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GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

THE INDIA WEATHER REVIEW

FOR THE YEAR

1916

Published by Authority of the Government of India

UNDER THE DIRECTION OF

GILBERT T. WALKER, C.S.I., M.A., Sc.D., F.R.S.,

Director General of Observatories

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ANNUAL SUMMARY, 1916.

INTRODUCTION.

THE present account of the meteorology of 1916 is based on revised data and is intended primarily for scientific reference; for those needing prompt information the Annual Supplement to the India Daily Weather Report was issued on January 2, 1917.

Several systems of territorial division of India have come into use from time to time for meteorological purposes, each having been adopted to meet the needs of some particular set of data. A certain amount of confusion had been found to result from the consequent want of uniformity of boundaries, and, with a view of obviating the inconvenience caused, the Government of India in 1907 authorised the adoption of the following system of division :—

Chief political divisions.	Sub-divisions.
	Bay Islands.
Burma	Lower Burma.
	Upper Burma.
Eastern Bengal and Assam	Assam.
	Eastern Bengal.
Bengal	Bengal.
	Orissa.
	Chota Nagpur.
	Bihar.
United Provinces	United Provinces, East.
	United Provinces, West.
Punjab	Punjab, East and North.
	Punjab, South-west.
North-West Frontier Province	North-West Frontier Province.
	Baluchistan.
Sind	Sind.
Rajputana	Rajputana, West.
	Rajputana, East.
Bombay	Gujarat.
	Konkan.
	Bombay Deccan.
Central India	Central India, West.
	Central India, East.
Central Provinces	Berar.
	Central Provinces, West.
	Central Provinces, East.
Hyderabad	Hyderabad, North.
	Hyderabad, South.
Mysore	Mysore.
Madras	Malabar.
	Madras, Southeast.
	Madras Deccan.
	Madras Coast, North.

From the 1st April 1912 a fresh territorial division of Eastern Bengal and Assam and Bengal was sanctioned by which Eastern Bengal was restored to Bengal, while Orissa, Chota Nagpur and Bihar were constituted into a separate province under the name of Bihar and Orissa. The present arrangement is shewn below :—

Chief political divisions.	Sub-divisions.
Assam	Assam.
Bengal	Bengal.
Bihar and Orissa	Orissa.
	Chota Nagpur.
	Bihar.

In the present review the new division has been adopted throughout.

The system of division is illustrated in Plate I at the end of this Annual Summary, and its relationship to the old system of divisions which was adopted for the tables of the 'Geographical Summary,' given in former issues can be obtained by reference to pages 9 to 14 of Volume III of the Indian Meteorological Memoirs.

The data of Table B in the monthly reviews and in the present annual part are obtained, with a few exceptions, from the observations telegraphed daily to Simla for publication in the Daily Weather Report. The maximum and minimum temperature data of the second class observatories derived from these telegraphic reports and given in Table B, occasionally differ to some slight extent from the corresponding means in Table A. The chief reason for this is that in Table B the daily or 24-hour period is assumed to end at 8 hrs. and in Table A at midnight [except for rainfall the period of which ends at 8 hours], and hence the maximum temperature in Table B for any month of 31 days at any station gives the mean for 31 periods of 24 hours ending at 8 hours of the 31st and in Table A for the same number of 24 hour periods ending at midnight on the 31st, and virtually, therefore, of a monthly period one day in advance of the former. Similarly for months of 28, 29 or 30 days.

SOLAR AND MAGNETIC ACTIVITY.

Report from Kodaikanal Observatory.

Observations.

(*a*) Solar Physics.

Summary of solar observations.—The following table gives the number of observations made at Kodaikanal during each month of the year :—

Table 1.

—	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
A . . .	31	28	31	30	30	24	30	30	26	26	28	28	342
B . . .	3	2	3	2	6	...	1	...	...	...	1	3	21
C . . .	31	27	31	28	29	18	26	26	23	23	26	27	315
D . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
E . . .	31	27	31	29	29	20	28	28	25	26	28	27	329

A—spots and faculae observed. B—spot spectrum observed. C—visual spectroscopic observations made. D—photoheliograms taken. E—spectroheliograms taken.

The year was rather more favourable than usual for spectroscopic observations and prominence records.

At Srinagar 725 spectroheliograms were obtained on 223 days from January 1st to October 25th, when the instruments were dismantled. The conditions here were extremely favourable from the beginning of May to the end of October.

Summary of Sunspot and Prominence Observations.

Sunspots.—The following table shows the monthly numbers of new groups observed at Kodaikanal, the mean daily numbers of spots visible and the distribution between the northern and southern hemispheres :—

TABLE 2.

—	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
New groups .	20	26	25	23	22	22	20	19	24	24	22	31	278
Daily numbers	3·4	4·4	3·9	3·9	4·8	3·8	4·0	2·3	2·8	3·6	4·8	5·0	3·9
North . .	12	11	14	10	11	12	14	15	16	15	12	16	158
South . .	8	15	11	13	11	10	6	4	8	9	10	15	120
Equator . .	...	...	...	...	...	...	...	...	...	...	...	...	...

The increase in the number of new groups amounts to 40 per cent compared with the previous year but the rate of increase has diminished.

There were ten days in 1915 and five in 1916 on which no spots were recorded.

There was a preponderance of spots in the northern hemisphere as in 1915, and the mean latitude was 16°·0 for northern spots and 18°·4 for southern.

Disturbances in the spot spectrum have been recorded in a large number of cases, as was to be expected in this part of the solar cycle. There were in the whole year 489 cases of C reversals, 51 of D_3 darkenings and 145 displacements of the C line.

Prominences.—The mean daily areas of prominences in square minutes of arc, derived from photographic records made at Kodaikanal and at Srinagar, are as follows:—

TABLE 3.

—	North.	South.	Total.
1916—January to June	2·06	1·77	3·83
„ July to December ...	1·98	1·65	3·58

The corresponding totals for the year 1915 were, for the first six months 5·27, and for the second six months 5·29. A reduction of area amounting to about 30 per cent is thus shown.

The mean daily number of prominences recorded during the year is 18·9, a reduction compared with 1915 of under 1 per cent.

The distribution east and west of the sun's axis is interesting as indicating a return to the condition of eastern preponderance. There is only a slight excess of east over west in prominence areas and numbers, the percentage east being 50·6 and 50·5 respectively derived from a total of 6129 prominences. Prominences projected on the disc as absorption markings give percentages east of the central meridian as 52·2 for areas and 51·5 for numbers, derived from 2618 prominence markings. D_3 darkenings also preponderate east of the central meridian and of 489 bright reversals of H*a* on the disc 54·3 per cent were east. Only fifty-eight metallic prominences were recorded during the year and these were more frequent on the west limb than on the east. 438 displacements of H*a* were observed in the chromosphere and prominences and of these 55 per cent were on the east limb.

On May 26 a very complete record was obtained at Kodaikanal and at Srinagar of an eruptive prominence which rose to the extraordinary height of over 18′, or about half a million miles above the sun—a description of this prominence will be given in Bulletin No. LV.

J. EVERSHED,

Director,

Kodaikanal and Madras Observatories.

Report from the Bombay Observatory.

During the year there were 120 calm days, 233 days of small, 11 days of moderate and 2 days of great disturbance as against 133 calm days, 217 days of small, 13 days of moderate and 2 days of great disturbance in the previous year. On the whole hence the conditions in regard to the intensity and progress of magnetic activity appear to remain practically the same during the two years, indicating a near approach to the maximum of the 11-year cycle.

