	11th	37·0	31st
	Roorkee	899	29·127	−·024	30·069	29·266	1st	29·029	27th	·237	47·0	71·1	−1·3	41·9	−1·6	56·5	−1·5	29·2	77·4	2nd	36·9	7th
22	Meerut	738	29·302	−·025	30·066	29·414	1st	29·215	29th	·199	49·1	73·2	+0·3	44·2	−0·5	58·7	−0·1	29·0	78·5	2nd	38·7	31st
26	Delhi	718	29·336	−·021	30·072	29·474	1st	29·221	29th	·253	52·9	72·9	−0·8	49·5	+0·6	61·2	−0·1	23·4	77·2	1st, 2nd & 4th.	42·9	23rd
28	Lahore	702	29·341	−·032	30·077	29·469	1st	29·230	19th	·239	46·6	69·6	−3·6	43·9	+3·6	56·8	0	25·7	77·8	1st	37·1	31st
27	Sirsa	662	29·411	−·007	30·095	29·539	1st	29·289	19th	·250	49·2	71·3	−3·6	44·6	+1·9	58·0	−0·9	26·7	77·2	1st, 4th & 19th	36·0	31st
	Patiala	*818*	29·221		30·072	29·358	1st	29·132	29th	226	49·5	70·1		44·8		57·5		25·3	76·6	1st	39·5	1st
29	Ludhiana	812	29·220	−·025	30·067	29·371	1st	29·132	29th	·239	48·8	69·2	−1·8	46·7	+2·7	58·0	+0·5	22·5	75·1	7th	41·1	30th & 31st. 4 days
	Sialkot	830	29·216	−·011	30·085	29·346	1st	29·114	28th	·232	49·7*	68·4*	−1·7*	46·7*	+4·2*	57·6*	+1·3*	21·7*	74·5	1st	42·1	
	Ambala	892	29·128	−·032	30·061	29·262	1st	29·025	28th	·237	47·8	71·9	−0·2	44·0	+0·5	58·0	+0·2	27·9	77·5	1st	36·7	1st
	Rawalpindi	1,674	28·351	−·033	30·134	28·487	1st	28·197	19th	·290	44·0	63·1	−4·5	39·5	+2·4	51·3	−1·1	23·6	72·9	1st & 2nd.	33·1	10th
	VII.—Indus Valley and North-West Rajputana.			−·020								74·7	−1·0	48·7	+2·8	61·7	+0·9	26·0				
32	Peshawar	1,110	28·967	−·030	30·155	29·095	15th	28·760	19th	·335	44·6	63·8	−3·7	41·7	+2·7	52·8	−0·5	22·1	71·2	6th	32·4	31st
	D. I. Khan	590	29·506	−·026	30·099	29·645	15th	29·337	19th	·308	47·6	69·4	−3·1	43·2	+3·1	56·3	0	26·2	75·8	6th & 7th.	33·5	31st
31	Khushab	612	29·472	−·015	30·108	29·610	1st	29·300	19th	·310	49·4	69·9	−1·8	44·2	+2·3	57·1	+0·3	25·7	78·3	6th	32·4	31st
	Montgomery	558	29·521	−·019	30·095	29·631	1st	29·364	15th	·267	49·7	70·6	−2·3	43·7	+0·6	57·2	−0·9	26·9	79·8	1st	33·0	30th
	Multan	420	29·674	−·023	30·094	29·812	15th	29·532	19th	·280	52·4	72·0	−1·9	46·1	+3·7	60·0	+0·9	23·9	79·3	1st, 4th & 7th.	37·5	3
47	Jacobabad	186	29·932	−·005	30·094	30·055	15th	29·795	28th	·260	55·1	75·9	−0·8	47·6	+3·6	61·8	+1·4	28·3	85·0	1st	35·5	30th
	Hyderabad	96	30·011	−·020	30·066	30·112	15th	29·891	28th	·221	60·5	80·5	+1·4	55·0	+2·7	67·8	+2·1	25·5	88·6	4th	45·0	31st
	Kurrachee	30	30·070	−·024	30·052	30·163	31st	29·974	19th	·189	64·0	82·8	+2·5	59·8	+3·9	71·3	+3·2	23·0	87·9	2nd	47·7	31st
51	Bikaner	*771*	29·295	−·024	30·090	29·384	15th	29·162	19th	·222	52·8	74·4	−0·9	49·4	−1·9	61·9	−1·4	25·0	83·7	19th	40·1	30th
	Pachpadra	*380*	29·698	−·015	30·063	29·792	23rd	29·591	28th	·201	65·3	82·1	+0·7	49·4	+2·1	65·3	+1·4	33·7	89·8	19th	37·6	30th
	Jodhpur	782	29·289		30·100	29·377	23rd	29·187	19th	·190	58·2	80·6		54·2		67·4		26·4	88·1	19th	40·6	30th
	VIII.—East Rajputana, Central India and Gujarat.			−·009								82·0	+1·1	53·0	+0·5	67·5	+0·8	29·0				
40	Jaipur	1,431	28·627	−·021	30·105	28·737	1st	28·501	29th	·236	55·9	78·2	+0·5	49·8	+0·7	64·0	+0·6	28·4	83·2	20th	42·0	30th
	Kotah	819?	29·235		30·101	29·335	1st	29·103	29th	·232	55·2	80·9		54·0		67·5		26·9	89·0	20th	49·0	31st
	Sambhar	1,254	28·807	−·010	30·116	28·916	1st	28·700	29th	·216	50·4	77·1	+1·1	45·8	−0·5	61·5	+0·3	31·3	82·4	2nd	36·5	31st
	Ajmer	1,611	28·452	−·019	30·128	28·560	1st	28·346	29th	·214	52·2	78·3	+2·0	49·7	+4·1?	64·0	+3·1?	28·6	82·4	5th	42·9	31st
	Udaipur	1,925	28·134		30·109	28·209	23rd	28·029	29th	·180	57·6	79·6		48·8		64·2		30·8	83·5	2nd, 19th & 20th.	42·2	23rd
46	Bhuj	395	29·680	−·005	30·047	29·764	25th	29·604	19th	·160	65·2	84·3	+2·1	57·9	+1·8	71·1	+2·0	26·4	91·3	18th	48·9	31st
	Jamnagar	61	30·038		30·044	30·126	25th	29·959	19th	·167	64·3	84·5		56·5		70·5		28·0	93·5	19th	46·3	31st
	Rajkot	429	29·636	−·002	30·036	29·737	25th	29·565	9th	·172	66·2	87·6	+2·2	55·2	+0·3	70·4	+1·3	34·4	93·9	19th	42·0	31st
	Veraval	*18*	30·051	+·005	30·011	30·155	25th	29·969	9th	·186	68·5	84·3	+0·2	62·5	+0·5	73·4	+0·4	21·8	91·1	16th	53·8	31st
	Dwarka	37?	30·052		30·036	30·149	25th	29·979	9th	·170	71·0			64·0							52·6	21st
	Bhavnagar Para.	55	30·032	−·014	30·031	30·125	25th	29·972	9th	·153	62·5	86·7	+1·6	55·5	−3·0?	71·1	−0·7?	31·2	92·6	17th & 19th.	42·0	31st
49a	Nowgong	757	29·316	−·022	30·088	29·432	1st	29·166	29th	·266	53·2	76·3	+1·1	46·4	0	61·4	+0·6	29·9	83·5	21st	41·0	12th
49	Indore	1,823	28·230	+·004	30·086	28·313	1st	28·139	30th	·174	60·7	80·5	+1·2	48·7	−0·6	64·6	+0·3	31·8	85·1	20th	40·6	12th
	Neemuch	1,630	28·433	−·005	30·107	28·515	1st	28·326	29th	·189	58·6	79·2	+0·8	49·2	−0·3	64·2	+0·3	30·0	84·5	19th	40·8	31st

* Mean of 22 days.

N.B.—Elevations in Italics indicate barometrical determinations.

Note 1.—When a query is inserted against any reading or in the returns of any s

Note 2.—The data from which divisional means of the

-continued.

India, Burma, etc., in December 1905—continued.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December 1905.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December 1905.	Heaviest rainfall during month.	Station.
6	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
													76	+1	·263	+·003	2·4	−0·3				0·71	0·57	+0·17					VI.—Upper Sub-Himalayas.
						4	1	N 81° W	7·8	2·2	+255	7·4	86	+ 5	·305	−·001	1·5	+0·1	1	0·64	+0·36	0·12	0·33	− 0·21	0·12	0·33	− 0·21	0·11	Bareilly.
								Calm	0·9‡	1·7	−47		73	− 2	·218	−·020	2·9	−0·8	2	1·40	+0·60	1·00	0·80	+ 0·20	1·00	0·80	+ 0·20	0·48	Dehra Dun.
		[illegible]	2				7	N 36° W	2·5	1·3	+92		79	− 5	·261	−·018	1·7	−0·4	2	1·30	+0·70	0·52	0·61	− 0·09	0·52	0·61	− 0·09	0·28	Roorkee.
		1			6	4		N 70° W	0·9	1·6	−44	0·9	67	− 8	·239	−·022	1·0	−1·0	1	0·90	+0·10	0·14	0·48	− 0·34	0·14	0·48	− 0·34	0·10	Meerut.
		1		1	14	6		N 79° W	2·8	2·7	+ 4	2·4	61	0	·245	−·005	0·8	−1·6	0	1·10	−1·10	0	0·53	− 0·53	0	0·53	− 0·53	0	Delhi.
1		1				1		N 11° E	1·3†	1·5	−13		91	+13	·294	+·042	3·7	+0·8	1	0·90	+0·10	0·56	0·38	+ 0·18	0·56	0·38	+ 0·18	0·50	Lahore.
1			1	1		2	1	N 11° W	1·0	2·2	−55	0·9	76	+ 7	·268	+·031	2·7	−0·3	1	0·80	+0·20	0·49	0·31	+ 0·18	0·49	0·31‡	+ 0·18	0·47	Sirsa.
5	1	3	3	2	1	4	10	N 37° W	4·5			4·6	77		·275		2·7		1			0·41			0·41			0·33	Patiala.
	3		1			8	4	N 63° W	1·2	0·8	+50	1·1	75	− 1	·261	+·001	2·0	−1·8	2	0·90	+1·10	0·27	0·78	− 0·51	0·27	0·78	− 0·51	0·16	Ludhiana.
1	1	6				1	4	N 33° E	1·7	1·1	+55	1·7	72*	− 2	·263*	+·016	3·0	+0·4	3	1·10	+1·90	1·63	0·52	+ 1·11	1·63	0·52	+ 1·11	0·73	Sialkot.
			2			1	10	N 49° W	3·1			2·8	80	−2	·267	−·010	2·3	−0·1	1	1·20	−0·20	0·41	0·82	− 0·41	0·41	0·82	− 0·41	0·36	Ambala.
1			1					N 67° E	2·3	1·1	+109	2·1	79	+ 5	·232	+·022	4·6	+1·0	5	1·60	+3·40	3·02	0·74	+ 2·28	3·02	0·74	+ 2·28	1·65	Rawalpindi.
													64	+ 3	·269	+ ·028	2·8	+ 0·2				0·60	0·22	+ 0·38					VII.—Indus Valley and North-West Rajputana.
	1							N 45° E	0·2	2·4	−92	0·2	75	+ 5	·229	+ ·024	4·5	+ 0·7	2	1·10	+0·90	2·54	0·33	+ 2·21	2·54	0·33	+ 2·21	1·61	Peshawar.
	1						3	N 27° W	0·4	0·8	−50	0·4	78	+ 7	·261	+ ·044	3·5	+ 0·9	2	0·80	+1·20	1·02	0·21	+ 0·81	1·02	0·21	+ 0·81	0·77	D. I. Khan.
2	5	1		2	4	3		N 60° W	5·0			4·8	66	+ 6	·236	+ ·037	3·4	+ 0·7	1	0·40	+0·60	1·16	0·54	+ 0·62	1·16	0·54	+ 0·62	1·10	Khushab.
1		1	8	1	3	2	6	S 27° W	3·8			3·5	68	+ 3	·244	+ ·014	3·5	+ 0·8	1	0·60	+ 0·40	0·44	0·42	+ 0·02	0·44	0·42	+ 0·02	0·44	Montgomery.
3			2				3	N 11° W	1·0	1·3	−23	0·9	71	+ 1	·281	+ ·020	3·5	+ 1·0	1	0·70	+ 0·30	0·90	0·19	+ 0·71	0·90	0·19	+ 0·71	0·88	Multan.
6	3	1			1	2	2	N 6° W	2·1	1·6	+31	2·2	72	+ 9	·317	+ ·076	3·9	+ 1·1	1	0·40	+ 0·60	0·18	0·09	+ 0·09	0·18	0·09	+ 0·09	0·13	Jacobabad.
14	4				1	1	6	N 9° W	6·2	6·5	− 5	5·5	60	+ 6	·318	+ ·052	1·1	− 1·2	1	0·20	+ 0·80	0·10	0·05	+ 0·05	0·10	0·05	+ 0·05	0·10	Hyderabad.
10	15	3				1	2	N 27° E	6·8	9·2	−26	6·7	62	+ 3	·380	+ ·051	2·1	− 0·1	1	0·40	+ 0·60	0·20	0·13	+ 0·07	0·20	0·13	+ 0·07	0·16	Kurrachee.
1	7	7	5	2	2	1	1	S 89° E	1·5	2·4	−38		54	− 2	·222	− ·019	2·5	− 0·1	0	0·40	− 0·40	0·05	0·17	− 0·12	0·05	0·17	− 0·12	0·03	Bikaner.
3	11	6	2		1	1	1	N 54° E	4·2	2·1	+100	3·9	52	− 8	·232	−·020	0·7	−1·8	0	0·40	−0·40	0	0·12	− 0·12	0	0·12	− 0·12	0	Pachpadra.
5	19	2			1	1	1	N 35° E	1·8			1·6	48		·236		1·6		0	0·50	−0·50	0	0·15	− 0·15	0	0·15	− 0·15	0	Jodhpur.
													53	−5	·297	−·025	0·9	−0·7				0·02	0·18	−0·16					VIII.—East Rajputana Central India and Gujarat.
3	2	2	3		1	1	4	N 13° E	2·7	3·4	−21		52	−10	·232	−·037	0·8	−1·4	0	0·70	−0·70	0	0·19	− 0·19	0	0·19	− 0·19	0	Jaipur.
1						1	1	N 45° W.	1·3			1·0	47		·241		0·6		0	0·80	−0·80	0·02	0·29	− 0·27	0·02	0·29	− 0·27	0·02	Kotah.
1			1					N 67° E	3·5	3·7	− 5		59	− 5	·218	−·030	0·6	−1·6	0	0·80	−0·80	0	0·35	− 0·35	0	0·35	− 0·35	0	Sambhar.
	6		3		1		4	N 34° E	3·0	1·4	+114	2·6	62	−12	·247	−·028	1·4	−0·7	0	0·60	−0·60	0	0·27	− 0·27	0*	0·27	− 0·27	0	Ajmer.
						1		W	1·8			1·6	58		·284		0·6		0	0·50	−0·50	0			0			0	Udaipur.
	1	3				7	2	N 65° W	6·2	5·1	+22	5·2	66	+11	·429	+·088	0·4	−1·2	0	0·20	−0·20	0	0·07	− 0·07	0	0·07	− 0·07	0	Bhuj.
	1	17	2	3	2			S 74° E	7·9			7·7	50		·315		0·7		0			0			0			0	Jamnagar.
1		6			1	1		N 86° E	2·5	4·8	−48	2·5	43	−10	·273	−·051	0·8	−0·2	0	0·20	−0·20	0	0·04	− 0·04	0	0·04	− 0·04	0	Rajkot.
	16	13					2	N 16° E	7·6	5·0	+52	7·6	52	+ 1	·363	+·001	0·8	−1·2	0	0·40	−0·40	0	0·09	− 0·09	0	0·09	− 0·09	0	Veraval.
	8	13	3		2	2	3	N 20° E	9·8				69		·537		1·7		0			0	0		9			0	Dwarka.
8	2			1	3	2	20	N 42° W	4·5			3·7	43	−19	·255	−·116	1·2	−0·2	0	0·10	−0·10	0	0·07	− 0·07	0	0·07	− 0·07	0	Bhavnagar Para.
6	1		3	1	4	3	3	S 84° W	0·3	1·2	−75	0·3	59	−15†	·243	−·075	1·1	−0·1	1	0·70	+0·30	0·36	0·55	− 0·19	0·36	0·55	− 0·19	0·36	Nowgong.
8		5	1	5	1		1	S 82° E	2·2	2·1	+ 5	1·8	49	−10	·260	−·050	1·2	−0·2	0	0·50	−0·50	0	0·20	− 0·20	0	0·20	− 0·20	0	Indore.
3	8	11	5			1	2	1	N 30° E	5·3	8·1	−35	4·5	45	—	·231	−·036	1·7	+0·3	0	0·60	−0·60	0	0·28	− 0·28	0	0·28	− 0·28	0	Neemuch.

the data for that station are not utilized in calculating the provincial departures from normal.

columns Nos. 40, 42 and 44 are derived are incomplete.