The following table, prepared in accordance with the suggestions made by the International Commission, Terrestrial Magnetism, represents the magnetic character of each day during the year:—

TABLE 4.—*Representing the magnetic character of the day during the year 1916.*

1916.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 . .	0	0	0	1	1	1	2	0	0	1	0	1
2 . .	0	0	1	0	1	0	1	2	1	1	1	1
3 . .	0	0	1	0	1	0	1	1	1	1	1	1
4 . .	1	0	1	0	0	0	1	1	1	0	1	1
5 . .	0	1	1	0	1	0	1	1	1	1	1	0
6 . .	1	0	1	1	1	1	1	1	1	2	1	0
7 . .	0	0	1	1	1	1	0	1	1	1	1	1
8 . .	0	1	2	1	0	1	1	1	1	1	1	0
9 . .	1	1	2	1	1	1	1	1	1	1	1	1
10 . .	1	0	2	0	1	0	1	0	1	1	1	0
11 . .	2	0	1	0	1	1	1	1	1	1	1	0
12 . .	2	1	1	0	1	1	1	1	1	1	1	1
13 . .	1	1	0	0	0	1	0	0	1	1	1	1
14 . .	0	1	0	1	0	0	0	1	0	1	1	1
15 . .	0	1	0	1	0	0	0	0	1	0	1	1
16 . .	0	0	1	1	1	0	0	0	1	0	1	1
17 . .	0	1	1	1	1	1	1	0	1	0	0	1
18 . .	0	1	1	1	0	1	1	0	1	0	1	1
19 . .	0	1	1	1	1	1	1	1	0	1	1	0
20 . .	1	1	1	1	1	1	0	1	0	1	1	0
21 . .	1	0	1	0	1	1	0	1	0	1	0	0
22 . .	1	1	1	1	1	1	0	1	1	1	1	0
23 . .	1	1	0	0	1	1	1	1	1	1	1	0
24 . .	1	1	1	0	1	0	0	1	1	1	0	1
25 . .	1	0	1	2	1	1	0	0	1	1	1	1
26 . .	1	1	1	1	1	1	0	2	1	1	1	0
27 . .	0	1	0	1	0	1	0	2	1	0	1	1
28 . .	1	0	1	1	1	1	0	1	0	0	1	1
29 . .	1	0	2	2	1	1	0	1	0	1	1	1
30 . .	0	...	1	1	1	1	1	1	2	1	1	1
31 . .	0	...	1	...	1	...	1	1	...	0	...	1
Sum . .	18	16	29	21	24	21	18	26	24	24	26	20

In the above table 0 represents calm day.
" 1 " small disturbance.
" 2 " larger disturbance.

Up to date the day was reckoned from 0 h to 0 h of Bombay local time. In the data published above the day is reckoned from 4 h 51 m to 4 h 51 m of local time corresponding to 0 h to 0 h of Greenwich Mean Time.

The following is a list of days during the year 1916 selected as "quiet" from the Alibag records, as suitable locally for the determination of the magnetic diurnal inequalities:—

TABLE 5.

Months.	Selected quiet days.				
1916.					
January	1	8	18	19	30
February	3	7	11	16	29
March	2	13	16	23	27
April	5	11	13	23	24
May	4	14	15	18	27
June	2	5	16	24	29
July	7	13	15	20	25
August	4	11	16	17	25
September	1	9	19	20	29
October	4	15	16	17	27
November	1	11	17	23	24
December	6	10	11	22	23

The mean values of the magnetic elements obtained from all days in the year 1916 are as follows:—

Mean Easterly Declination	0° 36′ 47″
„ Horizontal Force	0·36867 C.G.S.
„ Vertical Force	0·16790 C.G.S.
„ Inclination	24° 29′·1

The following table gives the corrected monthly mean values of the several magnetic elements and of the summed ranges of the Horizontal Force.

TABLE 6.

Months.	Absolute values of				Horizontal Force.	
	Horizontal Force.	Vertical Force.	Inclination.	Easterly Declination.	Summed ranges.	Summed ranges (Smoothed.)
1916	C. G. S.	C. G. S.	° ′	° ′ ″	C. G. S.	C. G. S.
January	0·36872	0·16746	24 25·5	0 38 33	0·00183	0·00302
February	0·36878	0·16750	24 25·7	0 38 10	0·00278	0·00300
March	0·36858	0·16762	24 27·3	0 37 57	0·00387	0·00297
April	0·36870	0·16768	24 27·3	0 33 5	0·00413	0·00294
May	0·36867	0·16780	24 28·5	0 37 21	0·00314	0·00295
June	0·36876	0·16785	24 28·4	0 36 30	0·00366	0·00297
July	0·36871	0·16798	24 29·6	0 36 39	0·00326	0·00299
August	0·36861	0·16799	24 30·0	0 36 21	0·00266	0·00302
September	0·36861	0·16810	24 30·9	0 35 49	0·00226	0·00303
October	0·36860	0·16816	24 31·4	0 35 42	0·00310	0·00305
November	0·36864	0·16828	24 32·2	0 35 14	0·00285	0·00309
December	0·36867	0·16836	24 32·6	0 35 1	0·00217	0·00316

TABLE 7.—*Smoothed summed range* of Horizontal Force.*

(*Continuation of table 536 in the Colaba Magnetic Data, 1846—1905.*)

Unity = 1γ ≡ 0·00001 C.G.S.

Months.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1905	294	295	297	300	307	311	322	321	320	320	322	321	311
1906	318	316	314	312	304	294	295	299	301	302	301	301	305
1907	300	299	305	310	315	323	326	323	318	314	313	314	313
1908	317	320	314	308	306	301	298	294	293	294	296	295	303
1909	289	284	290	296	297	301	302	301	298	289	280	274	292
1910	272	272	263	254	252	247	244	244	245	244	244	243	252
1911	239	234	230	227	223	217	212	207	203	203	202	202	216
1912	204	205	204	205	208	211	215	219	222	223	223	224	214
1913	223	224	226	225	222	221	221	220	219	220	222	224	222
1914	226	229	231	231	233	234	235	238	242	246	251	257	238
1915	264	268	274	282	288	290	288	288	294	300	303	303	287
1916	302	300	297	294	295	297	299	302	303	305	309	316	302

* Summed range means sum without regard to sign of the twenty-four ordinates of the diurnal inequality. Smoothed summed ranges are derived by taking overlapping means of twelve consecutive monthly values and reducing them to the proper epoch, so as to eliminate the annual variation.

The range figures of H. F. at Alibag as given above indicate that the maximum of the 11-year cycle appears to have been reached about 1916; and as anticipated in the annual report for 1913, it is likely to be the lowest maximum on record. Conditions of a low maximum, it is well known, usually result in prolonging the duration of the climax making it diffused in character. From the figures of ranges available upto the time of issue of the Observatory annual report for 1916 it was observed that although the maximum of the solar cycle appeared to have been reached and passed about December 1915, it was not improbable that the minor periods may thereafter carry the range figure slightly above this maximum value 303 attained then by the ranges. It will be seen that the figures for October, November and December 1916 do show such a second maximum. Such fluctuations were noted in the previous cycle also to extend over the period 1905-1907, the range figure for July 1905 being 322 and that for July 1907 being 326. It is likely that the means for 1915-1917 will also tell a similar tale.

N. A. F. Moos,
Director,
Bombay and Alibag Observatories.

Solar Radiation.

No observations with the Angstroms electric compensation pyrheliometer were possible during January owing to cloudy skies and from March to the end of the year on account of the absence of officers on war service. For February the data are given below; the values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·46
Minimum	1·35
Mean	1·42
Number of days of observation	4

Nocturnal Radiation.

Observations of the terrestrial radiation thermometers, which are, as a rule, not very reliable, were recorded during the year 1916, at the following stations :—

Srinagar. Jodhpur. Bombay.
Lahore. Calcutta (Alipore) Simla.

The following Table 8 gives the average data of past years for the above stations; and Table 9 the departure from the normal.