† Mean of 29 days

‡ Mean of 30 days.

Table

Abstract of Observations taken at 8 A.M. at 233 Station

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
45	Surat	39	30·032	+·005	30·018	30·121	25th	29·969	9th	·152	64·9	88·5	+1·1	59·0	+1·3	73·8	+1·2	29·5	94·2	17th, 18th & 19th.	50·1	31st	4
	Ahmedabad	163	29·912	−·007	30·032	30·004	25th	29·849	9th	·155	65·6	87·4	+1·5	59·4	−0·7	73·4	+0·4	28·0	92·7	1st	49·7	31st	4
	Deesa	466	29·600	−·012	30·046	29·682	25th	29·428	31st	·254	60·6	86·6	+1·2	51·8	−0·9	69·2	+0·2	34·8	92·9	1st	40·9	31st	5
22	Agra	555	29·525	−·018	30·083	29·649	1st	29·395	29th	·254	54·1	75·6	−0·5	50·5	+1·7	63·1	+0·6	25·1	82·0	20th	43·9	31st	3
21	Jhansi	858	29·228	−·009	30·094	29·331	1st	29·085	29th	·246	60·2	79·9	+1·5	54·5	+2·6	67·2	+2·1	25·4	87·7	20th	50·2	10th	3
	IX.—Deccan.			−·007								82·2	+0·9	52·6	−1·4	67·4	−0·3	29·6					4
38	Belgaum	2,539	27·481	+·006	29·999	27·561	25th	27·410	9th	·151	67·7	83·5	+1·9	57·7	−0·4	70·6	+0·8	25·8	87·8	30th	51·4	10th	3
	Sholapur	1,590	28·456	0	30·050	28·534	25th	28·368	30th	·166	65·6	87·1	+1·6	57·4	−0·1	72·3	+0·8	29·7	92·7	30th	48·6	10th	4
	Poona	1,840	28·213	+·009	30·097	28·305	25th	28·138	30th	·167	57·7	85·2	+0·9	50·0	−3·8	67·6	−1·5	35·2	89·5	30th	42·5	11th	4
	Bijapur	*1,948*	28·091	−·005	30·038	28·168	25th	28·013	30th	·155	66·8	86·0	+2·0	56·8	+0·8	71·4	+1·4	29·2	90·4	24th & 30th.	50·6	12th	3
40	Malegaon	1,430	28·623	−·007	30·080	28·697	1st	28·519	30th	·178	58·8	86·1	+1·9	49·1	−2·2	67·6	−0·2	37·0	92·4	20th & 29th.	42·2	10th & 12th.	5
	Ahmednagar	2,154	27·914	+·011	30·092	27·990	25th	27·819	30th	·171	62·3	84·6	+1·6	51·3	−0·2	68·0	+0·7	33·3	89·4	30th	44·6	11th & 13th.	4
41	Akola	930	29·135	−·007	30·069	29·230	1st	29·012	30th	·218	58·7	84·7	+1·1	48·3	−3·1	66·5	−1·1	36·4	90·9	21st	41·9	12th	4
	Amraoti	1,215	28·839	−·009	30·059	28·945	1st	28·727	30th	·218	63·4	83·1	+0·4	55·0	−1·8	69·1	−0·7	28·1	87·1	5 days	48·8	9th	3
42	Khandwa	1,044	29·013	−·008	30·075	29·089	1st	28·910	30th	·179	57·5	84·1	+1·1	48·8	−1·4	66·5	−0·2	35·3	91·2	21st	42·1	8th & 10th.	4
	Hoshangabad	1,006	29·075	−·004	30·107	29·163	1st	28·954	30th	·209	54·6	78·7	−0·6	48·2	−3·5	63·5	−2·1	30·5	84·5	21st	42·3	9th	3
	Nagpur	1,025	29·041	−·001	30·076	29·143	1st	28·911	30th	·232	59·7	82·8	+1·5	52·4	−1·9	67·6	−0·2	30·4	88·6	30th	47·7	9th & 10th.	5
43	Chanda	*634*	29·442	0	30·065	29·540	1st	29·322	30th	·218	55·7	82·6	+0·1	48·3	−3·5	65·5	−1·7	34·3	86·5	30th	41·6	9th, 10th & 11th.	4
	Seoni	2,033	28·015	−·010	30·094	28·118	1st	27·881	30th	·237	57·5	78·6	+0·9	49·4	−0·4	64·0	+0·3	29·2	84·8	29th	42·0	9th	5
	Jubbulpore	1,327	28·723	−·019	30·097	28·836	1st	28·579	30th	·257	51·5	77·5	+0·6	44·2	−1·8	60·9	−0·6	33·3	84·9	21rt	37·8	10th	4
	Saugor	1,807	28·237	−·016	30·083	28·357	1st	28·109	30th	·248	58·8	77·1	+0·4	53·4	+1·5	65·3	+1·0	29·7	83·4	20th	47·6	31st	3
39a	Sutna	1,040	29·011	−·026	30·083	29·128	1st	28·869	29th	·259	53·2	76·5	+1·4	46·7	−0·4	61·6	+0·5	29·8	84·4	21st	41·2	9th	5
44	Raipur	970	29·089	−·012	30·065	29·193	1st	28·945	30th	·248	59·4	79·5	+0·8	53·8	−0·8	66·4	−0·3	26·2	85·6	22nd	45·8	11th	3
	Pendra	2,123	27·997		30·081	28·107	1st	27·845	30th	·262	56·8	76·0		49·6		62·8		26·4	84·3	22nd	43·5	24th	5
	Sambalpur	486	29·554	−·016	30·059	29·722	1st	29·447	30th	·275	58·3	79·7	−0·1	50·8	−3·2	65·3	−1·7	28·9	85·1	23rd	44·7	10th	5
39	Aurangabad	1,905	28·152		30·059	28·220	1st	28·077	30th	·143	65·9	84·1		52·9		68·5		31·2	89·3	29th	44·2	12th, 13th & 14th.	5
	Indur	1,260	28·772		30·036	28·785	13th	28·754	2nd	·031	63·0	81·8		49·6		65·8		32·2	84·9	1st	45·1	11th	
	Bidar	*2,165*	27·907		30·056	27·992	25th	27·817	31st	·175	70·7	81·0		60·5		70·8		20·5	87·7	22nd	54·0	10th	
53	Gulbarga	1,503	28·544	−·017	30·045	28·628	25th	28·459	30th	·169	66·5	85·6	+0·7	56·6	−1·2	71·2	−0·3	29·0	91·0	30th	50·9	9th	5
	Raichur	1,326?	28·706	−·005	30·018	28·775	1st	28·598	31st	·177	69·4	85·1	+0·2	62·4	−0·9	73·8	−0·4	22·7	92·1	31st	51·7	10th	
	Hyderabad (Deccan)	1,690	28·352	−·015	30·058	28·439	1st	28·272	30th	·167	62·5	83·9	+1·5	56·1	−1·2	70·0	+0·2	27·8	89·3	26th & 30th.	48·3	10th	
	Hanumkonda	871	29·177		30·028	29·269	1st	29·084	30th	·185	65·9	83·4		58·4		70·9		25·0	89·0	23rd & 30th.	52·2	11th	
	X.—West Coast.			+·003								87·0	−0·1	68·7	−1·3	77·9	−0·7	18·3					
37	Bombay	37	30·007	−·004	29·985	30·090	25th	29·938	10th	·152	71·8	85·1	+0·6	69·3	−0·5	77·2	+0·1	15·8	89·5	2nd, 16th & 18th.	61·0	31st	
	Ratnagiri	110	29·912	+·006	29·966	30·000	25th	29·847	10th	·153	73·0	89·1	−0·4	65·5	−1·7	77·3	−1·1	23·6	93·8	18th	60·0	10th, 11th & 12th.	
	Mormugao	*60*	29·968	0	29·963	30·050	25th	29·909	9th	·141	71·9	85·7	−0·6	69·5	−0·8	77·6	−0·7	16·2	89·5	18th	65·3	9th, 10th & 11th.	
	Goa	199	29·819	?	29·962	29·909	25th	29·758	9th	·151	72·4	86·0	−1·4	69·3	0	77·7	−0·7	16·7	91·0	18th	64·0	10th	
	Karwar	44	29·978	+·007	29·957	30·069	25th	29·903	10th	·166	67·4	88·5	+0·8	64·0	−2·2	76·3	−0·7	24·5	92·8	1st	56·5	9th	
33	Cochin	10	29·976	+·002	29·915	30·025	25th	29·911	10th	·114	74·7	89·7	+1·2	71·2	−1·7	80·5	−0·3	18·5	91·3	6 days	66·8	29th	
	Calicut	27	29·974	+·005	29·931	30·053	25th	29·902	10th	·151	73·8	86·7	−0·9	68·8*	−1·7*	77·9*	−1·3	17·9	88·8	2nd	64·7	27th	
	Mangalore	65	29·945	+·004	29·943	30·036	25th	29·867	9th	·159	75·1	87·3	−2·2	68·3	−1·8	77·8	−2·0	19·0	90·7	4th, & 18th.	64·5	11th	
	Trivandrum	198	29·775	0	29·907	29·827	25th	29·701	10th	·126	75·4	85·2	+2·2	72·3	−1·1	78·7	+0·6	12·9	86·5	4 days	68·0	30th	

* Mean of 30 days.

N. B.—Elevations in italics indicate barometrical determinations.

NOTE 1.—When a query is inserted against any reading or in the returns of any sta

NOTE 2.—The data from which divisional means of the f

continued.

India, Burma, etc., in December, 1905—continued.

Wind Direction.								Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.								Station.
Number of winds from							Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December 1905.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December 1905.	Heaviest rainfall during month.	
N.E.	E.	S.E.	S.	S.W.	W.	N.W.																					
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
4	15	3		1			N 78° E	4·4	5·0	−12	4·1	66	+ 4	·419	+ ·020	0·5	−0·8	0	0·10	− 0·10	0	0·01	− 0·01	0	0·01	− 0·01	0	Surat.
12	12	1			1	2	N 59° E	3·4			2·9	45*	− 4	·290*	− ·022	1·2	−0·3	0	0·10	− 0·10	0·05	0·07	− 0·02	0·05	0·07	− 0·02	0·05	Ahmedabad.
16	9	2	1		1		N 64° E	7·4	8·1	− 9		42	− 5	·228	− ·030	0·5	−1·3	0	0·09	− 0·09	0	0·06	− 0·06	0	0·06	− 0·06	0	Deesa.
2		19		4		1	S 39° E	3·7	2·6	+ 42	4·4	59	− 9	·250	− ·035	0·3	−1·2	0	0·60	− 0·60	0·03	0·29	− 0·26	0·03	0·29	− 0·26	0·02	Agra.
			3	7	1	5	S 70° W	2·6	2·3	+ 13	3·2	63	+ 6	·331	+ ·038	0·4	− 0·7	0	0·80	− 0·80	0	0·24	− 0·24	0	0·24	− 0·24	0	Jhansi.
												53	− 8	·289	− ·079	1·2	−0·5				0·01	0·36	− 0·36					IX.—Deccan.
		7	7				S 68° E	7·8*	12·3	− 37		47	−10	·322	− ·061	2·6	+1·0	0	0·40	− 0·40	0	0·12	− 0·12	0	0·12	− 0·12	0	Belgaum.
17	8	4				1	N 66° E	8·7	6·8	+ 28	8·6	34	−15	·220	− ·126	1·2	− 0·8	0	0·50	− 0·50	0	0·43	− 0·43	0	0·43	− 0·43	0	Sholapur.
1	3			2		4	N 14° W	5·1	5·7	− 11		52	− 4	·254	− ·077	1·2	−0·7	0	0·50	− 0·50	0	0·19	− 0·19	0	0·19	− 0·19	0	Poona.
6	8	4	1		2	4	N 48° E	1·7				58	−14?	·391	− ·086?	1·7	+0·1	0	0·50	− 0·50	0	0·03	− 0·03	0	0·03	− 0·03	0	Bijapur.
	1			2	8	7	N 71° W	4·7	3·5	+ 34	5·4	38	−20	·197	− ·134	9	−2·0	0	0·50	− 0·50	0	0·26	− 0·26	0	0·26	− 0·26	0	Malegaon.
		1	1	3		11	N 62° W	4·6			5·6	43	−20?	·248	− ·130	0·6	−0·9	0	0·90	− 0·90	0	0·50	− 0·50	0	0·50	− 0·50	0	Ahmednagar.
1	3	12	1		1		S 52° E	3·4	3·1	+ 10	3·0	55	− 1	·273	?	0·9	−0·9	0	0·70	− 0·70	0	0·75	− 0·75	0	0·75	− 0·75	0	Akola.
9	9			2	1		N 68° E	1·5	3·1	− 52	1·4	49	− 2	·289	?	0·6	−1·1	0	0·60	− 0·60	0	0·57	− 0·57	0	0·57	− 0·57	0	Amraoti.
1						1	N	1·1	2·4	− 54	1·0	48	− 9	·238	− ·062	0·5	−0·8	0	0·50	− 0·50	0	0·43	− 0·43	0	0·43	− 0·43	0	Khandwa.
10	14			2			N 74° E	2·7	2·4	+ 13	2·8	62	− 7?	·270	− ·059	0·5	−1·1	0	0·60	− 0·60	0	0·53	− 0·53	0	0·53	− 0·53	0	Hoshangabad.
4							N 6° E	4·6	3·5	+ 31	3·6	52	− 8	·272	− ·081	1·2	−0·8	0	0·70	− 0·70	0	0·48	− 0·48	0	0·48	− 0·48	0	Nagpur.
1	1				3	4	N 43° W	2·3	1·6	+ 44	2·0	68	− 4	·310	− ·088	1·4	0	0	0·80	− 0·80	0	0·34	− 0·34	0	0·34	− 0·34	0	Chanda.
5	1	1	1	2	1	2	N 10° E	3·6	2·5	+ 44	3·0	55	−12	·263	− ·081	1·2	−0·7	0	0·90	− 0·90	0	0·52	− 0·52	0	0·52	− 0·52	0	Seoni.
	3	13	8	1			S 32° E	1·7	1·8	− 6	1·5	69	− 5?	·268	− ·085	0·5	−1·1	0	0·60	− 0·60	0·05	0·33	− 0·28	0·05	0·33	− 0·28	0·05	Jubbulpore.
2	2	7		3	2		S 37° E	3·5	2·5	+ 40	3·1	44	−14	·220	− ·074	0·9	−0·2	0	0·80	− 0·80	0·06	0·70	− 0·64	0·06	0·70	− 0·64	0·06	Saugor.
1	1			1	4	3	N 67° W	1·4	3·6	− 61	1·3	66	− 1	·270	− ·023	2·1	+1·1	0	0·90	− 0·90	0·05	0·43	− 0·38	0·05	0·43	− 0·38	0·05	Sutna.
2			2	1		2	N 13° W	1·8	2·6	− 31	2·2	64	+ 2	·334	− ·010	1·5	−0·5	0	0·50	− 0·50	0	0·25	− 0·25	0	0·25	− 0·25	0	Raipur.
2		1	2	1		4	N 17° W	3·8			3·2	53		·251		0·9		0			0			0			0	Pendra.
10	4	7	5	1		2	S 89° E	3·7	1·4	+ 164	3·6	70	− 4	·343	− ·063	1·1	−0·6	0	0·30	− 0·30	0	0·24	− 0·24	0	0·24	− 0·24	0	Sambalpur.
4	12	2			1	1	N 81° E	6·3			6·2	42		·284		0·7		0	1·10	− 1·10	0	0·61	− 0·61	0	0·61	− 0·61	0	Aurangabad.
						8	N 45° W	4·3			3·6	37		·217		1·2		0	0·60	− 0·60	0	0·33	− 0·33	0	0·33	− 0·33	0	Indur.
9	8	6	2	2		1	N 83° E	5·3			4·5	36		·277		2·5		0	0·70	− 0·70	0	0·52	− 0·52	0	0·52	− 0·52	0	Bidar.
9	14	4					N 80° E	7·2			6·3	57	− 2	·372	?	0·4	−1·4	0	0·30	− 0·30	0	0	0	0	0	0	0	Gulbarga.
1	13	5		2			S 75° E	7·8			7·4	54	−12	·398	− ·088	2·1	+0·6	0	0·30	− 0·30	0	0	0	0	0	0	0	Raichur.
							Calm.	2·0			1·9	61	−12	·350	− ·102	1·4	− 0·3	0			0	0·17	− 0·17	0	0·17	− 0·17	0	Hyderabad (Deccan).
		5	1		1	1	N 40° E	3·2*			2·8	57		·372		1·7		0	0·10	− 0·10	0			0			0	Hanumkonda
												69	−3	·542	− ·046	1·9	−0·1				0	0·62	− 0·62					X.—West Coast.
13	13	1					N 61° E	8·9	10·0	− 11		70	− 2?	·553	− ·035	1·4	− 0·3	0	0·10	− 0·10	0	0·06	− 0·06	0	0·06	− 0·06	0	Bombay.
4	15	3	1	1			N 87° E	9·7	9·9	− 2	9·6	52	− 1?	·415	− ·053?	1·2	− 0·2	0	0·10	− 0·10	0	0·05	− 0·05	0	0·05	− 0·05		Ratnagiri.
	2	1	24	3	1		S 1° W	7·1				75	− 1	·571	− ·050?	1·5	+0·6	0			0	0	0	0	0	0	0	Mormugao.
6	24						N 82° E	6·5				64	0?	·521	− ·038	1·6	+0·2	0			0	0·06	− 0·06	0	0·06	− 0·06		Goa.
11	15	2					N 62° E	4·7				72	− 3	·495	− ·045	0·7	− 0·4	0	0·10	− 0·10	0	0·07	− 0·07	0	0·07	− 0·07	0	Karwar.
20	10						N 58° E	5·8				69	− 6	·611	− ·085	2·8	+0·4	0	2·50	− 2·50	0	1·66	− 1·66	0	1·66	− 1·66	0	Cochin.
13	17	1					N 72° E	5·5			5·5	77	0	·641	− ·042	1·4	− 0·7	0	1·60	− 1·60	0	0·97	− 0·97	0	0·97	− 0·97	0	Calicut.
4	24	3					N 89° E	4·5	3·5	+ 29		68	0	·596	− ·005	2·1	− 0·2	0	0·50	− 0·50	0	0·45	− 0·45	0	0·45	− 0·45	0	Mangalore.
3	1				3	4	N 13° W	3·7				74	− 6	·658	− ·066	4·2	− 0·1	0	3·60	− 3·60	0	2·24	− 2·24	0	2·24	− 2·24	0	Trivandrum.

y station, the data for that station are not utilized in calculating the provincial departures from normal, 40, 42 and 44 are derived are incomplete.

* Mean of 30 days.

Tal

Abstract of Observations taken at 8 A.M. at 233 Stati

Number of District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded month.	Date.	Lowest pressure recorded month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	XI.—South India.			+·001								85·1	+1·7	64·2	—1·6	74·7	0	20·9				
57	Pamban . .	37	29·977	+·005	29·942	30·047	24th	29·913	6th	·134	77·8	83·3	+1·7	75·3	+0·7	79·3	+1·2	8·0	86·3	5th	72·2	10th
	Tinnevelly .	168	29·867	+·012	29·967	29·928	25th	29·809	9th	·119	76·2	88·0	+1·8	71·1	—1·3	79·6	+0·3	16·9	92·2	14th	66·9	22nd
	Madura . .	447	29·582	+·023	29·974	29·643	25th	29·506	6th	·137	75·0	87·6	+1·6	68·8	—1·7	78·2	—0·1	18·8	90·4	14th	64·7	22nd, 30th & 31st.
	Periyakulam .	944	29·076		29·985	29·131	25th	29·017	9th	·114	70·5	87·4		62·3		74·4		25·1	89·9	14th	55·0	27th
34	Salem . .	940	29·111	+·007	30·012	29·178	25th	29·043	8th & 9th.	·135	73·6	89·5	+3·1	63·4	—1·9	76·4	+0·6	26·1	92·7	15th	57·8	23rd
	Coimbatore .	1,348	28·672	+·008	30·000	28·735	25th	28·596	9th	·139	69·3	86·3	+1·2	63·2	—2·9	74·8	—0·9	23·1	88·9	8th, 14th & 15th.	58·7	22nd & 27th.
35	Mercara . .	3,781	26·288	+·002	26·221	26·348	25th	26·216	10th	·132	60·3	77·0	+1·8	56·0	—1·8	66·5	0	21·0	80·0	16th, 25th & 31st.	50·6	11th & 21st.
36	Chitaldroog .	2,405	27·620	—·007	29·996	27·693	1st	27·552	30th	·141	69·7	84·2	+2·9	60·6	—0·2	72·4	+1·4	23·6	89·1	31st	56·4	10th
	Bangalore .	3,021	27·025	—·005	30·020	27·099	1st	26·954	9th	·145	64·7	81·6	+3·6	55·9	—2·8	68·8	+0·4	25·7	86·3	14th	51·9	4 days
	Hassan . .	3,091	26·965	+·001	30·033	27·041	25th	26·889	9th	·152	63·8	83·4	+4·0	52·6	—2·8	68·1	+0·6	30·8	86·7	15th	45·3	10th
	Mysore . .	2,518	27·515	—·005	30·012	27·591	25th	27·439	9th	·152	67·6	84·2	+2·6	57·7	—2·1	71·0	+0·3	26·5	87·0	15th, 30th & 31st.	54·4	20th
56	Negapatam .	31	29·982	+·005	29·943	30·050	25th	29·898	6th	·152	75·1	85·0	+3·5?	71·6	—0·5	78·3	+1·5?	13·4	87·9	7th	67·1	11th
	Cuddalore .	37	29·995	—·002	29·963	30·067	25th	29·924	6th	·143	73·4	83·9	+0·7	67·9	—1·2	75·9	—0·3	16·0	86·1	15th	62·2	10th
	Trichinopoly .	255	29·787	+·021	29·981	29·854	25th	29·713	6th	·141	74·1	87·1	+1·9	67·1	—2·3	77·1	—0·2	20·0	89·5	7th	62·4	10th & 11th.
	Pudukkottai .	318	29·720		29·978	29·778	24th & 25th.	29·651	6th	·127	74·1	85·9		67·4		76·7		18·5	88·6	24th	62·8	22nd
	Madras . .	22	30·029	+·011	29·982	30·100	25th	29·941	6th	·159	73·5	83·5	+0·2	67·1	—2·6	75·3	—1·2	16·4	86·0	13th	59·0	10th
	Vellore . .	707	29·342		30·015	29·414	25th	29·269	6th	·145	68·3	?		61·6		?		7·3	?		54·8	10th
55	Nellore . .	52	29·995	—·001	29·990	30·071	25th	29·919	6th	·152	72·0	84·2	—0·6	66·2	—2·0	75·2	—1·3	18·0	87·3	28th	59·6	10th
	Masulipatam .	15	30·064	+·014	30·014	30·138	1st	29·980	9th	·158	72·0	85.2	+2·2?	65·1	—1·5	75·2	+0·4?	20·1	87·0	31st	59·2	9th
54	Cuddapah .	433	29·610	—·016	29·994	29·688	1st	29·528	30th	·160	70·9	88·5	+1·7	63·2	—2·2	75·9	—0·3	25·3	91·7	23rd	53·3	10th
	Kurnool .	945	29·113	—·017	30·016	29·193	25th	29·034	9th	·159	66·6	87·7	+ 0·8	57·5	—1·4	72·6	—0·3	30·2	93·2	30th	45·8	10th
	Bellary . .	1,475	28·545	—·015	30·011	28·616	1st & 25th.	28·477	31st	·139	67·3	88·2	+2·6	60·6	—0·3	74·4	+1·2	27·6	94·0	30th	53·1	9th & 10th.
52	Cocanada .	26	30·048	—·002	30·010	30·129	1st	29·938	7th	·161	71·1	81·9	+1·2	65·4	—0·3	73·7	+0·5	16·5	88·1	31st	59·5	11th
	Waltair (Vizag.)	*226*	29·851	+·005	30·024	29·947	1st	29·749	30th	·198	73·5	80·9	?	67·5	?	74·2	?	13·4	83·3	1st	62·9	9th
	Gopalpur .	72	30·008	—·012	30·024	30·128	1st	29·878	30th	·250	66·0	79·8	—0·5	59·0	—1·8	69·4	—1·2	20·8	83·1	24th	55·5	12th
	XII.—Hill Stations.																					
48	Pishin . .											53·4		32·0		42·7		21·4	65·3	2nd	21·0	5th, 30th & 31st.
	Quetta . .	5,502	24·712	—·034	24·672	24·855	5th	24·568	18th	·287	36·0	52·0	— 3·6	32·0	+2·3	42·5	—0·7	21·0	65·2	2nd	20·8	31st
	Kalat . .										43·0	53·0	— 5·1	25·2	+1·1	39·1	—2·0	27·8	67·9	2nd	11·9	8th & 30th
	Chaman . .	4,311	25·795	—·030	25·757	25·957	5th	25·645	18th	·312	41·7	56·5	— 2·5	37·3	—1·1	46·9	—1·8	19·2	68·3	2nd & 6th.	26·6	31st
30	Leh . .	11,503	19·668	—·068	19·636	19·867	2nd	19·417	30th	·450	15·3	32·7	— 2·0	12·8	—0·4	22·8	—1·2	19·9	49·0	19th	0	29th
	Srinagar .	5,204	25·007	—·037	24·978	25·127	1st	24·824	30th	·303	32·2	44·6	— 3·2	30·3	+1·8	37·5	—0·7	14·3	55·5	1st & 2nd.	23·1	30th
	Sonemarg .	*8,764*	21·757		21·726	21·877	16th	21·548	30th	·329	22·2	37·1		12·6		24·9		24·5	46·4	2nd	—24·9	30th
	Astor (Kashmir)	7,955	22·587		22·557	22·806	16th	22·353	19th	·453	24·2	37·8		20·9		29·4		16·9	48·5	6th	7·0	31st
	Minimarg .	*9,359*	21·351		21·319	21·514	5th	21·186	19th	·328	18·2	33·5		10·7		22·1		22·8	45·8	16th	—3·0	27th
	Skardu .	*7,505*	22·955		22·925	23·148	2nd	22·771	19th	·377	24·1	38·4		20·8		29·6		17·6	48·0	2nd	5·6	29th
	Dras . .	*10,059*	20·787		20·755	20·958	2nd	20·568	30th	·390	8·1	25·8		0·1		13·0		25·7	37·3	10th	—28·9	31st
	Gilgit . .	4,890	25·281		25·254	25·458	1st	25·021	19th	·437	37·6	47·6	— 1·3	33·8	—0·7	40·7	—1·0	13·8	55·6	1st	27·1	25th & 29th.
32	Chitral . .	*5,486*									32·5	49·8		28·3		39·1		21·5	61·1	4 days	18·4	23rd
	Killa Drosh .	4,700?									35·6	48·2		32·2		40·2		16·0	62·3	7th	23·6	23rd
	Para Chinar .	6,000	24·506		24·473	24·642	1st	24·307	19th	·335	37·6	50·8*		31·9		41·4		18·9	60·6	1st	25·2	29th, 30th & 31st.
	Cherat . .	*4,256*	25·779	—·045	25·747	25·914	1st	25·575	19th	·339	43·6	51·5	— 4·0*	40·1	—2·5	45·7*	—3·3	11·4	64·3	1st	33·0	30th

N. B.—Elevations in italics indicate barometrical determinations.

* Mean of 30 days.

NOTE 1.—When a query is inserted against any reading or in the re

" 2.—The data from which divisional means of the figure colu

NOTE.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations the elevations of which exceed 5,200 feet.

1—*continued.*

in India, Burma, etc., in December, 1905—continued.