TABLE 8.—*Average depression of mean monthly and annual nocturnal radiation temperatures below mean monthly and annual minimum shade temperatures.*

Station.	Number of years observations used.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
Srinagar	18—23	8·6	8·9	10·0	10·5	11·3	11·7	11·1	10·9	12·2	11·9	11·4	11·1	10·8
Simla	24—25	4·3	3·7	3·9	5·5	4·6	3·9	3·1	2·5	4·0	5·3	...	...	4·1
Lahore	39—40	9·6	9·3	9·0	9·2	9·1	6·3	4·0	4·2	6·6	9·8	10·7	10·2	8·2
Jodhpur	19—21	8·9	8·6	8·7	8·2	5·6	2·8	2·3	2·3	4·6	9·0	10·7	9·9	6·8
Calcutta (Alipore)	39—40	7·3	6·9	5·9	4·4	3·1	2·1	1·9	1·9	2·5	4·3	6·3	7·7	4·5
Bombay	41	9·6	9·0	8·1	6·6	4·5	2·9	2·3	2·6	3·2	6·1	9·0	9·9	6·1

TABLE 9.—*Departures from the averages of Table 8 of mean monthly and annual depression of nocturnal radiation temperatures in 1916.*

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Srinagar	−0·5	−1·7	−1·3	−0·8	−1·3	−2·5	−4·2	−4·6	−2·9	−1·8	+0·2	−0·2	−1·8
Simla	+1·7	+1·0	+2·1	+0·2	+1·4	−1·1	+1·2	+1·4	+1·8	+1·5	...	...	+1·1
Lahore	−0·5	−0·7	+0·8	−0·7	−0·9	−3·2	−1·9	−1·1	−0·6	−0·8	+0·4	+0·9	−0·7
Jodhpur	+2·0	−2·2	−0·6	−1·8	+0·3	−1·0	−0·9	−0·1	−2·1	−5·2	−4·4	−2·4	−1·5
Calcutta (Alipore)	+2·6	+3·0	+3·7	0	+1·1	−0·1	+1·2	+0·2	+0·2	−0·8	+1·2	+2·6	+1·2
Bombay	+7·7	+7·9	+10·1	+10·9	−0·4	+0·5	−0·2	+1·6	+0·7	−1·6	−4·1	−3·2	+2·5

Temperature of the ground.

Observations of the temperature of the surface of the ground were recorded during the year 1916 at four stations, Lahore, Jaipur, Calcutta (Alipore) and Bombay; and of the temperature under ground at Bombay only.

The thermometers used for the purpose are verified standard mercurial thermometers with attached scales of porcelain, the scale being engraved also on the tube.

At Lahore the surface thermometer is read four times daily; at Jaipur at 10 and 16 hrs., and at Calcutta at 13 hrs. 45 mins. At Bombay the two nearest to the surface are read five times a day, the deeper instruments being read once only.

The thermometers below the surface have their bulbs protected with pointed copper shoes which rest on ground at the bottom of a wooden tube, inserted to the specified depth and projecting six inches above the surface, the upper ends being closed by a cap of metal or wood. Those at depths of five feet or more are attached to the lower ends of stout wooden bars of about half the diameter of the tube.

Those at one foot have a brass ring attached to the top of the wooden frame by which they are lifted; and in all these the lower part of the frame around the bulb has been cut away, and the lower end fitted with the copper shoe above mentioned.

The average monthly data are here given at length, but a paper published by Mr. R. Ll. Jones (Meteorological Memoirs, Vol. XV, Pt. III, 1904), makes it clear that the results of the measurement of underground temperatures lead to inconsistent results when analysed on the lines developed by Lord Kelvin. It may be that this is due to irregularities from percolation of rainfall as well as to imperfections in the mode of measurement.

Under these circumstances a table of departures from the average of past years is more likely to give indications of value than a statement of absolute temperatures recorded; such a table is therefore given below. The number of years included in the averages in the different cases lies between 21 and 27.

TABLE 10.—*Departures from normal of the mean monthly and annual temperatures of the air and of the ground in 1916.*

Station.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
LAHORE	Air	+2·0	+0·8	+4·4	+1·6	−2·2	+1·3	−2·7	−2·1	−0·3	+0·6	−2·7	−1·1	0
	Surface	+3·8	+4·9	+5·8	+1·7	−4·3	+0·6	−6·0	−5·7	−0·2	+4·0	+1·5	+1·2	+0·6
JAIPUR	Air	+1·5	−2·4	+3·7	+0·2	−0·2	−1·4	+1·2	−2·5	−1·4	−2·4	−4·2	−2·8	−0·9
	Surface	+2·6	+0·7	+5·9	−1·8	−0·4	−10·2	−2·7	−11·3	−7·7	−9·4	+0·1	+1·3	−2·7
CALCUTTA (ALIPORE)	Air	0	+1·3	+2·7	+1·5	+3·0	−1·0	+1·0	+0·4	+0·7	+1·2	+1·2	−0·1	+1·0
	Surface	+14·8	+17·4	+17·3	+7·4	+13·0	−1·0	+5·3	+0·8	+3·5	+5·1	+9·5	+18·7	+9·3
BOMBAY	Air	+1·4	−1·1	+1·7	+0·8	+0·5	−0·3	+0·9	+1·0	+0·7	−0·3	+0·9	+0·1	+0·5
	1 inch deep	+0·8	−1·3	+1·6	+1·0	+0·6	+0·2	+1·2	+1·0	+0·9	+0·3	+1·2	+0·2	+0·6
	9 inches "	+1·3	−0·3	+1·4	+1·5	+1·5	+1·6	+2·2	+1·9	+1·9	+1·5	+2·4	+1·7	+1·6*
	1 foot 8 inches deep	+2·2	+1·2	+1·4	+2·5	+2·5	+2·3	+2·7	+2·4	+2·8	+2·1	+3·1	+3·2	+2·4
	5 feet deep	+1·3	+1·3	+1·6	+1·6	+1·6	+1·4	+1·4	+1·5	+2·0	+1·6	+1·8	+2·0	+1·6
	11 " "	+0·5	+0·8	+1·3	+1·3	+1·1	+0·5	−0·2	−0·6	−0·4	+0·1	+0·6	+0·5	+0·5

* In the case of the 9" deep thermometer the normals have been derived from the readings of the old thermometer which was broken and replaced by a new one on 27th March 1914.

Temperature.

The methods of exposing the thermometers at observatories in India were described in pages 18-19 of the Annual Report for 1890.

The method of deducing the daily and monthly means from the observed readings of the instruments was described in page 7 of the Monthly Weather Review for January 1916.

The departures from normal of the mean temperature of each month given in Table A of the Monthly Weather Reviews are deduced by a comparison of the actual monthly means with the normal monthly means given in the "Indian Meteorological Memoirs," Volume XVII, pages 16 to 24.

The departures obtained by a comparison of these normal means with the actual monthly means in Table A of the Monthly Weather Reviews for the year are given in Table 11.

In Table B, published in each Monthly Review, the mean temperature of the day is calculated, as in the Daily Weather Report, by the formula:—daily means $= \frac{\text{maximum} + \text{minimum}}{2}$. It differs from the true daily mean by amounts varying slightly with the season. In Table B of the Monthly Weather Reviews of the year 1916 are given the departure from normal of the monthly means of daily maximum and minimum temperatures, as well as the departures of the monthly means of daily mean temperature given by the formula ½ (maximum + minimum).

In the great majority of cases the normals of maximum and minimum temperatures for the stations in Table B, are derived from the data of the 33 year period 1878—1910; in the case of some of the most recently started observatories the period is shorter, but it is never less than five years. The normals are given in the "Indian Meteorological Memoirs," Volume XXII, Part III, pages 426—457.