Wind Direction.										Wind Velocity.				Hygrometry, 8 A.M.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Number of winds from																														
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Mean cloud amount at 8 A.M.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December 1905.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December 1905.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
														74	−3	·573	−·037	3·3	−0·6				0·25	2·63	−2·38					XI.—South India.
1	12	8						10	N 3° W	18·7			19·8	82		·779		3·7		3	9·20	−6·20	4·18	10·31	−6·13	4·18	10·31	−6·13	3·34	Pamban.
	15	9					2	5	N 2° W	4·0			3·8	73	−4	·668	−·022	5·4	+0·9	0	5·70	−5·70	0·11	3·75	−3·64	0·11	3·75	−3·64	0·07	Tinnevelly.
1	5	13	2				1	9	N 10° E	7·0	4·9	+43	8·1	76	+2	·661	+·002	3·5	−1·0	0	3·80	−3·80	0	1·87	−1·87	0	1·87	−1·87	0	Madura.
15	2	1	1	1	4	2	2	3	S 72° W	2·2			2·3	72		·542		2·5		0	3·20	−3·20	0·06	1·56	−1·50	0·06	1·56	−1·50	0·05	Periyakulam.
2	4	9	13	1			1	1	N 59° E	4·7	4·0	+18	4·1	74	−2	·614	−·012	3·4	?	0	2·10	−2·10	0	1·26	−1·26	0	1·26	−1·26	0	Salem.
3	4	11	7				2	4	N 35° E	5·2	3·0	+73	4·8	80	−4	·577	−·080	3·9	−1·0	0	2·40	−2·40	0	1·13	−1·13	0	1·13	−1·13	0	Coimbatore.
	2	13	14	1		1			N 68° E	5·6	4·7	+19	5·2	80	0	·425	−·022	3·6	−1·2	0	1·00	−1·00	0	0·51	−0·51	0	0·51	−0·51	0	Mercara.
3	1	2	15	10					S 78° E	6·8			5·9	49	−6	·437	−·023	1·8	−1·2	0	0·70	−0·70	0	0·09	−0·09	0	0·09	−0·09	0	Chitaldroog.
1		10	18	1	1				N 78° E	8·4	3·9	+115	7·5	73	−5	·457	−·026	2·4	−1·4	1	1·00	0	0·12	0·48	−0·36	0·12	0·48	−0·36	0·12	Bangalore.
5		8	11	5	1			1	N 84° E	2·9			2·5	76	+3	·466	−·021	3·0	−0·6	0	1·00	−1·00	0	0·18	−0·18	0	0·18	−0·18	0	Hassan.
	2	16	10	2			1		N 61° E	8·5			9·2	67	−7	·461	−·042	4·9	+1·1	0	1·00	−1·00	0	0·17	−0·17	0	0·17	−0·17	0	Mysore.
	2	6						22	N 29° W	12·3†	6·8	+88	11·3	81	−2	·714	−·040	5·7	−1·0	3	9·40	−6·40	0·63	12·79	−12·16	0·63	12·79	−12·16	0·21	Negapatam.
	9						3	19	N 36° W	6·5			8·1	83	−7	·688	−·078	3·2	−2·8	0	6·80	−6·80	0	8·19	−8·19	0	8·19	−8·19	0	Cuddalore.
22	6	3							N 15° E	2·8	5·0	−44		73	−4	·621	−·046	2·5	−2·4	0	4·60	−4·60	0·05	2·76	−2·71	0·05	2·76	−2·71	0·05	Trichinopoly.
	23	7					1		N 8° E	9·1			8·7	75		·632		5·4		0			0			0			0	Pudukkottai.
	11	1				1	2	9	N 46° W	6·0	7·6	−21		82	−1	·688	−·042	3·5	−1·6	1	7·20	−6·20	0·40	6·02	−5·62	0·40	6·02	−5·62	0·33	Madras.
26			1	1				3	N 16° W	2·0			2·0	84		·583		3·3		1	3·60	−3·60	0·13	2·88	−2·75	0·13	2·88	−2·75	0·13	Vellore.
2	6	2	1	1	1	1	1	16	N 31° W	3·9				81	−4	·647	−·069	4·4	+0·4	0	3·30	−3·30	0·07	1·64	−1·57	0·07	1·64	−1·57	0·07	Nellore.
23	5	3							N 17° E	5·7	5·7	0	5·0	84	+3	·662	+·025	2·3	−0·3	0	0·60	−0·60	0	0·78	−0·78	0	0·78	−0·78	0	Masulipatam.
		3	2	17	1	8			S 32° E					75	−3	·569	−·051	2·8	−0·6	0	1·30	−1·30	0	1·14	−1·14	0	1·14	−1·14	0	Cuddapah.
4	1	2	3		1				N 74° E	2·4				67	−3	·453	?	1·8	+0·1	0	0·30	−0·30	0	0·12	−0·12	0	0·12	−0·12	0	Kurnool.
1	3		3	6	3	1		4	S 60° E	3·5	3·1	+13	3·1	59	−8	399	−·083	2·7	−0·6	0	0·30	−0·30	0	0·11	−0·11	0	0·11	−0·11	0	Bellary.
7	11	5						8	N 6° W	7·4			6·2	78	+3?	·554	+·013	3·2	+0·7	0	0.70	−0·70	0	0·80	−0·80	0	0·80	−0·80	0	Cocanada.
4	6	12				1	7	1	N	9·1				57	−2?	·470	−·050	3·2	+0·7	0	1·10	−1·10	0	1·80	−1·80	0	1·80	−1·80	0	Waltair (Vizag.).
	14					1		16	N 26° W	10·4	6·9	+51	10·2	67	−10	·429	−·066	1·0	−1·1	0	0·80	−0·80	0	0·75	−0·75	0	0·75	−0·75	0	Gopalpur.
																				8	2·70	+5·30	5·15	1·20	+3·95	5·15	1·20	+3·95	1·30	*XII.—Hill Stations.* Pishin.
6				2	2		1		S 7° E	1·4	2·7	−48	1·5	85	+11	·187	+·032	4·8	+1·6	8	4·00	+4·00	3·60	0·81	+2·79	3·60	0·81	+2·79	0·96	Quetta.
	9		1		16		5		S 30° W					62*		·175*				8	2·70	+5·20	3·37	0·65	+2·72	3·37	0·65	+2·72	1·43	Kalat.
1	1	4	6	6	6	1	1	2	S 59° E	5·4			5·9	76	+17	·210	+·035	4·3	+0·8	10	3·10	+6·90	4·94	0·92	+4·02	4·94	0·92	+4·02	0·92	Chaman.
		3	1	2			1	1	E	1·9				63	+5	·057	+·006	6·7	+0·8	1	0·60	+0·40	0·24	0·19	+0·05	0·24	0·19	+0·05	0·17	Leh.
		2	1	2	2	3	1	4	S 58° W	2·0			1·9	38	−1	·163	+·003	7·7	+1·7	11	3·50	+7·50	3·09	0·91	+2·18	3·09	0·91	+2·18	0·55	Srinagar.
2	1	2	1					1	N 45° E	1·5			1·4	88		·111		5·0		16			14·46			14·46			3·12	Sonemarg.
1					7	7			S 24° W	3·3			3·0	63		·085		5·9		6			1·33			1·33			0·47	Astor (Kashmir).
	1	7	6	5					S 54° E	4·6			4·9	84		·089		5·3		12			6·23			6·23			1·49	Minimarg.
	1	1	1						E	1·0			1·0	95		·128		7·1		5	1·10	+3·90	1·24	0·71	+0·53	1·24	0·71	+0·53	0·35	Skardu
		1							E	0·9			0·7	84		·067		5·1		10	6·60	+3·40	3·92	2·19	+1·73	3·92	2·19	+1·73	1·04	Dras.
						2	7		S 80° W	2·6			2·3	55	−6	·124	−·010	7·2	+0·8	0	0·80	−0·80	0·20	0·09	+0·11	0·20	0·09	+0·11	0·04	Gilgit.
1		5		2					S 79° W	1·2			1·0	78		·156		3·1		4			2·77			2·77			1·70	Chitral.
1	2	2	2	1	1	2			S 63° E					75		·153		3·9		3			0·85			0·85			0·30	Killa Drosh.
1						1			N 45° W	2·2			2·0	68		·148		4·5		8	2·50	+5·50	3·07	0·79	+2·28	3·07	0·79	+2·28	1·10	Para Chinar.
11			2	1		1	13		N 26° W	14·3			13·9	66	+21	·185	+·043	4·7	+1·0	4			5·86	1·00	+4·86	5·86	1·00	+4·86	3·50	Cherat.

any station, the data for that station are not utilized in calculating the provincial departures from normal.
s. 40, 42 and 44 are derived are incomplete.

Mean of 16 days.

Abstract of Observations taken at 8 A.M. at 233 St

Number of District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			Mean 8 A.M. pressure reduced to 32°.	Departure from normal.	Mean 8 A.M. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
29	Murree	6,333	23·871	−·046	23·838	24·025	1st	23·722	19th	·303	40·4	46·7	−6·1	33·0	−6·0	39·9	−6·1	13·7	55·0	1st, 3rd & 7th.	22·0	30th
	Kailang	*10,087*	20·999		20·954	21·040	17th	20·957	18th	·083	19·7	35·5	−4·4	15·4	−3·5	25·5	−4·0	20·1	47·8	9th	1·0	31st
	Poo											40·0		27·2		33·6		12·8	50·5	9th	20·6	2.rd
	Simla	7,224	23·125	−·040	23·087	23·253	1st	22·959	30th	·294	41·0	49·0	−0·4	37·8	−1·3	43·4	−0·9	11·2	55·2	17th	25·4	31st
	Sarain		23·180			23·307	1st	23·005	30th	·302	32·6	49·2		29·9		39·6		19·3	58·0	18th	20·5	31st
	Chakrata	7,022	23·309	−·029	23·269	23·436	1st	23·151	30th	·285	42·2**	55·5†	+0·6†	39·6**	+0·3**	47·6†	+0·5**	15·9	60·8	11th	29·0	31st
25	Ranikhet	6,069	24·134	−·034	24·093	24 277	1st	24·008	27th	·269	44·3	55·5	−2·0	41·2	−1·4	48·4	−1·7	14·3	63·2	12th	28·0	31st
	Muktesar	7,600	22·834		22·792	22·949	1st	22·692	30th	·257	42·2	52·7		37·4		45·1		15·3	60·7	12th	24·2	31st
13	Yatung	10,480										42·1		23·3		32·7		18·8	60·6	13th	16·1	31st
	Darjeeling	7,376	23·033	−·042	22·988	23·172	1st	22·912	26th	·260	40·7	47·5	−1·2	36·1	−0·5	41·9	−0·9	11·4	55·2	12th	29·0	31st
8	Shillong	4,920	25·224		25·176	25·331	1st	25·121	30th	·213	48·2	60·9		39·4		50·2		21·5	66·0	2nd	31·0	31st
	Cherra Poonjee	4,309	25·770		25·722	25·891	1st	25·686	9th	·205	53·3	60·8		47·1		54·0		13·7	69·7	1st	40·5	29th
50	Mount Abu	3,945	26·158	−·010	26·108	26·253	1st	26·060	30th	·193	59·7	66·6	−2·0	53·7	+0·8	60·2	−0·6	12·9	73·6	19th	40·6	31st
42	Pachmarhi	3,528	26·569	−·010	26·516	26·673	1st	26·437	30th	·236	52·8	70·7	+0·4	42·1	−3·6	56·4	−1·6	28·6	76·1	20th & 21st.	35·0	8th
34	Wellington	6,200	24·301	−·001	24·234	24·372	1st	24·220	10th	·152	56·6	70·5	+4·3	43·6	−4·5	57·1	−0·1	26·9	75·2	30th	37·2	11th
	Ootacamund	*7,322*	23·058		22·994	23·109	15th	22·976	10th	·133	54·2	66·6		42·9		54·8		23·7	70·5	13th & 23rd.	35·6	11th
57	Kodaikanal	7,668	22·866		22·801	22·913	20th	22·780	10th	·133	56·6	66·4		47·5		54·8		18·9	73·3	24th	41·7	11th
	XIII.—Extra India.																					
	Trincomalee	12	29·978	+·013	29·915	30·036	22nd	29·892	6th	·144	77·6	84·0	+1·5	75·0	+0·5	79·5	+1·0	9·0	86·0	3rd	68·5	11th
	Colombo	40	29·929	−·004	29·895	29·984	25th	29·874	10th	·110	77·1	88·2	+1·3	73·2	+0·2	80·7	+0·8	15·0	91·5	24th & 25th.	68·5	30th
	Meshed	3,104	27·697*			27·950	29th	27·31	16th	·640	37·0	50·4		32·0	+1·2	41·2		18·4	60·3	2nd & 3rd.	21·0	28th
	Teheran (*b*)	*4,002*																				
	Ispahan (*b*)	*5,817*	24·232			24·500	5th	23·940	17th	·560	29·8	50·2	−2·1	27·2	−2·0	38·7	−2·1	23·0	66·8	2nd	11·2	22nd, 23rd & 24th.
	Bushire	14	30·107	−·027	30·080	30·305	24th	29·804	16th	·501	55·9	66·3	−2·9	53·3	−2·1	59·8	−2·5	13·0	78·1	3rd	37·4	29th
	Bahrein‡	18	30·123		30·094	30·341	28th	29·934	15th	·407	64·4	71·0		59·0		65·0		12·0	78·9	4th	43·0	28th
	Jask	13	30·071	−·053	30·041	30·235	25th	29·886	16th	·349	67·8	76·2	−1·8	64·2	+0·4	70·2	−0·7	12·0	83·3	5th	57·3	30th
	Muscat	20	30·079	−·058	30·047	30·229	25th	29·908	16th	·321	72·0	80·9	+5·5	70·1	−0·6	75·5	+2·5	10·8	84·9	3rd, 4th & 5th.	65·1	30th
	Baghdad	220	30·018	+·007	30·229	30·375	28th	29·704	16th	·671	42·6	60·9	−2·5	38·2	−4·7	49·6	−3·6	22·7	80·2	4th & 6th.	18·6	22nd
	Busrah	25	30·163			30·469	28th	29·754	10th	·715		56.1		43·3		49·7		12·8	68·2	9th	29·9	28th
	Aden	94	29·981	−·014	30·008	30·078	29th	29·905	10th	·173	76·8	82·2	+0·4	75·2	+2·2	75·5	+1·3	7·0	84·8	4th	72·4	8th & 16th,
	Perim	201	29·847	+·005	29·985	29·925	29th	29·784	16th	·151	79·3	84·9	+0·6	76·2	+1·6	80·6	+1·1	8·7	86·3	5th	75·2	14th & 16th.
	Kabul		24·382		24·351	24·454	1st	24·200	19th	·254	28·3	45·1	−9·8	22·7	−5·0	33·9	−7·4	22·4	65·7	1st	10·4	31st
	Kashgar	4,255	25·700*			25·990	1st	25·260	5th	·730	19·8	38·4	+1·8	16·7	+0·3	27·6	+1·1	21·7	56·2	6th	9·7	28th
	Amini Divi	*13*									82·3	86·9	+2·0	72·1	−1·7	79·5	+0·2	14·8	89·6	3rd	68·3	11th
	Minicoy	7	29·985		29·918	30·046	25th	29·901	10th	·145	81·7	85·9	−0·1						88·4	3rd		
	Zanzibar	72	29·885	−·045	29·884	29·945	24th & 25th.	29·820	17th	·125	82·0	87·2	+1·5	79·3	−0·2	83·3	+0·7	7·9	91·0	19th	74·0	30th
	Do. Dunga	*154*	29·834		29·916	29·887	28th	29·779	16th	·108	79·7	90·8		74·1		82·5		16·7	94·0	10th & 23rd.	72·3	26th & 30th.
	Penang (*a*)	20	29·927		29·872	29·972	3rd	29·900	22nd	·072	81·7	90·6		74·5		82·6		16·1	92·0	2nd, 15th & 24th.	73·0	5 days
	Singapore (*a*)	10	29·960		29·891	30·007	25rd	29·921	31st	·086	82·6	87·4		73·5		80·5		13·9	90·5	8th	71·0	17th

Note 1.—When a query is inserted against any reading or in the returns of
,, 2.—The data from which divisional means of the figure columns Nos.

N.B.—Elevations in italics indicate barometrical determinations.
Note.—The barometric readings are not reduced to sea-level in the cases of hill or plateau stations, the elevations of which exceed 3,200 feet.
(*a*) 9 hours' observations. * Mean of 28 days.
(*b*) Aneroid uncorrected. † ,, of 25 ,,

—concluded.

India, Burma, etc., in December, 1905—concluded.

Wind Direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Wind Velocity. Mean daily velocity in miles per hour, instrumental errors uncorrected.	Normal (uncorrected).	Percentage departure from normal.	Mean velocity corrected (where possible).	Hygrometry, 8 A.M. Mean humidity at 8 A.M.	Departure from normal.	Mean vapour tension at 8 A.M.	Departure from normal.	Cloud. Mean cloud amount at 8 A.M.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December 1905.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December 1905.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
1	2		9	5				S 41° E	4·4	6·1	− 28	4·8	55	+ 9	·134	+·013	4·4	+0·3	11	1·50	+9·50	6·58	1·14	+ 5·44	6·58	1·14	+ 5·44	2·26	Murree.
1	5	8	6		3	5	3	N 87° E	0·4				60		·071		2·7					††	1·08			1·08			Kallang.
1	1	1		1				N 63° E									4·6		6			1·43	1·05	+ 0·38	1·43	1·05	+ 0·38	0·54	Poo.
7			1	7	1		2	W	4·1	1·8	+128	3·9	46	+ 6	·114	+·008	3·1	−0·8	5	1·60	+3·40	1·86	1·23	+ 0·63	1·86	1·23	+ 0·63	0·55	Simla.
				3	2			S 14° W	1·1			1·1	81		·148		3·3		3			1·96			1·96			1·08	Sarain.
15								N	4·2	4·2	0	5·0	52**	+ 3	·140**	+·005	2·4	−0·6	3	2·40	+0·60	2·23	1·16	+ 1·07	2·23	1·16	+ 1·07	1·20	Chakrata.
	1				6			S 45° W	1·8	1·3	+38	2·1	59	0	·170	−·015	1·4	−1·3	3	1·50	+1·50	1·20	0·71	+ 0·49	1·20	0·71	+ 0·49	0·51	Ranikhet.
2	3	5	3	2	1	11	1	W	7·3			6·8	51		·129		2·5		3			1·04			1·04			0·45	Muktesar.
																	4·9		5	0·57	+4·43	0·84	0·18	+ 0·66	0·84	0·18	+ 0·66	0·35	Yatung.
1	7	1	5	1	1	1		N 83° E	3·0	1·9	+58	2·7	81	+3	·208	+·011	2·3	+1·8	4	0·65	+3·35	1·27	0·23	+ 1·04	1·27	0·23	+ 1·04	0·43	Darjeeling.
		2			2			S 28° E	0·9			1·0	72		·244		3·5		0	0·70	−0·70	0	0·28	− 0·28	0	0·28	− 0·28	0	Shillong.
	7	1			1	3	1	N 7° E	2·8			2·5	71		·289		1·0		2	3·90	−1·90	1·14	0·21	+ 0·93	1·14	0·21	+ 0·93	0·74	Cherra Poonjee.
9	6	2			3	2	4	N 3° W	5·8	3·6	+61	5·9	40	− 4	·208	−·017	1·1	−0·7	0	0·50	−0·50	0·04	0·21	− 0·17	0·04	0·21	− 0·17	0·04	Mount Abu.
2	3		1		3	2	2	N 45° W	2·1	2·6	−19	2·2	60	+ 1	·245	−·060	1·7	−0·8	0	1·00	−1·00	0	0·47	− 0·47	0	0·47	− 0·47	0	Pachmarhi.
2	3		1	1				N 50° E	2·4	2·5	− 1		52	− 19	·238	−·091	2·0	−2·0	0	5·60	−5·60	0	3·91	− 3·91	0	3·91	− 3·91	0	Wellington.
	2	7	7	2	1	1		S 63° E	5·0			4·7	42		·180		2·9		0	3·30	−3·30	0	1·65	− 1·65	0	1·65	− 1·65	0	Ootacamund.
1	7	11	5	3	1		3	N 87° E	13·5				40		·177				0	8·10	−8·10	0·02	5·57	− 5·55	0·02	5·57	− 5·55	0·02	Kodaikanal.
																													XIII.—Extra India.
1	17							N 42° E	1·5				84	− 2	·798	−·033	3·2	−1·7	10			6·12	15·90	− 9·78	6·12	15·90	− 9·78	2·60	Trincomalee.
15	11	2						N 26° E	10·5	7·9	+33		80	+ 3	756	−·045	3·1	−1·0	2			0·51	6·79	− 6·28	0·51	6·79	− 6·28	0·31	Colombo.
													74		·161		3·1		2			1·00	0·70	+ 0·30	1·00	0·70	+ 0·30	0·86	Meshed.
																							1·37			1·37			Teheran.
2	1	1			1	1	1	N 18° W	2·3			3·0	73		·134		3·0		2			0·45	0·54	− 0·09	0·45	0·54	− 0·09	0·25	Ispahan.
5	4	7	6				6	N 51° E	7·0	6·6	+ 6	7·7	76	+ 2	·361	−·019	4·0	+1·7	2			1·35	3·24	− 1·89	1·35	3·24	− 1·89	1·15	Bushire.
7	1	3	1			5	14	N 33° W	7·9			6·8	78		·196		3·8		2			0·75			0·75			0·40	Bahrein.
6	10	3	2				2	N 38° E	10·0			8·6	75	+ 5	·506	+·018	6·1	+3·7	5			3·37	0·78	+ 2·59	3·37	0·78	+2·59	13·8	Jask.
					1	3	7	N 64° W	3·9			4·1	70	+ 2	·530	−·019	3·6	+1·6	0			0·09	0·26	− 0·17	0·09	0·26	−0·17	0·06	Muscat.
4	1		3	3	1	2	3	N 63° W	3·8			5·0	76		·222		1·9		1			0·23	1 64	− 1·41	0·23	1·64	− 1·41	0·16	Baghdad.
14			1	6			1	N											1			0·33			0·33			0·15	Busrah.
3	13	7	5		1			N 09° E	10·9	12.4	−12	8·8	79	+ 5	·728	+·073	4·0	−1·2	0			0·03	0·37	− 0·34	0·03	0·37	−0·34	0·03	Aden.
		25	6					S 82° E	18·8			19·0	73	− 1	·734	+·034	2·5	−1·6	0			0·01	0·08	− 0·07	0·01	0·08	−00·7	0·01	Perim.
2	3	2		1	1	6	16	N 45° W					81		·129		4·6	+1·7	7			1·84	0·29	+ 1·55	1·84	0·29	+1·55	0·38	Kabul.
	1		1		1		5	N 45° W	0·8			0·8					5·4		0			0	0·19	− 0·19	0	0·19	−0·19	0	Kashgar.
10	13						1	N 24° E					68		·757		3·2		0			0	0·32	− 0·32	0	0·32	−0·32	0	Amini Divi.
15	15		1					N 24° E	3·91			4·21	73		·767		3·5		0			0	4·66	− 4·66	0	4·66	−4·66	0	Minicoy.
12	11	3	1	2	1		1	N 30° E	6·8			6·4	84		·911		6·5		10			5·56	2·77	+ 2·79	5·56	2·77	+2·79	1·09	Zanzibar.
1	7				2			N 39° E	5·3			5·2	84		·853		6·9		10			7·55						1·41	Do. Dunga.
15	5	3		2		1	2	N 13° E	11·3								0		7			5·10			5·10			1·26	Penang.
	28	2					1	N 46° E	3·6								4·4		15			11·04			11·04			4·13	Singapore.

ition, the data for that station are not utilized in calculating the provincial departures from normal.
and 44 are derived are incomplete.

‡ Mean of 30 days.
** „ „ 26 „
†† Snow water.

Table II.—Abstract of Observations recorded at 10 A.M. and 4 P.M. at 64 Stations in India, Burma, etc., in December, 1905.

Tabl

Abstract of Observations recorded at 10 A.M. and 4 P.M. at

Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bu			
		Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to S. L. and gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean of three
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Port Blair	61	29·938	29·835	·103	29·887	+·005	29 879	85·3	77·2	8·1	88·0	70·6	17·4	82·6	83·6	80·5	0	74·0	77·6	77·7	7
Rangoon	57	·974	·859	·115	·915	−·011	·910	88·4	68·6	19·8	91·0	61·9	29·1	80·9	86·5	76·8	+ 1·2	66·3	71·3	71·7	6
Diamond Island	41	·885	·873	·112	·929	−·016	·905	83·3	73·5	9·8	86·4	71·2	15·2	79·4	81·5	77·2	+ 0·3	68·5	73·0	74·1	7
Cocos Island	119	·888	·782	·106	·835		·887	82·6	76·2	6·4	86·4	72·3	14·1	80·3	80·1	78·6		71·4	74·7	74·5	7
Akyab	20	30·040	·921	·119	·977	−·013	·940	79·0	64·2	14·8	83·9	58·1	25·8	71·8	76·8	70·4	− 1·3		68·5	70·1	
Chittagong	87	29 980	·867	·113	·923	−·015	·960	77·1	58·9	18·2	80·4	51·7	28·7	71·0	74·6	68·0	− 0·1	56·3	65·5	66·1	6
Calcutta (Alipore)	21	30·067	·910	·127	998	−·030	·965	77·9	56·4	21·5	82·9	51 7	31·2	70·8	76·6	66·1	+ 0·8	54·2	62·0	63·5	5
Saugor Island	25	·065	·940	·125	·995	−·019	·965	77·6	59·7	17·9	80·6	53·7	26·9	71·1	73·8	67·8	+ 1·0	57·5	64·2	64·9	6
False Point	21	·080	·959	·121	30·012	−·018	·975	79·0	55·9	23·1	82·4	48·6	33·8	72·2	76·2	66·6	− 0·1	54·9	63·6	65·2	6
Hazaribagh	2,007	28·022	27·927	·095	27·966	−·030	·975	71·3	50·0	21·3	78·7	46·1	32·6	66·1	69·4	59·8	− 0·7	46·1	54·7	56·5	5
Allahabad	309	29·793	29·670	·123	29·720	−·029	·994	76·9	46·6	30·3	83·1	41·6	41·5	66·2	75·2	59·7	0·1	45·0	54·5	58·1	5
Dehra Dun	2,233	27·788	27·710	·078	27·738	−·035	30·012	68·7	44·9	23·8	75·9	37·0	36·9	59·1	63·7	56·0	− 0·3	42·2	51·1	52·8	4
Roorkee	899	29·159	29 058	·101	29·098	−·024	·007	70·6	42·0	28·6	77·2	35·8	41·4	58·9	67·3	54·3	− 1·6	40·8	51·6	54·3	4
Lahore	702	·375	·294	·081	·324	−·031	·033	69·1	44·9	24·2	76·9	37·1	39·8	58·3	66 6	54·8	+ 0·2	43·5	53·1	57·7	5
Ludhiana	812	·221	·157	·054	·184	−·037	·007	68·8	46·2	22·6	75·1	41·1	34·0	58·4	67·0	55·3	0	43·7	50·5	52·4	4
Peshawar	1,110	·004	28 915	·089	28·950	−·016	·107	63·6	41·7	21·9	71·2	32·3	38·9	54·5	60·2	50·4	− 0·7	38·8	48·2	50·6	4
Jacobabad	186	·934	29·839	·095	29·882	−·014	·037	75·5	48·2	27·3	84·5	35·3	49·2	67·7	70·9	60·4	+ 1·5	45·5	58·4	60·5	5
Kurrachee	30	30·092	·979	·113	30·030	−·018	·012	82·3	60·1	22·2	87·7	47·8	39·9	74·9	79·0	70·5	+ 3·1	54·0	62·9	66·6	6
Jaipur	1,431	28·653	28·550	·103	28·590	−·020	·016	77·8	49·8	28·0	83·1	42·0	41·1	69·0	75·3	61·8	+ 0·3	43·8	54·7	57·1	5
Udaipur	1,925?	·149	·031	·118	·084		29·994	79·1	48·8	30·3	83·7	42·4	41·3	70·1	77·1	63·8		43·8§	58·3	62·7	5
Deesa	466	29·622	29·506	·116	29·558	0	·983	86·3	51·7	34·6	92·6	40·7	51·9	77·4	84·5	68·9	− 0·1	45·2	58·6	61·0	5
Jamnagar	61	30·047	·923	·124	·980		·986	84·1	56·7	27·4	93·6	46·3	47·3	76·4	81·8	69·6		50·2	60·4	62·2	5
Belgaum	2,539	27·489	27·367	·122	27·427	+·001	·881	83·6	57·7	25·9	87·8	51·4	36·4	76·3	82·5	70·1	+ 0·8	52·3	59·7	60·6	5
Sholapur	1,590	28·465	28·321	·144	28·392	−·001	·933	87·2	57·4	29·8	92·5	48·6	43·9	76·7	85·8	72·1	+ 0·8	47·2	58·7	61·3	5
Akola	930	29·141	29·002	·139	29·067	−·014	·959	84·5	48·3	36·2	90·9	41·9	49·0	73·8	82·9	65·8	− 1·0	43·2	59·2	62·7	5
Buldana	2,132	27·936	27·822	·114	27·872	−·022	·963	80·0	56·3	23·7	87·7	50·3	37·4	74·0	77·9	67·6	− 0·6	47·0	57·6	58·2	5
Khandwa	1,044	29·029	28·894	·135	28·957	−·005	·975	83·7	48·9	34·8	91·4	41·9	49·5	72·8	81·7	66·0	− 0·2	43·7	56·7	58·9	5
Nagpur	1,025	·060	·923	·137	·987	−·001	·987	82·8	52·4	30·4	88·8	47·7	41·1	71·4	81·1	66·5	− 0·2	47·1	56·7	60·7	5
Do. (Sanitary Commr.'s Office)	1,013	·063	·926	·137	·990		·980	82·4	51·5	30·9	88·5	45·4	43·1	72·8	80·8	66·3		46·9	56·8	60·7	5
Hyderabad (Deccan)	1,690	28·363	·235	·128	·296	−·008	·947	84·0	56·0	28·0	89·3	48·1	41·2	74·9	80·5	69·2	+ 0·1	51·3	61·4	63·2	5
Bombay	37	30·018	29·900	·118	29·954	+·001	·931	84·9	69·4	15·5	89·7	61·2	28·5	75·8	80·8	76·4	0	63·5	66·7	70·7	6
Karwar	44	29·981	·863	·118	·921	+·010	·898	88·1	64·1	24·0	92·3	56·8	35·5	78·7	86·1	75·3	− 0·9	60·5	67·4	71·8	6

§ Mean of 30 days.