Tables 12 to 17 give summaries of the temperature departure data for each month of the year 1916 and for the whole year. In the first set of tables (Tables 12, 13 and 14) the departure data are given for the 15 chief political divisions, and in the last three tables (Tables 15 to 17) the data are given for the 33 sub-divisions.

TABLE 11.—*Departure from normal of monthly and annual mean air temperature at first and second class observatories in 1916.*

Division.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
BENGAL	Calcutta	0	+1·3	+2·7	+1·5	+3·0	−1·0	+1·0	+0·4	+0·7	+1·2	+1·2	−0·1	+1·0
PUNJAB	Lahore	+2·0	+0·8	+4·4	+1·6	−2·2	+1·3	−2·7	−2·1	−0·3	+0·6	−2·7	−1·1	0
RAJPUTANA	Jaipur	+1·5	−2·4	+3·7	+0·2	−0·2	−1·4	+1·2	−2·5	−1·4	−2·4	−4·2	−2·8	−0·9
BOMBAY	Bombay	+1·4	−1·1	+1·7	+0·8	+0·5	−0·3	+0·9	+1·0	+0·7	−0·3	+0·9	+0·1	+0·5
MYSORE	Bangalore	−0·2	+1·6	+1·3	+1·7	+0·1	−1·5	+0·9	−0·3	0	−0·1	+0·2	−0·6	+0·3
MADRAS	Madras	−0·4	+1·2	−0·8	+1·0	−1·1	+0·5	−2·0	+0·4	+0·8	+0·6	+0·9	+0·2	+0·1
HILL STATIONS, EXCLUDING KASHMIR AND BALUCHISTAN.	Katmandu	+0·4	+3·0	+5·0	+2·6	+3·3	+0·2	−0·7	+0·9	+0·3	+2·2	+0·8	−2·4	+1·3
EXTRA INDIA	Seychelles	+1·2	+0·5	+2·2	+2·6	+0·9	+1·7	+0·9	0	−0·3	−0·1	+0·3	+0·9	+0·9
	Mauritius	−1·1	−0·3	0	−0·4	+0·6	+0·2	−2·0	−0·4	−0·5	−1·1	−1·2	−1·8	−0·7

TABLE 12.—*Departure of the mean monthly and annual maximum temperature from the normal in the fifteen chief political divisions of India in 1916, as given by all observatories.*

DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma	−1·9	−0·3	+0·6	−0·2	+1·3	−1·0	+0·9	+0·7	−0·3	−0·6	−1·0	−2·1	−0·3
Assam	+0·3	+1·0	+3·0	−2·4	+0·8	+1·8	−1·9	+0·4	−0·4	−1·7	+0·1	−1·1	0
Bengal	−0·1	+1·4	+3·1	−2·3	+3·1	−1·6	−0·3	−0·3	−0·3	−0·9	−0·5	−1·2	0
Bihar and Orissa	+0·1	+1·6	+3·7	+0·2	+3·2	−4·9	0	0	−0·2	−1·7	−1·5	−1·4	−0·1
United Provinces	+1·7	+0·2	+3·7	+0·8	+1·9	−5·9	−1·3	−1·0	−2·0	−2·7	−3·0	−1·6	−0·8
Punjab	+4·3	+0·1	+6·2	+1·5	−1·9	−2·2	−2·0	−3·4	−2·1	−2·3	−3·0	+0·1	−0·4
North-West Frontier Province	+2·8	−2·3	+6·3	+1·5	−3·1	+0·7	+0·5	−4·9	−1·3	+0·4	−2·7	+0·4	−0·1
Sind	+2·4	−1·5	+3·8	+0·3	−0·5	+0·2	+0·8	−0·7	−0·5	−0·5	−2·5	−0·5	+0·1
Rajputana	+3·8	−1·0	+5·4	−0·3	−0·6	−3·5	+2·0	−2·2	−2·3	−6·3	−4·8	−0·8	−0·9
Bombay	+1·2	−1·8	+2·4	−0·1	+0·7	−1·5	+1·6	−0·7	−0·3	−2·3	−2·6	−1·2	−0·4
Central India	+1·3	−1·1	+3·9	+0·6	+1·5	−7·3	+1·7	−0·7	−0·3	−4·1	−3·6	−1·7	−0·8
Central Provinces	+0·1	−1·3	+1·9	+0·9	+0·8	−7·0	+1·6	−0·1	−0·1	−2·8	−2·1	−1·4	−0·8
Hyderabad	−0·3	+0·1	+1·3	+1·3	+0·3	−4·2	−0·8	−0·1	+0·3	−2·6	−3·1	−2·0	−0·8
Mysore	−0·7	0	+1·0	+1·6	+0·7	−3·8	+2·1	−0·7	−0·8	−1·4	−2·1	−1·5	−0·5
Madras	−0·1	+0·4	+0·1	+0·7	−0·2	−1·4	−1·4	−0·9	−1·1	−1·2	−0·2	−0·4	−0·5

TABLE 13.—*Departure of the mean monthly and annual minimum temperature from the normal in the fifteen chief political divisions of India in 1916.*

DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma	−0·6	−0·1	+0·1	−0·3	+0·2	−0·7	−0·2	+0·2	0	−0·2	−0·5	−0·6	−0·2
Assam	+1·5	+1·2	+1·8	+0·5	+0·6	+1·1	−1·0	−0·1	−0·1	+0·9	+2·5	+0·3	+0·8
Bengal	−0·7	+0·2	+1·3	−0·5	+1·9	−0·5	−0·6	−0·3	0	+1·9	+2·1	−0·4	+0·4
Bihar and Orissa	−1·8	0	+0·7	+1·5	+1·6	−1·5	−0·3	+0·3	+0·3	+3·6	+2·5	−1·3	+0·5
United Provinces	−1·5	+0·1	+2·3	+2·9	−0·6	−1·9	−1·0	−0·6	+0·6	+3·2	−1·6	−2·3	0
Punjab	+0·7	+0·2	+3·7	+3·9	−2·3	+1·6	−1·0	−1·1	+0·7	+2·0	−3·3	−2·4	+0·2
North West Frontier Province	+0·7	+0·5	+2·7	+2·9	−2·5	+1·9	+1·1	−0·1	+1·2	+3·7	−2·2	−2·7	+0·6
Sind	+2·6	−1·8	+2·3	+1·6	−1·0	+1·7	+0·9	+1·5	+2·0	+1·8	−3·9	−1·6	+0·5
Rajputana	+1·4	−2·3	+2·9	+2·7	−2·0	−1·5	+0·8	−0·6	+0·4	+0·4	−3·8	−3·9	−0·5
Bombay	+1·8	−0·6	+1·4	+0·4	+0·2	−0·3	+0·5	+0·4	+0·8	+1·1	+1·0	−1·4	+0·4
Central India	−1·0	−0·6	+1·5	+2·6	+0·3	−3·2	+0·3	+0·3	+1·3	+3·6	−1·1	−2·5	+0·1
Central Provinces	−0·8	0	−0·1	+2·6	+0·7	−2·7	+0·2	+0·3	+0·7	+4·7	+3·1	−1·1	+0·6
Hyderabad	+1·0	+0·9	−0·1	+0·9	+0·3	−1·9	+0·5	+0·9	+0·6	+2·5	+4·2	−0·5	+0·8
Mysore	−0·7	+1·1	+0·5	+0·9	+0·4	−0·5	+0·9	+0·6	+0·5	+0·5	+1·2	−0·7	+0·4
Madras	−0·7	+0·4	−0·4	+1·0	+0·2	−0·4	−0·5	+0·3	+0·1	+0·6	+1·4	−0·5	+0·1

TABLE 14.—*Departure of the mean monthly and annual temperature from the normal in the fifteen chief political divisions of India in 1916.*

DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma	−1·2	−0·2	+0·4	−0·3	+0·8	−0·8	+0·4	+0·5	−0·1	−0·4	−0·8	−1·3	−0·3
Assam	+0·9	+1·1	+2·4	−1·0	+0·7	+1·5	−1·5	+0·2	−0·2	−0·4	+1·3	−0·4	+0·4
Bengal	−0·4	+0·8	+2·2	−1·4	+2·5	−1·0	−0·5	−0·3	−0·2	+0·5	+0·8	−0·8	+0·2
Bihar and Orissa	−0·9	+0·8	+2·2	+0·8	+2·4	−3·2	−0·2	+0·1	+0·1	+1·0	+0·5	−1·3	+0·2
United Provinces	+0·1	+0·2	+3·0	+1·9	+0·6	−3·9	−1·1	−0·8	−0·7	+0·3	−2·3	−2·0	−0·4
Punjab	+2·5	+0·2	+4·9	+2·7	−2·1	−0·3	−1·5	−2·2	−0·7	−0·1	−3·1	−1·2	−0·1
North-West Frontier Province	+1·8	−0·9	+4·5	+2·3	−2·8	+1·3	+0·8	−2·5	−0·1	+2·1	−2·5	−1·1	+0·2
Sind	+2·5	−1·7	+3·0	+0·9	−0·8	+0·9	+0·8	+0·4	+0·7	+0·7	−3·2	−1·0	+0·3
Rajputana	+2·6	−1·7	+4·1	+1·2	−1·3	−2·5	+1·4	−1·4	−0·9	−2·9	−4·3	−2·4	−0·7
Bombay	+1·5	−1·2	+1·9	+0·1	+0·5	−0·9	+1·1	−0·1	+0·2	−0·6	−0·8	−1·3	0
Central India	+0·1	−0·9	+2·7	+1·6	+0·9	−5·2	+1·0	−0·2	+0·5	−0·2	−2·3	−2·1	−0·3
Central Provinces	−0·3	−0·6	+0·9	+1·7	+0·8	−4·8	+0·9	+0·1	+0·3	+0·9	+0·5	−1·3	−0·1
Hyderabad	+0·4	+0·5	+0·6	+1·1	+0·3	−3·0	−0·2	+0·4	+0·5	−0·1	+0·5	−1·3	0
Mysore	−0·7	+0·5	+0·7	+1·3	+0·5	−2·1	+1·5	−0·1	−0·1	−0·5	−0·4	−1·1	0
Madras	−0·4	+0·4	−0·1	+0·8	0	−0·9	−1·0	−0·3	−0·5	−0·3	+0·6	−0·4	−0·2
Mean of India	+0·5	−0·2	+2·1	+0·9	+0·3	−1·9	+0·1	−0·4	−0·1	−0·2	−1·0	−1·3	−0·1

TABLE 15.—*Departure of the monthly and annual maximum temperature from the normal in 33 sub-divisions of India in 1916.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
1. Bay Islands	−1·9	−1·2	0	+1·6	−0·7	−0·4	+0·7	+0·1	+0·1	−0·9	−1·7	−1·9	−0·5
2. Lower Burma	−2·7	−1·5	−0·5	+0·1	+0·2	−1·8	+1·4	+0·7	−0·5	+0·1	−1·7	−1·9	−0·7
3. Upper Burma	−0·9	+0·8	+1·8	−0·5	+2·6	−0·2	+0·4	+0·8	−0·1	−1·5	−0·4	−2·2	+0·1
4. Assam	+0·3	+1·0	+3·0	−2·4	+0·8	+1·8	−1·9	+0·4	−0·4	−1·7	+0·1	−1·1	0
5. Bengal	−0·1	+1·4	+3·1	−2·2	+3·1	−1·6	−0·3	−0·3	−0·3	−0·9	−0·5	−1·2	0
6. Orissa	−0·2	+0·7	+1·4	−0·3	+1·4	−4·1	+1·0	+0·1	+0·3	−1·3	−1·1	−0·7	−0·2
7. Chota Nagpur	−0·3	+3·1	+5·4	+2·1	+3·5	−7·0	+0·7	−0·2	+0·3	−2·1	−1·7	−1·7	+0·2
8. Bihar	+0·4	+1·3	+4·2	−1·1	+4·5	−4·4	−1·4	0	−0·8	−1·7	−1·6	−1·8	−0·2
9. United Provinces, East	+1·0	+0·2	+3·1	+0·2	+2·3	−6·7	−1·7	−0·9	−1·7	−1·7	−2·7	−1·7	−0·9
10. Do. do. West	+2·8	+0·2	+3·7	+1·4	+1·4	−4·9	−0·8	−1·2	−2·5	−3·8	−3·4	−1·4	−0·7
11. Punjab, East and North	+4·5	+0·4	+6·1	+1·9	−1·3	−2·9	−2·1	−2·9	−2·6	−2·8	−2·0	+0·1	−0·4
12. Punjab, Southwest	+3·9	−0·7	+6·3	+0·7	−3·3	−0·4	−1·6	−4·7	−1·0	−0·8	−3·1	0	−0·4
13. Kashmir	+3·7	+2·8	+5·0	+4·0	−3·2	+3·4	−1·4	−1·0	+1·1	+4·7	−1·8	+0·9	+1·5
14. North-West Frontier Province	+2·8	−2·3	+6·3	+1·5	−3·1	+0·7	+0·5	−4·9	−1·3	+0·4	−2·7	+0·4	−0·1
15. Baluchistan	+4·3	−5·1	+5·0	−2·3	−4·1	−4·1	+2·0	+0·9	+2·5	+0·4	−6·2	+2·1	−0·4
16. Sind	+2·4	−1·5	+3·8	+0·3	−0·5	+0·2	+0·8	−0·7	−0·5	−0·5	−2·5	−0·5	+0·1
17. Rajputana, West	+4·3	−0·9	+6·1	−0·7	−0·9	−1·7	+2·1	−0·7	−2·1	−7·3	−5·6	−0·3	−0·6
18. Do. East	+3·3	−1·1	+4·9	0	−0·4	−4·8	+2·0	−3·1	−2·5	−5·9	−4·6	−1·0	−1·1
19. Gujarat	+2·6	−2·5	+3·7	−0·7	+1·3	−0·5	+2·2	−1·3	−0·4	−2·3	−1·8	−0·5	0
20. Central India, West	+2·0	−0·9	+4·5	+0·7	+2·2	−4·9	+2·7	−0·9	+0·7	−4·4	−3·8	−0·5	−0·2
21. Do. do. East	+0·5	−1·4	+3·4	+0·5	+0·7	−9·7	+0·7	−0·5	−1·3	−3·7	−4·0	−2·7	−1·5
22. Berar	+0·2	−1·5	+2·3	+0·7	+1·8	−5·0	+1·2	0	−0·2	−2·7	−2·0	−0·9	−0·5
23. Central Provinces, West	+0·3	−1·7	+1·8	+0·2	+0·5	−7·7	+1·8	−0·3	−0·1	−3·4	−2·7	−1·7	−1·1
24. Do. do. East	−0·3	−0·2	+1·6	+2·5	+0·8	−7·4	+1·5	+0·2	−0·1	−1·8	−1·3	−1·4	−0·5
25. Konkan	+0·2	−1·8	+1·0	+0·3	−0·5	−1·6	+0·2	+0·1	−0·5	−2·3	−3·0	−1·7	−0·8
26. Bombay Deccan	−0·3	−1·2	+1·7	+0·5	+0·8	−2·8	+1·9	−0·2	−0·2	−2·4	−3·4	−2·2	−0·7
27. Hyderabad, North	−0·4	−0·3	+1·6	+1·4	+0·7	−4·4	−0·7	−0·3	−0·5	−2·1	−3·0	−1·2	−0·8
28. Do. South	−0·1	+0·4	+1·0	+1·3	+0·1	−4·0	−0·9	0	+0·5	−2·9	−3·2	−2·7	−1·0
29. Mysore	−0·7	0	+1·0	+1·6	+0·7	−3·8	+2·0	−0·7	−0·8	−1·4	−2·1	−1·5	−0·5
30. Malabar	+0·8	−1·2	−0·1	+0·9	+0·2	−1·3	+0·8	+0·8	−0·5	−0·8	−1·0	−0·3	−0·1
31. Madras, Southeast	−0·3	+0·6	+0·3	+0·8	−0·4	−0·9	−2·0	−1·8	−1·7	−0·8	+1·1	−0·2	−0·4
32. Do. Deccan	−0·2	−0·5	−0·1	+1·0	−0·1	−1·6	−0·9	−1·5	−0·7	−2·7	−2·5	−1·3	−1·0
33. Do. Coast, North	−0·2	+1·5	+0·1	+0·2	−0·2	−2·3	−2·4	−0·6	−0·4	−1·5	−0·8	−0·1	−0·6

TABLE 16.—*Departure of the monthly and annual minimum temperature from the normal in 33 sub-divisions of India in 1916.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
1. Bay Islands	−2·8	−2·2	−0·5	+1·4	−0·5	−0·2	−0·6	+0·1	−0·2	+0·3	−0·2	−1·3	−0·6
2. Lower Burma	−0·7	−0·6	−0·7	−0·4	−0·3	−1·3	−0·1	+0·2	−0·3	0	−2·0	−1·5	−0·7
3. Upper Burma	+0·7	+0·5	+0·9	−0·3	+0·9	0	−0·3	+0·2	+0·3	−0·5	+0·9	+0·3	+0·3
4. Assam	+1·5	+1·2	+1·8	+0·5	+0·6	+1·1	−1·0	−0·1	−0·1	+0·9	+2·5	+0·3	+0·8
5. Bengal	−0·7	+0·2	+1·3	−0·5	+1·9	−0·5	−0·6	−0·3	0	+1·9	+2·1	−0·4	+0·4
6. Orissa	−1·3	−1·0	−0·7	+0·8	+1·1	−1·7	+0·1	+0·5	+0·1	+2·4	+3·7	−1·6	+0·2
7. Chota Nagpur	−2·6	+0·6	+2·1	+2·2	+2·1	−2·5	−0·1	+0·1	+0·4	+4·5	+3·3	−1·8	+0·7
8. Bihar	−1·6	+0·3	+0·7	+1·4	+1·5	−0·9	−0·7	+0·2	+0·4	+4·1	+1·2	−0·6	+0·5
9. United Provinces, East	−1·3	+0·8	+2·2	+2·7	−0·1	−1·8	−1·0	−0·6	+0·3	+4·5	−0·9	−1·3	+0·3
10. United Provinces, West	−1·7	−0·6	+2·3	+3·2	−1·2	−1·9	−1·0	−0·7	+1·0	+1·6	−2·4	−3·6	−0·4
11. Punjab, East and North	−0·1	+0·3	+3·5	+4·2	−1·7	+1·3	−1·5	−1·0	+0·6	+1·9	−3·3	−2·7	+0·1
12. Punjab, Southwest	+3·6	−0·4	+4·1	+3·5	−3·7	+2·5	+0·4	−1·2	+1·1	+2·4	−3·2	−1·9	+0·6
13. Kashmir	+2·1	+4·2	+3·1	+3·6	−1·8	+5·2	+0·7	+1·7	+0·7	+3·4	−1·7	−1·6	+1·6
14. North-West Frontier Province	+0·7	+0·5	+2·7	+2·9	−2·5	+1·9	+1·1	−0·1	+1·2	+3·7	−2·2	−2·7	+0·6
15. Baluchistan	+2·2	−2·7	+2·5	+2·7	−0·2	−0·9	+0·6	+3·7	+2·7	−2·3	−8·7	−3·5	−0·3
16. Sind	+2·6	−1·8	+2·3	+1·6	−1·0	+1·7	+0·9	+1·5	+2·0	+1·8	−3·9	−1·6	+0·5
17. Rajputana, West	+1·7	−2·5	+2·7	+1·5	−3·0	−1·1	+0·7	−0·3	0	+1·1	−2·7	−4·0	−0·5
18. Rajputana, East	+1·1	−2·3	+3·0	+3·5	−1·3	−1·8	+0·9	−0·8	+0·7	+0·2	−4·2	−3·9	−0·4
19. Gujarat	+2·8	−1·2	+2·2	+0·7	+0·3	+0·3	+0·7	+0·3	+1·2	+1·0	−1·8	−2·0	+0·4
20. Central India, West	+0·9	−0·3	+2·3	+2·9	+1·1	−1·7	+0·9	+0·9	+1·7	+2·5	−1·1	−1·7	+0·7
21. Central India, East	−3·0	−1·0	+0·5	+2·3	−0·5	−4·7	−0·3	−0·4	+0·9	+4·7	−1·1	−3·3	−0·5
22. Berar	+0·1	−0·2	+0·8	+2·2	+0·9	−1·6	+0·7	+0·9	+1·2	+4·9	+4·8	−0·4	+1·2
23 Central Provinces, West	−1·3	−0·2	−0·6	+2·4	+0·4	−3·1	+0·1	+0·1	+0·5	+4·7	+1·8	−1·2	+0·3
24. Central Provinces, East	−0·6	+0·7	−0·2	+3·3	+1·2	−3·0	−0·2	+0·3	+0·4	+4·4	+4·2	−1·7	+0·7
25. Konkan	+1·1	−0·5	+1·5	+0·1	−0·9	−1·1	+0·3	+0·7	0	+0·2	+1·7	−0·6	+0·2
26. Bombay Deccan	+0·9	−0·2	+0·3	+0·3	+0·9	−0·6	+0·5	+0·5	+0·7	+1·9	+4·2	−1·1	+0·7
27. Hyderabad, North	+0·8	+0·9	+0·3	+1·3	+1·1	−1·7	+1·2	+1·2	+1·4	+3·1	+4·5	−0·2	+1·2
28. Hyderabad, South	+1·1	+0·9	−0·3	+0·5	−0·4	−2·0	−0·1	+0·7	+0·5	+2·0	+3·9	−0·7	+0·5
29. Mysore	−0·7	+1·1	+0·5	+0·9	+0·4	−0·5	+0·9	+0·6	+0·5	+0·5	+1·2	−0·7	+0·4
30. Malabar	−1·0	+0·3	+1·3	+0·7	−0·1	−0·7	−0·6	+0·6	−0·1	−0·6	−0·1	−1·5	−0·1
31. Madras, Southeast	−1·3	−0·2	0	+1·5	+0·5	+0·3	−0·7	+0·3	+0·1	+0·4	+1·0	−0·4	+0·1
32. Madras Deccan	+0·6	+2·1	−0·9	+1·2	+0·2	−0·4	−0·3	+0·8	0	+1·4	+3·9	−0·1	+0·7
33. Madras Coast, North	−0·2	+0·7	−1·4	+0·2	−0·1	−1·4	−1·1	+0·4	+0·4	+1·0	+2·2	−0·1	+0·1

TABLE 17.—*Departure of the mean monthly and annual temperature from the normal in 33 sub-divisions of India in 1916.*