¶ Mean of 27 days.

tations in India, Burma, etc., in December, 1905.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.	Meteorological Province.
														Total number of 10 hours and 16 hours winds from																	
From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																									%	%						
01	·884	·872	·877	+·026	85	79	76	82	+1	3·9	4·1	4·0	−1·2		3	42	3	9	1	1		3	N 54° E	N 57° E	72	66	199*	175	13·57	3·93	Port Blair	Burma Coast and Bay Islands.
24	·645	·584	·631	−·021	88	61	46	72	−6	1·5	2·8	2·2	−0·7		11	12	2	2	2		2	28	N 14° W	N 42° E	64	61	45*	108	0·02	0·02	Rangoon	
33	·729	·748	·719	+·023	77	72	69	75	+1	2·1	2·4	2·3	−1·1	1	10	23	5	3	1	1		18	N 15° E	N 54° E	60	46	228* ††	214	2·22	1·54	Diamond Island.	
11	·790	·783	·786	+·076	78	76	76	80	+6	3·5	4·0	3·8	+0·3		39	10	4	4		1		1	N 16° E	N 33° E	76	91	336		3·58	1·54	Cocos Island,†	
	·661	·655				84	71			1·1	1·1	1·1	−1·3		3	26	4				1	28	N 2° E	N 6° W	66	41	101*	58	2·27	1·33	Akyab	
24	·563	·534	·514	−·011	84	74	62	73	−3	3·1	2·8	3·0	+0·6	1	14	14	2	5	3	3	3	17	N 3° W	N 18° W	43	52	63*	67	1·89	1·61	Chittagong,	Bengal and Orissa.
37	·441	·414	·430	−·008	87	58	45	66	−5	1·5	1·5	1·5	−0·3	2	10	5	1		2	6	4	32	N 41° W	N 13° W	64	63	88*	60	0	0	Calcutta (Alipore).	
53	·515	·501	·497	+·003	87	67	60	71	−2	2·3	1·3	1·8	−0·7		34	6			6	5	3	8	N 13° W	N 2° E	56	59	184	170	0·46	0·46	Saugor Island,	
31	·484	·484	·473	−·037	94	60	53	69	−3	2·7	2·9	2·8	+0·2		13	12	7	4	6	3	3	14	N 9° E	N 30° E	34	56	137*	139	0·25	0·25	False Point.	
57	·289	·297	·289 *	+·010	73	45	41	57	+2	1·2	1·3	1·3	−0·8	1	17	4	2	4	3	1	5	25	N 27° W	N 44° W	56	58	134*	125	0·03	0·03	Hazaribagh.	Gangetic Plain and Chota Nagpur.
35	·274	·260	·280	−·051	88	42	30	58	−9	1·2	1·7	1·5	0	3	4	5	3	2	1	2	27	15	N 65° W	N 48° W	55	27	63*	72	0	0	Allahabad	
37	·283	·268	·262	−·009	79	57	46	63	0	2·8	3·5	3·2	+0·4	17	1		2	8	5	9	12	4	S 45° W	S 75° W	33	17	19**	29	1·00	0·48	Dehra Dun‡	Upper Sub-Himalayas.
44	·287	·252	·260	−·024	90	59	38	64	−1	2·1	2·2	2·2	−0·1	22	1	2	1	6		1	4	25	N 46° W	N 66° W	35	14	48	34	0·52	0·28	Roorkee	
39	·339	·365	·322	+·051	89	70	57	74	+11	3·0	3·9	3·5	+0·7	20	5		2	3	1		9	22	N 49° W	N 36° W	43	21	32*	31	0·56	0·50	Lahore	
58	·268	·206	·242	−·027	52	55	32	58	−4	2·4	2·5	2·5	−0·9	12		4		3			20	23	N 62° W	N 42° W	58	28	23*	31	0·27	0·16	Ludhiana	
57	·261	·254	·239	+·015	78	61	49	65	+4	4·4	3·9	4·2	+0·5	53	1		3	1			1	3	N 16° E	S	3	7	7*	55	2·54	1·61	Peshawar	Indus Valley and N.-W. Rajputana.
74	·370	·391	·343	+·101	80	56	53	65	+17	4·4	2·0	3·2	+0·8	24	14	3	4	1		3	5	8	N 17° W	N 13° W	32	19	57*	38	0·18	0·13	Jacobabad,	
50	·424	·495	·442	+·054	64	48	50	58	+2	2·3	2·4	2·4	+0·5	1	3	15	8	6	7	11	9	2	S 49° E	N 48° E	10	19	163*	202	0·20	0·16	Kurrachee.	
20	·253	·248	·240	−·027	60	36	27	46	−7	1·0	1·8	1·4	−1·1	4	11	3	2	8	5	7	5	17	N 51° W	N 27° W	24	27	63	70	0	0	Jaipur	East Rajputana, Central India and Gujarat.
31§	·350	·400	·322		65§	47	42	52		0·9	0·8	0·9		40	1	3	4	4	1	3	6		S 15° E		5		39*		0	0	Udaipur	
23	·249	·230	·229	−·020	56	27	19	35	−2	0·6	0·5	0·6	−1·1		9	14	11	5	5	2	7	9	N 32° E	N 46° E	29	49	183	192	0	0	Deesa	
36	·325	·302	326		60	35	27	45		0·7	0·1	0·4			7	24	16	2			6	7	N 40° E		58		184*		0	0	Jamnagar	
30	·314	·263	·300	−·069	68	34	23	42	−9	2·6	3·1	2·9	+0·4	7	1	4	20	22	3		1	1	S 70° E	N 88° E	67	70	182	290	0	0	Belgaum.†	Deccan.
03	·273	·242	·243	−·123	42	29	19	31	−16	1·1	1·1	1·1	−1·6	3	10	16	12	18		1		2	N 75° E	S 85° E	57	66	207*	190	0	0	Sholapur	
18	·316	·306	·286	−·050	63	37	27	45	−7	1·2	1·4	1·3	−0·5	8	5	15	12	8	1		1	12	N 27° E	N 60° E	32	52	70*	77	0	0	Akola	
12	·280	·247	·251	−·069	46	33	25	41	−11	0·6	0·9	0·8	−1·4		11	8	10	7	6	3	4	13	N 22° E	N 81° E	23	44	119	132	0	0	Buldana	
27	·265	·222	·244	−·078	64	32	20	42	−9	0·7	0·5	0·6	−1·1	20	7	11	11	1	4	1	1	6	N 45° E	N 63° E	31	42	28*	65	0	0	Khandwa	
32	·280	·279	·280	−·076	65	36	26	45	−9	1·0	1·2	1·1	−1·1	4	8	15	20	4	3	2	4	2	N 64° E	N 57° E	47	54	88*	72	0	0	Nagpur	
58	·268	·286	·280		70	33	27	46		0·6	1·2	0·9		15			•	1				46	N 45° W		72		20*		0	0	Do. (Sanitary Commr.'s Office).	
25	·379	·371	·365	−·075	71	43	35	52	−9	1·5	1·7	1·6	−1·0	55		6	1						N 53° E	S 78° E	11	57	47*	77	0	0	Hyderabad (Deccan).	
10	·543	·621	·583	−·056	70	60	59	66	−6	1·8	1·9	1·9	0		5	18	12				8	19	N 6° E	N 15° E	50	55	220	233	0	0	Bombay	West Coast.
84	·523	·591	·558	−·069	80	53	48	64	−6	0·4	0·7	0·6	−0·8	1	9	14	3	1		1	10	23	N 22° W	N 6° W	5	54	115	72	0	0	Karwar.	

** Mean of 28½ days.
†† „ 29½ „

* Corrected.

† Wind observations 3 less.
‡ Do. 4 less.

Tab

Abstract of Observations recorded at 10 A.M. and 4 P.M. at

	Station.	Elevation of barometer cistern above sea-level, in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean of daily mean pressures.	Departure from normal	Mean reduced to S. L., and gravity 45° Lat.	Temperature of Air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Temperature, Wet-bu Mean minimum.	Mean 10 hours.	Mean 16 hours.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Periyakulam	944	29·077	28·937	·140	29·016		29·900	87·5	62·3	25·2	89·9	55·0	34·9	78·5	85·1	74·4		60·2	67·5	69·9
	Salem	940	·112	·978	·134	·046	+·004	·927	89·6	63·4	26·2	92·5	57·9	34·6	78·6	87·6	75·6	+0·6	61·5	70·3	73·7
	Chitaldroog	2,405	27·629	27·508	·121	27·569	—·007	·897	84·4	60·6	23·8	89·2	56·5	32·7	76·2	82·0	71·7	+1·5	54·6	63·2	62·9
	Bangalore	3,021	·034	26·924	·110	26·980	—·002	·901	81·7	56·0	25·7	86·2	51·9	34·3	73·3	79·1	68·0	+0·5	54·6	61·4	61·3
	Hassan	3,091	26·974	·855	·119	·916	+·002	·892	83·5	52·6	30·9	86·7	45·3	41·4	74·9	80·8	67·2	+0·6	50·9	61·2	61·1
	Mysore	2,518	27·522	27·390	·132	27·457	—·014	·891	84·3	57·8	26·5	87·0	54·6	32·4	75·1	83·1	70·2	+0·4	55·1	62·3	62·9
	Pudukkottai	318	29·721	29·594	·127	29·658		·909‖	85·9	67·4	18·5	88·6	62·8	25·8	79·1	83·5	76·7		65·4	69·8	70·0
	Madras	22	30·039	29·925	·114	29·981	+·001	·935	83·5	67·2	16·3	86·2	59·2	27·0	79·7	80·7	74·6	—1·1	65·9	71·9	72·0
	Bellary	1,475	28·560	28·422	·138	28·490	—·021	·913	88·3	60·6	27·7	94·0	52·1	40·9	78·8	85·2	73·7	+1·2	54·5	64·7	64·5
	Waltair	*226*	29·860	29·736	·124	29·791	—·004	·962	80·9	67·5	13·4	83·0	62·9	20·1	78·6	77·8	73·5	—0·6	60·9	65·6	66·8
Baluchistan.	Quetta	5,502	24·731	24·660	·071	24·684	—·030	24·644	52·3	32·6	19·7	65·0	20·8	44·2	44·9	47·9	41·6	—0·7	31·2	39·5	41·0
India.	Leh	11,503	19·684	19·597	·087	19·635	—·064	19·603	32·3	12·2	20·1	40·0	—8·1	48·1	23·4	28·8	20·4	—1·7	64 9‡	19·8	24·4
	Srinagar	5,204	25·030	24·948	·082	24·981	—·040	24·952	43·8	30·3	13·5	55·5	23·1	32·4	36·4	41·7	35·2	—1·1	28·9	34·7	39·3
	Sarain		23·205	23·139	·066	23·161			48·8	30 3	18·5	58·0	20·5	37·5	42·5	39·2	38·7			35·7	34·4
	Kalabagh																				
	Simla (Ridge)	7,224	·154	·100	·054	·115	—·042	23·077	48·7	37·8	10·9	55·2	25·4	29·8	44·9	45·0	42·4	— 1·0	32·1	36·4	37·9
	Chakrata	7,022	·326	·281	·045	·295	—·044	·255	54·8§	39·1‖	15·7	60·8	29·0	31·8	47·3‖	46·6§	46·2‖	0	32·3	37·9‖	38·5§
	Ranikhet	6,069	24·166	24·094	·072	24·118	—·033	24·077	55·2	41·3	13·9	63·3	28·1	35·2	49·8	50·0	47·3	— 1·9	36·8	42·3	42·2
	Mukteswar	7,600	22·871	22·799	·072	22·823		22·781	52·3	37·4	14·9	60·7	24·2	36·5	45·8	48·2	43 9		31·7	37·6	40·1
	Katmandu	4,388	25·755	25·639	·116	25·694	¶ —·016	25·648	64·3	37·6	26·7	67·3	32·2	35·1	49·1	59·9	50·1	—2·5	37·4	45·9	52·1
	Darjeeling	7,376	23·033	22·996	·037	23·012	—·046	22·966	47·2	36·2	11·0	55·4	29·1	26·3	43·5	45·4	40·8	—1·0	34·8	41·0	43·1
Stations, C, India.	Mount Abu	3,945	26·178	26·105	·073	26·133	—·010	26·084	66·3	53·7	12·6	73·6	40·6	33·0	63·2	64·0	55·3	—4·6	44·8	49·1	49·7
	Pachmarhi	3,526	·598	·507	·091	·546	—·004	·493	70·4	42·2	28·2	76·0	35·3	40·7	64·8	66·5	55·4	—1·7	39·2	50·9	53·3
	Chikalda	3,642	·473	·375	·098	·417	—·034	·361	73·2	53·2	20·0	77·8	47·2	30·6	66·3	70·5	62·3	—0·6	45·8	52·5	54·4
Stations, B, India.	Kodaikanal	7,688	22·878	22·807	·071	22·842		22·778	66·8	47·5	19·3	73·3	41·7	31·6	62·4	60·2	55·0		38·7	48·5	52·4
	Ootacamund	7,329	23·082	23·011	·071	23·043		·979	66·8	43·1	23·7	70·7	35·6	35·1	63·0	60·7	54·1		37·2	48·6	50·6
	Dodabetta	8,539?	22·069	22·015	·054	22·036		21·973	60·0	45·9	14·1	70·2	41·7	28·5	56·1	54·4	52·2		38·8	43·5	45·8
Extra India.	Aden	94	29·992	29·889	·103	29·943	—·010	29·970	82·1	75·2	6·9	84·7	72·3	12·4	79·3	81·1	77·8	+1·2	71·1	73·5	72·7
	Perim	201	·851	·743	·108	·799	—·003	·934	85·0	76·2	8·8	86·3	75·2	11·1	81·6	82·4	79·8	+1·1	67·4	73·0	73·2
	Minicoy	7	·993	·917	·076	·959		·892	85·9			88·4			84·1	83·3				76·0	75·5
	Zanzibar	72	·886	·763	·123	·829	—·054	·826	87·2	79·3	7·9	91·0	74·0	17·0		86·6	82·5	+0·6	76·1		79·6
	Port Victoria (Seychelles).	15	·951	·864	·087	·918	¶ —·018	·857	83·2	77·7	5·5	85·2	73·6	11·6	80·9	81·6	79·3	+1·4¶	73·3	76·6	77·2
	Mauritius (Pamplemousses).	181				·783	—·039	·910				87·8	62·6	25·2			77·2	—0·8			

N.B.—Elevations in italics indicate barometrical determinations. ¶ Departures from old norm

‡ Mean of 30 days. § Mean of 27 days. ‖ Mean of 26 days. NOTE.—The barometric readings are not reduced to sea-level in the

concluded.

ions in India, Burma, etc., in December, 1905—concluded.