SUB-DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
1. Bay Islands	−2·3	−1·7	−0·3	+1·5	−0·6	−0·3	+0·1	+0·1	−0·1	−0·3	−0·9	−1·6	−0·5
2. Lower Burma	−2·2	−1·1	−0·6	−0·1	−0·1	−1·5	+0·7	+0·5	−0·4	+0·1	−1·9	−1·7	−0·7
3. Upper Burma	−0·1	+0·7	+1·3	−0·4	+1·7	−0·1	+0·1	+0·5	+0·1	−1·0	+0·3	−0·9	+0·2
4. Assam	+0·9	+1·1	+2·4	−0·9	+0·7	+1·5	−1·5	+0·1	−0·3	−0·4	+1·3	−0·4	+0·4
5. Bengal	−0·4	+0·8	+2·2	−1·3	+2·5	−1·1	−0·5	−0·3	−0·1	+0·5	+0·8	−0·8	+0·2
6. Orissa	−0·7	−0·1	+0·3	+0·3	+1·3	−2·9	+0·5	+0·3	+0·2	+0·5	+1·3	−1·1	0
7. Chota Nogpur	−1·5	+1·9	+3·7	+2·1	+2·8	−4·7	+0·3	−0·1	+0·3	+1·2	+0·8	−1·7	+0·4
8. Bihar	−0·6	+0·8	+2·5	+0·1	+3·0	−2·7	−1·1	+0·1	−0·2	+1·2	−0·2	−1·2	+0·1
9. United Provinces, East	−0·1	+0·5	+2·7	+1·5	+1·1	−4·3	−1·3	−0·7	−0·7	+1·4	−1·8	−1·5	−0·3
10. United Provinces, West	+0·5	−0·2	+3·0	+2·3	+0·1	−3·4	−0·9	−0·9	−0·7	−1·1	−2·9	−2·5	−0·6
11. Punjab, East and North	+2·2	+0·3	+4·8	+3·1	−1·5	−0·8	−1·3	−1·9	−1·0	−0·5	−3·1	−1·3	−0·1
12. Punjab, Southeast	+3·7	−0·5	+5·2	+2·1	−3·5	+1·1	−0·6	−2·9	+0·1	+0·8	−3·1	−0·9	+0·1
13. Kashmir	+2·9	+3·5	+4·1	+3·8	−2·5	+4·3	−0·3	+0·3	+0·9	+4·1	−1·7	−0·3	+1·6
14. North-West Frontier Province	+1·7	−0·9	+4·5	+2·2	−2·8	+1·3	+0·8	−2·5	−0·1	+2·1	−2·5	−1·1	+0·2
15. Baluchistan	+3·3	−3·9	+3·7	+0·2	−2·1	−2·5	+1·3	+2·3	+2·6	−0·9	−7·5	−0·7	−0·3
16. Sind	+2·5	−1·7	+3·1	+0·9	−0·7	+0·9	+0·9	+0·4	+0·7	+0·7	−3·2	−1·1	+0·3
17. Rajputana, West	+3·0	−1·7	+4·4	+0·4	−1·9	−1·4	+1·4	−0·5	−1·1	−3·1	−4·1	−2·1	−0·6
18. Rajputana, East	+2·2	−1·7	+3·9	+1·7	−0·9	−3·3	+1·5	−1·9	−0·9	−2·9	−4·4	−2·5	−0·8
19. Gujarat	+2·7	−1·9	+2·9	0	+0·8	−0·1	+1·5	−0·5	+0·4	−0·7	−1·8	−1·3	+0·2
20. Central India, West	+1·5	−0·6	+3·4	+1·8	+1·7	−3·3	+1·8	0	+1·2	−0·9	−2·2	−1·1	+0·3
21. Central India, East	−1·3	−1·2	+1·9	+1·4	+0·1	−7·2	+0·2	−0·5	−0·2	+0·5	−2·5	−3·0	−1·0
22. Berar	+0·1	−0·9	+1·5	+1·5	+1·3	−3·3	+0·9	+0·5	+0·5	+1·1	+1·4	−0·7	+0·3
23. Central Provinces, West	−0·5	−0·9	+0·6	+1·3	+0·5	−5·4	+0·9	−0·1	+0·2	+0·7	−0·5	−1·5	−0·4
24. Central Provinces, East	−0·5	+0·3	+0·7	+2·9	+1·0	−5·2	+0·7	+0·3	+0·1	+1·3	+1·5	−1·5	+0·1
25. Konkan	+0·7	−1·1	+1·3	+0·2	−0·7	−1·3	+0·3	+0·4	−0·3	−1·1	−0·7	−1·1	−0·3
26. Bombay Deccan	+0·3	−0·7	+1·0	+0·4	+0·9	−1·7	+1·2	+0·1	+0·3	−0·3	+0·4	−1·7	0
27. Hyderabad, North	+0·2	+0·3	+0·9	+1·3	+0·9	−3·1	+0·3	+0·5	+0·5	+0·5	+0·7	−0·7	+0·2
28. Do., South	+0·5	+0·7	+0·3	+0·9	−0·1	−3·0	−0·5	+0·3	+0·5	−0·5	+0·3	−1·7	−0·2
29. Mysore	−0·7	+0·5	+0·7	+1·3	+0·5	−2·1	+1·5	−0·1	−0·1	−0·5	−0·5	−1·1	−0·1
30. Malabar	−0·1	−0·5	+0·6	+0·8	+0·1	−1·0	+0·1	+0·7	−0·3	−0·7	−0·5	−0·9	−0·1
31 Madras, Southeast	−0·8	+0·2	+0·1	+1·1	+0·1	−0·3	−1·3	−0·5	−0·8	−0·2	+1·1	−0·3	−0·1
32 Do. Deccan	−0·1	+0·8	−0·5	+1·1	+0·1	−1·0	−0·6	−0·3	−0·3	−0·7	+0·7	−0·7	−0·1
33. Do., Coast, North	−0·2	+1·1	−0·7	+0·2	−0·1	−1·9	−1·7	−0·1	0	−0·3	+0·7	−0·1	−0·3

In the following discussion the year is divided into four seasons according to the following arrangement:—

1st.—The cold weather period, including the months of January and February.

2nd.—The hot weather period, including the months of March, April and May.

3rd.—The period of the south-west monsoon rains proper, including the months of June, July, August and September.

4th.—The period of the retreating south-west monsoon, including the months of October, November and December.

I. The cold weather period.—On the average of the season maximum and minimum temperatures were both nearly normal throughout India with the exception of Kashmir where they were appreciably higher than usual.

In Afghanistan as represented by Kabul temperature was much above the average by both day and night. In Persia no appreciably large departures from normal conditions occurred. A well marked wave of cold affected northern India between the 4th and the 11th February. It caused very low temperatures, especially in Baluchistan where maximum temperatures from 20° to 28° below normal were recorded.

II. The hot weather period.—There was nothing strikingly abnormal in the temperature conditions of the period as a whole.

The greatest heat of the year occurred generally between the 22nd and 29th May.

At Jacobabad, usually the hottest place in India, a temperature of 121° was observed which is 5° lower than the highest hitherto on record.

III. The south-west monsoon period.—In June maximum temperature was largely below the normal in Chota Nagpur, the United Provinces, Central India and the Central Provinces, but during the rest of the season the temperature conditions were fairly normal throughout the Indian area. In Kabul and Kashgar weather was appreciably warmer than usual all through the period.

IV. The retreating south-west monsoon period.—The mean temperature for the season did not differ appreciably from the normal anywhere in the plains except in Rajputana, where it was 3° lower than usual. Conditions were fairly normal in Kashmir, Afghanistan, as represented by Kabul as well as in Persia, but in Baluchistan temperature was 3° below the average due mainly to unusually low temperatures recorded in November.

The year.—On the mean of all the plain stations temperature ranged above the average by half a degree or more in January, March and April, was sensibly normal in February, May, July, August, September and October, and was lower than usual in June, November and December. The opposite monthly variations nearly neutralised each other, so that the mean temperature for the whole year differed from the normal by only —0·1°.