Vapour Tension.				Humidity.					Cloud.				Wind direction.										Wind steadiness.		Wind velocity.		Rainfall.		Station.	Meteorological Province.
													Total number of 10 hours and 16 hours winds from																	
Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean of daily means.	Departure from normal.	Mean 10 hours.	Mean 16 hours.	Mean of two previous columns.	Departure from normal.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																								%	%						
·531	·530	·520		88	54	44	60		2·9	4·3	3·6		7	3	2	8	15	13	5	3	6	S 26° E		34		56*		0·06	0·05	Periyakulam	South India.
·635	·651	·623	—·012	90	65	50	70	− 3	3·3	4·0	3·7	−1·0	12	3	12	29	1	1		4		N 74° E	N 75° E	58	52	99*	94	0	0	Salem	
·421	·340	·388	—·055	67	46	31	50	− 8	2·0	2·0	2·0	−1·2	2	4	12	27	14				3	N 84° E	N 84° E	71	83	138*	187	0	0	Chitaldroog	
·405	·340	·400	—·066	91	50	34	60	−10	2·1	2·3	2·5			3	20	31	4		1		3	N 71° E	N 72° E	77	81	176*	132	0·12	0·12	Bangalore	
·389	·316	·369	—·079	89	45	30	57	− 8	2·6	3·9	3·3	−1·1	3	2	28	20	9					N 72° E	N 75° E	79	82	59*	82	0	0	Hassan	
·409	·326	·394	—·082	82	47	29	55	− 7	4·9	4·9	4·9	+0·3		3	17	26	13	1		1	1	N 83° E	N 78° E	74	82	228*	247	0	0	Mysore	
·604	·556	·589		90	60	48	66		5·3	5·5	5·4			21	36	4					1	N 31° E		89		206*		0	0	Pudukkottai	
·683	·672	·679	—·050	93	67	61	77	− 5	3·9	3·4	3·7	−1·8		22	28	6	2	1			3	N 31° E	N 24° E	78	81	140	175	0·40	0·33	Madras	
·441	·353	·392	—·072	66	45	29	49	− 9	2·6	2·5	2·6	−1·4	4	3	15	23	10	4			3	N 83° E	S 85° E	63	71	70*	79	0	0	Bellary	
·464	·519	·497	—·043	67	47	54	58	− 6	3·4	3·3	3·4	+0·6		3	26	15	4	8	5	1		N 77° E	N 83° E	52	50	173*		0	0	Waltair	
																															Hill Station, Baluchistan.
·191	·139	·187	+·029	88	65	58	74	+13	4·3	4·4	4·4	+1·2	31	3			6	4	4	7	7	S 73° W	N 63° W	18	24	‡ 37*	55	3·60	0·96	Quetta	
·082	·100	·080	+·006	68‡	64	63	69	+ 8	5·9	7·4	6·7	+0·8			5	11	8	18	16	3	1	S 10° E	S 18° W	50	40	40‡	31	0·24	0·17	Leh	Hill Stations, Northern India.
·185	·221	·177	+·001	86	85	82	†† 84	+ 3	7·5	7·8	7·7	+2·6	17	6	8	2	4	2	6	4	13	N 30° W	S 36° E	23	3	43*	62	3·09	0·55	Srinagar	
	·141	·151			54	65			4·0	4·1	4·1		40		1		1	11	7	2		S 20° W		26		26*		1·96†	1·08†	Sarain Kalabagh	
·130	·158	·143	+·004	57	45	54	55	+ 7	4·4	5·2	4·8	+0·8	19	10	2		2	26			3	S 3° E	S 12° E	23	7	94*	98	1·86	0·55	Simla	
·133‖	·151§	·139	—·015	52‖	43‖	48§	51	− 3	2·7	3·8	3·3	+0·2	21	10			3	28				S 6° E	S 51° W	32	16	119*	120	2·23	1·20	(Ridge), Chakrata	
·196	·191	·192	—·011	68	56	54	62	+ 1	1·8	2·7	2·3	−0·3	41						11	8	2	S 70° W	S 57° W	29	22	49*	41	1·20	0·51	Ranikhet	
·145	·161	·148		57	49	50	55		2·7	4·0	3·4		8		1	3	7	5	8	30		S 61° W		50		167*		1·04	0·45	Muktesar	
·275	·301	·272	+·004	98	78	57	81	+ 6	1·9	2·1	2·0	−0·6	8	1	1	14	1	2	3	29	3	S 87° W	N 72° W	29	43	15 **	22	0	0	Katmandu	
·244	·259	·236	+·029	88	83	85	88	+ 8	5·7	6·5	6·1	+1·7	23		3	1	6		12	9	8	S 74° W	N 48° W	26	5	66*	70	1·27	0·43	Darjeeling	
·192	·197	·204	—·017	47	33	33	46	− 2	1·0	0·7	0·9	−0·9		13	10	2	8		5	9	15	N 22° W	N	37	10	141*	98	0·04	0·04	Mount Abu	Hill Stations, C. India.
·216	·236	·226	—·056	75	35	33	55	− 6	0·7	1·2	1·0	−1·2	13	6	10	7	5	1	8	2	10	N 17° E	N 27° E	16	20	49*	65	0	0	Pachmarhi	
·240	·240	·241	−·066	55	37	32	48	− 9	0·9	1·0	1·0	−1·3	21	15	2		1	1	15		7	N 56° W	S 75° W	26	7	180*	120	0	0	Chikalda	
·206	·319	·226		46	39	63	49		2·9	4·6	3·8		1	1	16	18	9	6	2	2	7	N 83° E		45		324		0·02	0·02	Kodaikanal.	Hill Stations, S. India.
·196	·269	·214		59	34	51	47		2·1	2·8	2·5		3	8	14	23	4	8		1	1	N 77° E		56		112*		0	0	Ootacamund	
·162	·223	·181		52	36	52	47		2·5	3·2	2·9			8	21	14	6	6	2	3	2	N 65° E		48		388		0	0	Dodabetta,	
·742	·690	·723	+·082	81	74	65	74	+ 4	3·3	0·9	2·1	−1·3			13	9	26	2	9	1	2	S 60° E	S 87° E	52	71	‡‡ 213*	310	0·03	0·03	Aden	Extra India.
·698	·698	·661	—·019	62	64	63	64	− 5	0·5	0·1	0·3	¶ −1·3					33	29				S 24° E	N 89° E	92	75	458*	463	0·01	0·01	Perim	
·788	·774				67	68			3·7	3·7	3·7			31	30	1						N 23° E		92		100*		0	0	Minicoy	
	·920			86		73				4·9				2	11	7	3	5		1	2	N 74° E	N 35° E	48	65	152*	151	5·56	1·09	Zanzibar§§	
·868	·882	·864	+·032	80	82	81	83	0	7·9	8·7	8·3	¶ +1·5	10	13	2				1	6	30	N 37° W	N 48° W	71	54	182	156	25·71	4·30	Port Victoria (Seychelles)	
		·725	+·019				78	+ 7			6·9	+0·8										N 80° E	N 89° E			192	259	8·73	3·41	Mauritius (Pamplemousses).	

†† Mean of three previous columns.
‡‡ Mean of 29¼ days.
** Mean of 30¼ days.
* Corrected.
§§ Wind observations 31 less.
† Snow water.

f hill or plateau stations, the elevations of which exceed 3,200 feet.

G. I. C P. O.—No. 550 Meteo.—14-6-06.—385.—

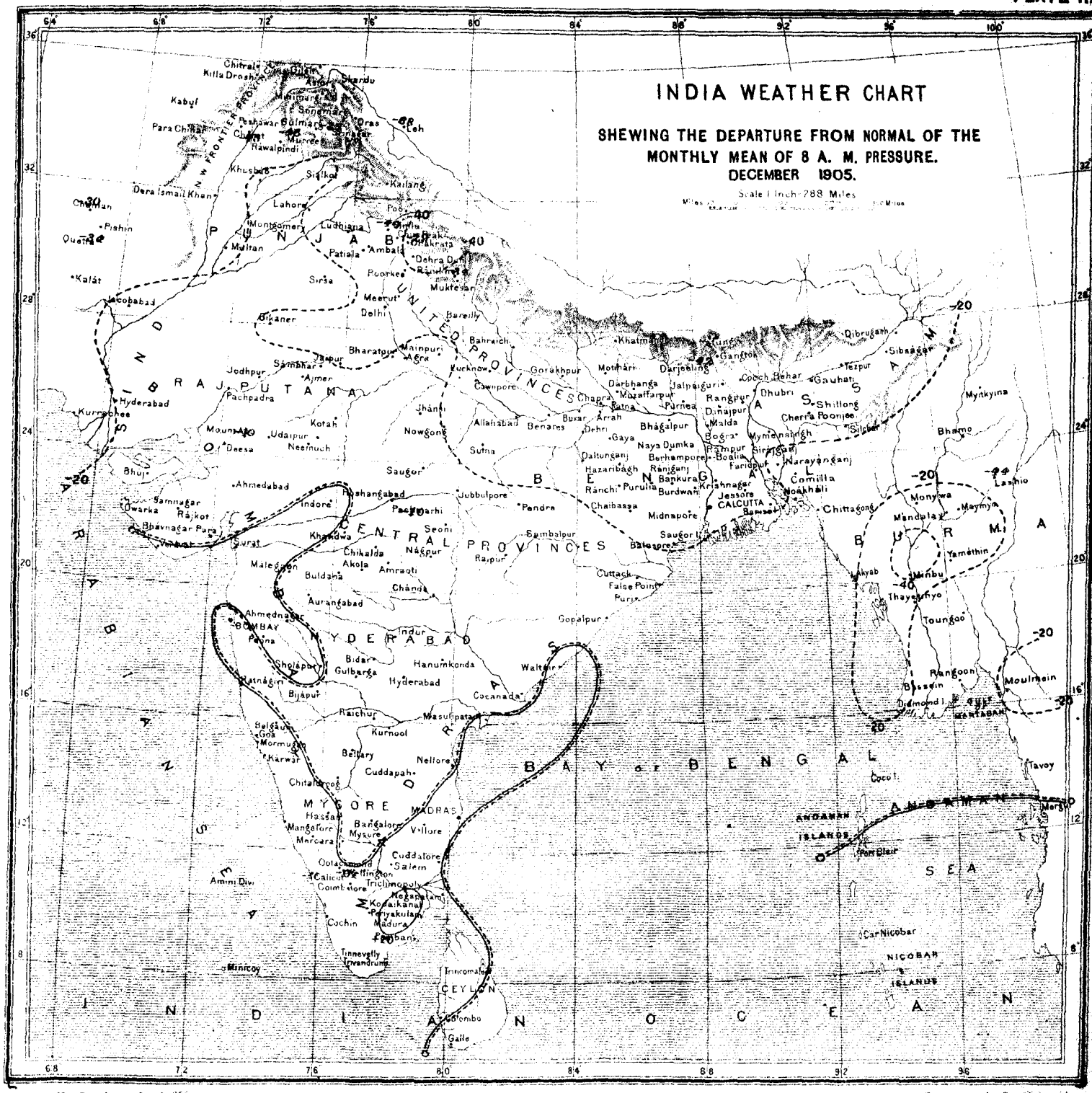
No. 9, W., I.—Jan. 05.—5,600

LITHO. BY S. S. MUNDLE, Zinco. S. I. O., Calcutta

The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the charts of the Bay of Bengal.

The mean 8 a.m. wind directions of the month are shewn by means of arrows flying with the wind, and are calculated by means of Lambert's formula applied to the winds as given in Table I of the 8 a.m. observations. The mean wind directions for the hill stations are indicated by broken arrows to distinguish them from the wind arrows for the plain stations. The mean velocity of the winds during the month is shewn by the following notation:—

Velocity of	0 to 2	miles per hour	...	one	feather	added	to	the	wind	arrow.
,, ,,	2 to 5	,, ,, ,,	...	two	feathers	,,	,,	,,	,,	
,, ,,	5 to 10	,, ,, ,,	...	three	,,	,,	,,	,,	,,	
,, ,,	10 to 20	,, ,, ,,	...	four	,,	,,	,,	,,	,,	
	over 20	,, ,, ,,	...	five	,,	,,	,,	,,	,,	



M. O. W., I.—Jan. 06.—5,600.

The chart shows the departure from normal of the mean during the month of 8 a.m. pressure by means of lines drawn for equal amounts of departure. The numbers are given in thousandths of an inch, 20 representing ·020″ or two hundredths of an inch, &c. Continuous lines indicate that the pressure was in excess by amounts indicated by the numbers attached to the lines, and broken or dotted lines that it was in defect by amounts indicated by the numbers attached to the lines. Two parallel lines near to each other, one continuous and the other broken or dotted, represent the line of no departure, the dotted line facing the area of deficient pressure or negative departures.

PLATE III.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MAXIMUM TEMPERATURE.

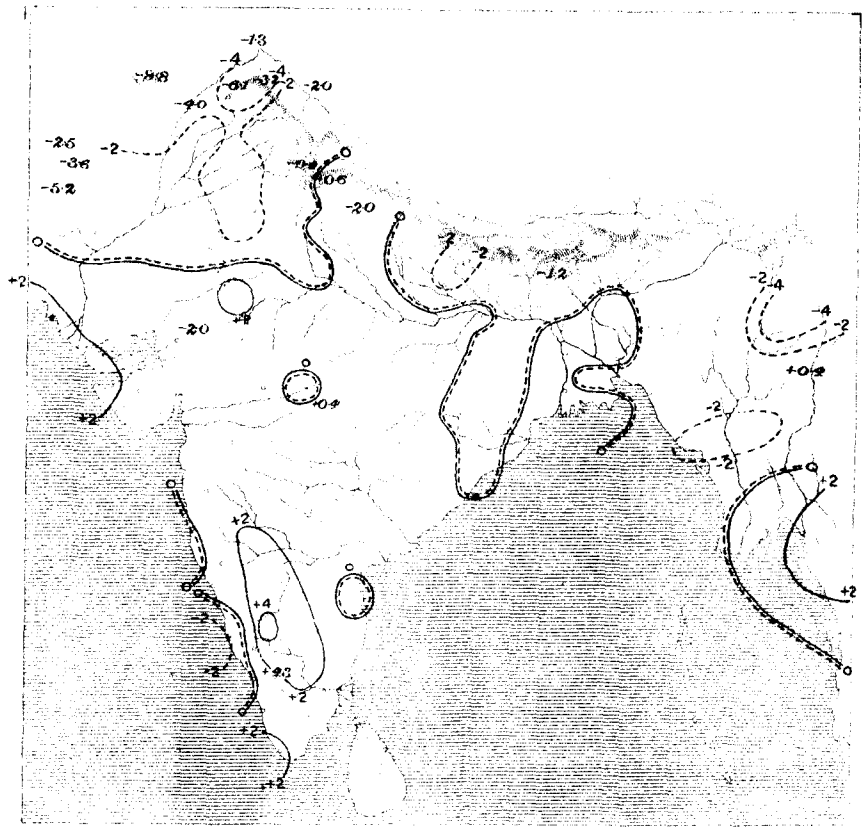
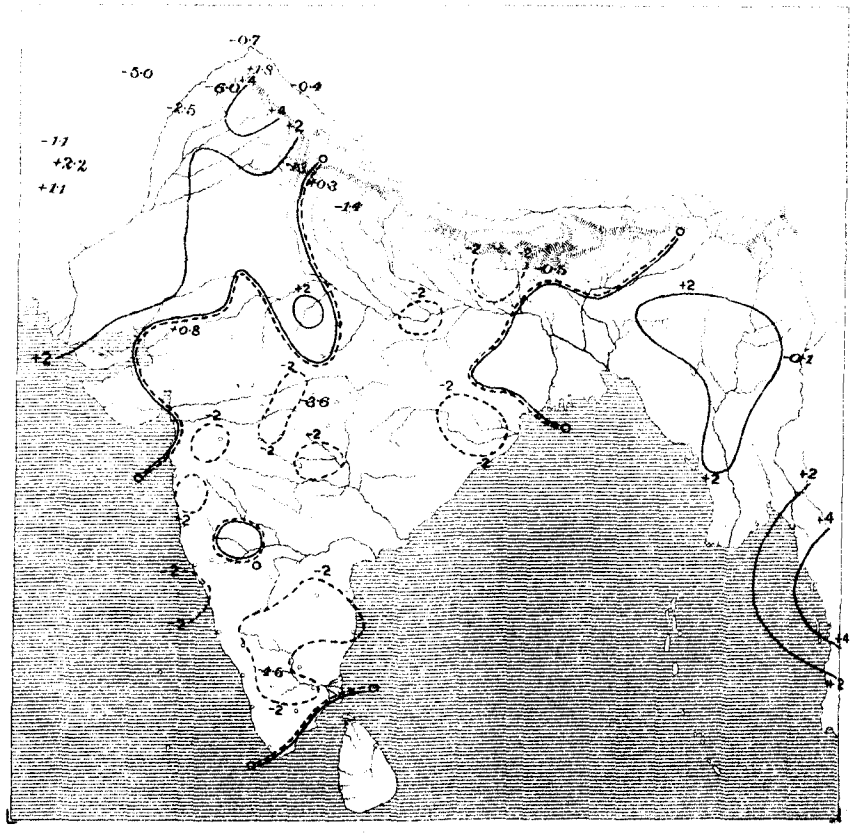


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S.B.MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

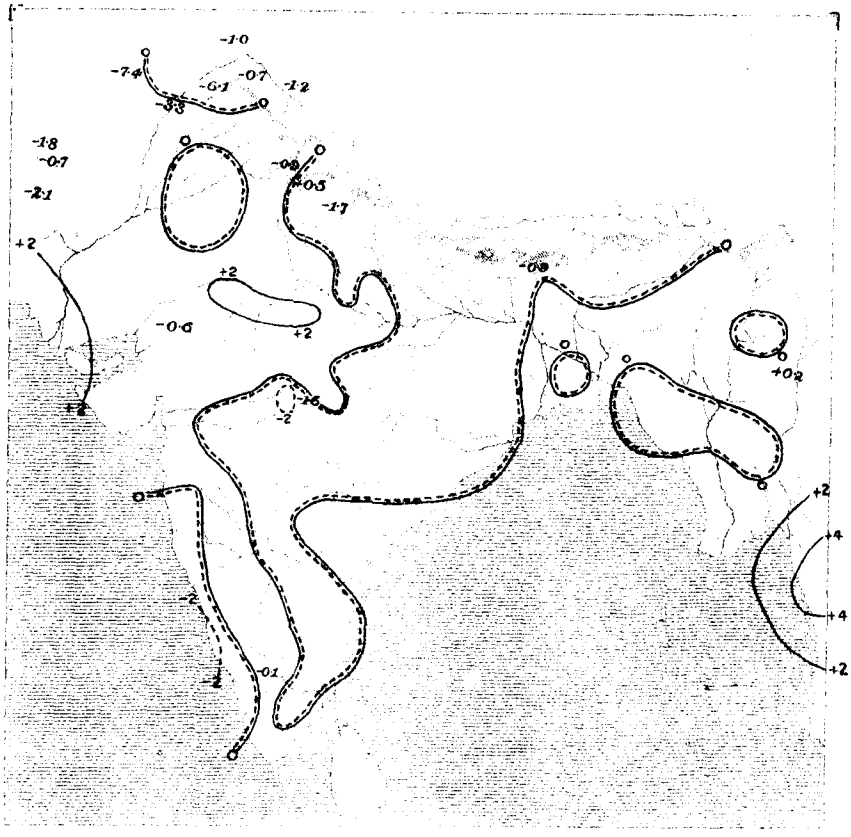
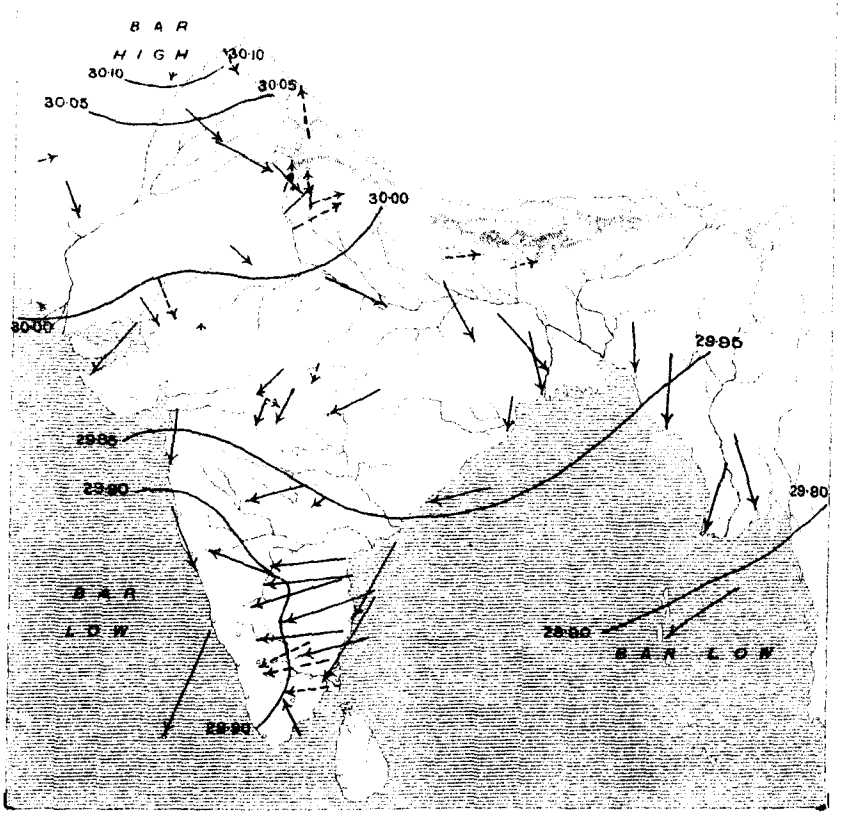


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S. B. MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 A. M.

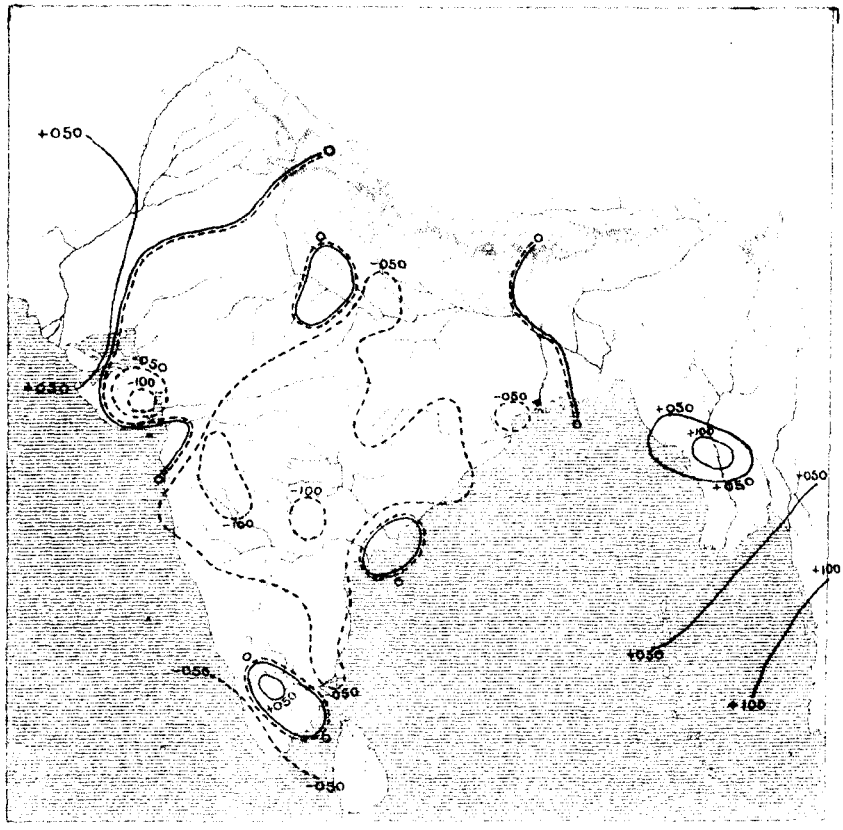


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 A. M.

LITHO. BY S.S.MUNDLE.

CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF CLOUD
AMOUNT AT 8 A. M.

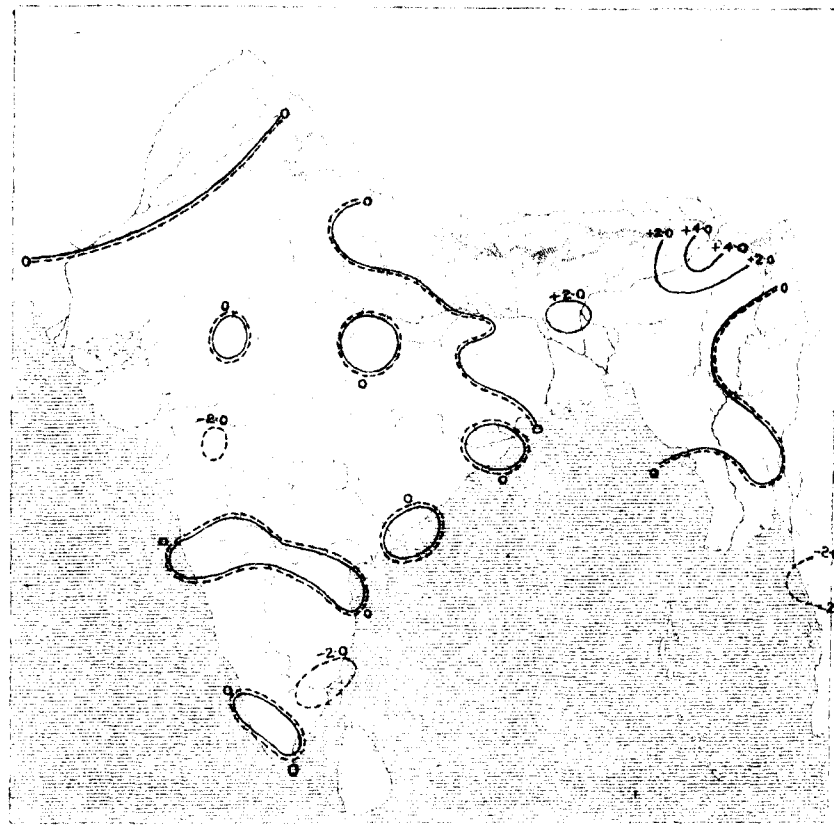
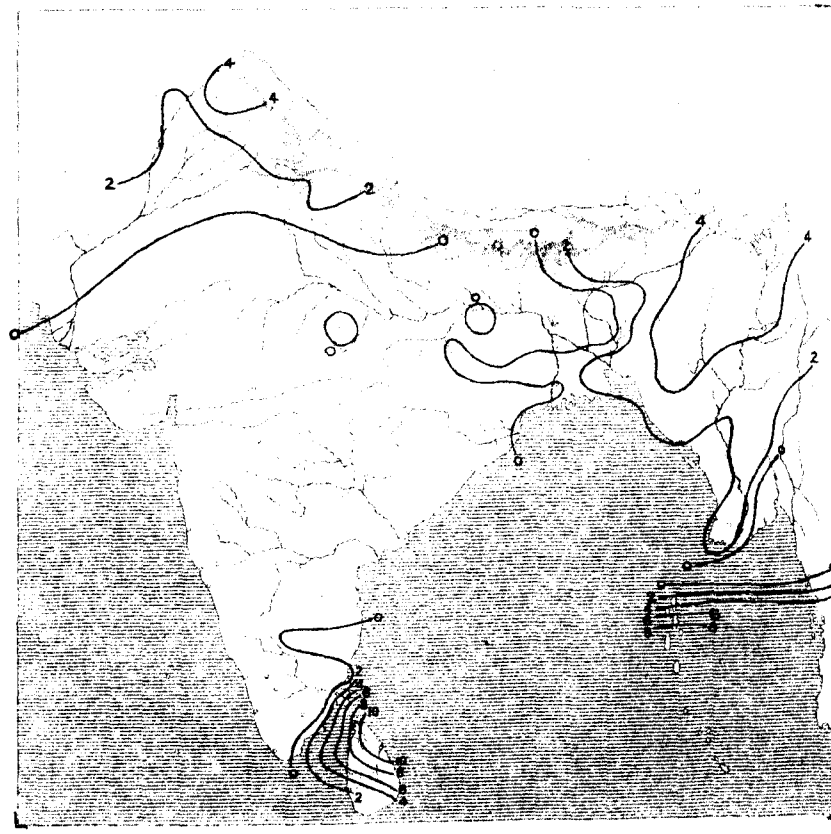
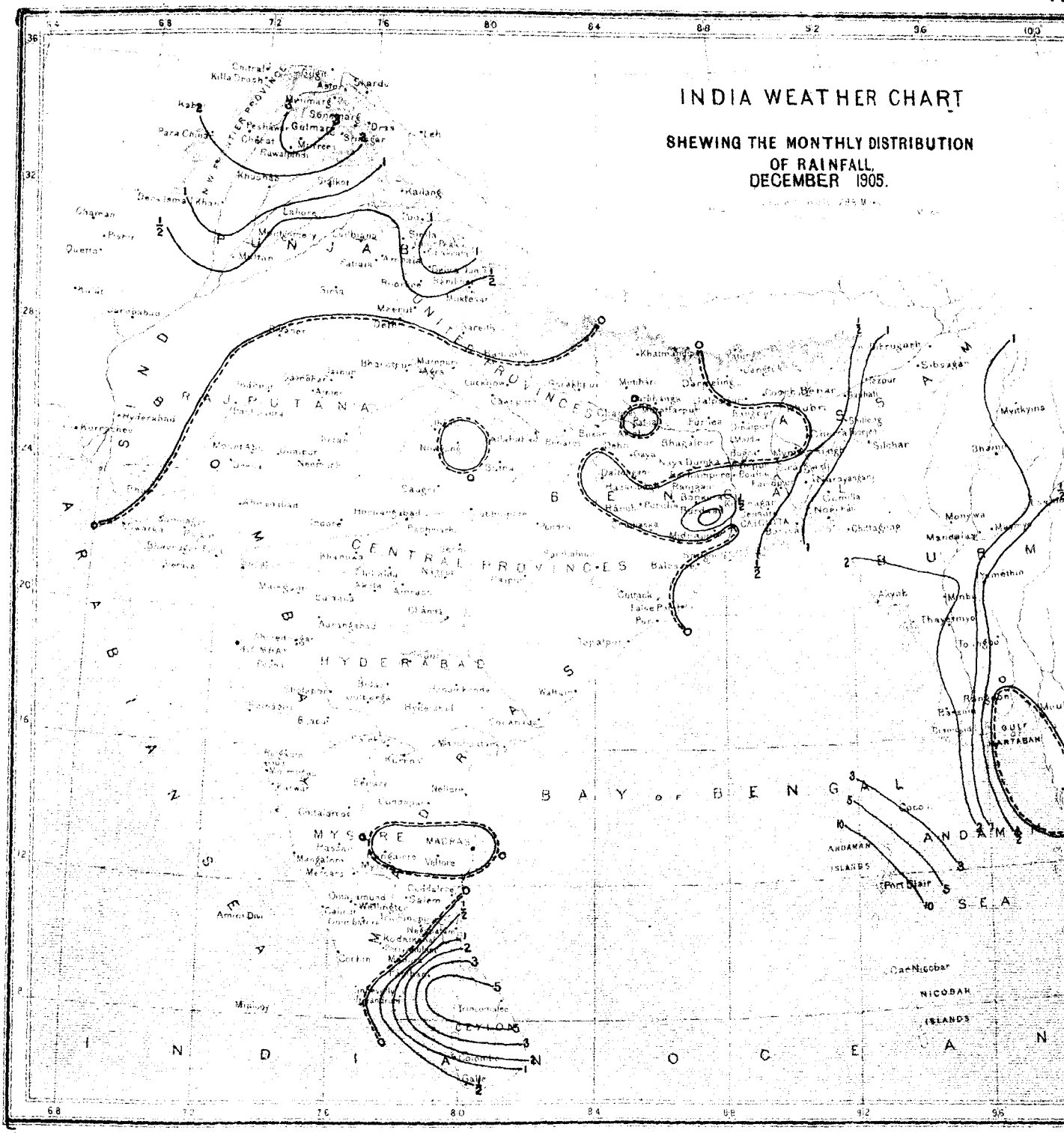


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE
MONTH ON WHICH RAINFALL EQUALLED OR
EXCEEDED 0·10 INCH.



LITHO. BY S. S. MUNDLE.



The chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The used in the preparation of this chart are the rainfall returns of all the observatories in India except those at the hill stations over 3,500 in elevation (177 in number). The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch those where it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall.

LITHO. BY S. B. MUNDLE.

The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character. The numbers in bracket on the chart give the average over the division of the normal monthly rainfall; the numbers above these give the departure from these normals of the average actual rainfall over the division. The name of the district can be ascertained by referring in the following list to the number given in each district in red figures

1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. United Provinces, East
19. South Oudh
20. North do.
21. U. Provs., Central
22. Do., West
23. Do., East Submontane
24. Do., West do.
25. Do., Hills
26. South East Punjab
27. South do.
28. Central do.
29. Punjab, Submontane
30. Do., Hills
31. West Punjab
32. North West Frontier Province
33. Malabar
33a Travancore
34. Madras, South Central
35. Coorg
36. Mysore
37. Konkan
38. Bombay Deccan
39. Hyderabad, North
40. Khandesh
41. Berar
42. Central Provinces, West
43. Do., Central
44. Do., East
45. Gujarat, East
46. Kathiawar and Cutch
47. Sind
48. Baluchistan Hills
49. Central India, West
49a Do., East
50. Rajputana, East
51. Do., West
52. Madras, East Coast, North
53. Hyderabad, South
54. Madras, Central
55. Do., East Coast, Central
56. Do., East Coast, South
57. Do., South