The statement below shows that during nearly the whole year the departures from normal of temperature were determined more or less by the character of the rainfall.

TABLE 18.

Month.	Departure from normal of temperature.	Percentage departure of rainfall.
	°	
January	+0·5	−89
February	−0·2	−28
March	+2·1	−62
April	+0·9	− 9
May	+0·3	−13
June	−1·9	+27
July	+0·1	− 6
August	−0·4	+24
September	−0·1	+21
October	−0·2	+89
November	−1·0	+19
December	−1·3	−66
Year	−0·1	+16

Atmospheric pressure.

Full information regarding the types of barometers in use at Indian observatories and of the methods of reducing the observations and obtaining the mean daily and monthly pressures will be found in pages 5 and 6 of the Monthly Review for January 1916.

In Table A, called Table II prior to 1907, of each Monthly Review, the monthly mean daily pressure (corrected for temperature) is given in the seventh column, and the departure from the normal in the eighth column. The normal monthly mean pressure values were recalculated in 1904 for all first and second class stations, and will be found in pages 66-69 of the "Indian Meteorological Memoirs," Volume XVII. The departure data in the Monthly Reviews for the year 1916 were obtained by a comparison of the actual monthly means with these normals; the departures of the monthly pressure of all first and second class stations in 1916 are given in Table 19. The figures in the seventh and eighth columns of Table A, appended to the present Annual Summary, giving data of the mean pressure of the air and its departure from the normal for all first and second class stations are comparable with the corresponding data of previous years published in the Annual Reports and Annual Summaries.

In the ninth column of Table A in each Monthly Review are given the mean pressures reduced to sea-level and corrected to constant gravity (Lat. 45°). These are not directly comparable with the sea-level pressure values of the years 1875-90 as given in the Annual Reports for those years, for

previous to 1891 no correction was made to reduce the monthly pressure means to standard gravity.

In Table B of each Monthly Review, and also in that appended to the Annual Summary, are given the pressure data for 8 hours local time. The fourth column in that table gives the mean 8 hours pressures for the month corrected for temperature. In the fifth column are given the departures of these mean 8 hours pressures from the normal pressures.

The greater part of the normal 8 hours monthly means of pressure used in Table B have been deduced from the barometic observations of the whole of the twenty-two years' period 1889-1910, and in all except 24 cases the periods employed equalled or exceeded five years.

TABLE 19.—*Departure from normal of monthly and annual mean pressure of first and second class stations in 1916.*

Division.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
Bengal	Calcutta	+·005	−·068	−·051	−·028	−·002	−·088	+·107	+·014	−·073	−·048	−·035	−·045	−·026
Punjab	Lahore	+·014	−·065	−·035	−·021	+·043	−·102	+·057	+·025	−·058	−·041	−·013	−·059	−·021
Rajputana	Jaipur	+·007	−·069	−·045	−·052	+·016	−·087	+·057	−·003	−·077	−·033	−·009	−·044	−·028
Bombay	Bombay	+·023	−·016	−·019	0	−·019	−·071	−·005	−·015	−·092	−·056	−·045	−·032	−·029
Mysore	Bangalore	+·037	−·027	+·001	+·015	−·003	−·045	−·021	+·008	−·051	−·041	−·023	−·022	−·014
Madras	Madras	+·028	−·045	−·013	−·010	−·004	−·063	−·008	−·004	−·066	−·065	−·043	−·037	−·027
Hill Stations, excluding Kashmir and Baluchistan.	Katmandu	+·066	+·036	+·048	+·084	+·102	+·058	+·135	+·102	+·032	+·001	+·034	−·030	+·056
Extra India	Seychelles	+·015	−·026	+·011	−·022	−·060	−·038	−·071	−·008	−·035	+·023	+·002	−·042	−·021
	Mauritius	−·041	−·047	−·009	−·024	−·118	−·047	−·024	−·027	−·007	−·006	−·009	−·012	−·031

TABLE 20.—*Departure of the mean monthly and annual pressure from the normal in the fifteen chief political divisions of India in 1916.*

Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	"	"	"	"	"	"	"	"	"	"	"	"	"
Burma	+·026	−·058	−·013	−·001	−·006	−·056	+·052	+·005	−·051	−·017	−·021	−·047	−·016
Assam	+·015	−·089	−·034	+·003	+·005	−·073	+·097	+·016	−·041	−·012	−·027	−·031	−·014
Bengal	+·019	−·074	−·032	−·005	+·003	−·076	+·113	+·024	−·052	−·034	−·025	−·037	−·015
Bihar and Orissa	+·024	−·063	−·028	−·012	+·009	−·069	+·103	+·018	−·047	−·042	−·022	−·033	−·013
United Provinces	+·024	−·061	−·035	−·014	+·004	−·076	+·080	+·014	−·054	−·030	−·004	−·035	−·016
Punjab	+·021	−·054	−·032	−·018	+·036	−·087	+·066	+·032	−·047	−·026	−·006	−·046	−·013
North-West Frontier Province	−·001	−·076	−·051	−·037	+·035	−·117	+·043	+·019	−·065	−·057	−·010	−·074	−·033
Sind	+·010	−·034	−·017	−·001	+·029	−·106	+·057	+·002	−·063	−·039	+·010	−·048	−·017
Rajputana	+·017	−·049	−·025	−·016	+·016	−·103	+·063	−·008	−·074	−·030	−·011	−·044	−·022
Bombay	+·023	−·027	−·011	+·006	−·026	−·087	+·018	−·016	−·085	−·055	−·042	−·039	−·028
Central India	+·026	−·045	−·015	−·007	+·005	−·093	+·063	−·016	−·069	−·045	−·023	−·045	−·022
Central Provinces	+·030	−·039	−·009	−·006	−·005	−·087	+·056	−·011	−·064	−·063	−·040	−·038	−·023
Hyderabad	+·032	−·034	0	+·003	−·012	−·073	+·018	+·001	−·062	−·055	−·047	−·028	−·021
Mysore	+·035	−·027	−·001	+·004	−·026	−·052	−·021	−·001	−·057	−·042	−·039	−·024	−·021
Madras	+·035	−·035	−·005	−·001	−·016	−·050	−·010	−·001	−·056	−·050	−·036	−·027	−·021
Mean of India	+·024	−·049	−·019	−·006	+·001	−·078	+·053	+·004	−·060	−·039	−·024	−·039	−·019

I. The cold weather period.—Atmospheric pressure in the plains of India differed largely from the normal, being 0·024″ in excess in January and as much as 0·049″ in defect in February.

The excess in January extended to Zanzibar and Seychelles but was replaced by a large defect at Mauritius. The defect in February was even more widespread.

The vertical pressure gradient was somewhat steeper than usual in both months in the Sind-Baluchistan area as well as in the Central Provinces and was below its normal value over the Punjab.

II. The hot weather period.—The defect in pressure of 0·049″ in February over the plains of India was reduced to 0·019″ in March, and 0·006″ in April. In May the mean pressure of the country was normal.

Pressure was in defect during the whole period generally in Persia and Arabia. At Zanzibar and Seychelles it was somewhat in excess in March, and in defect in April and May. It was in defect throughout the period at Mauritius.

There were no persistent marked abnormal features in the local distribution. In northern India in March the vertical pressure gradient was very weak and rainfall was much below normal. In May a somewhat steeper gradient than usual was associated with a normal rainfall.

III. The south-west monsoon period.—Pressure varied irregularly from the normal during this period; thus it was as much as 0·078″ and 0·060″ in defect in June and September respectively, 0·053″ in excess in July and nearly normal in August. Conditions were more or less similar in Persia and Arabia in June, July and September but in August pressure was in defect in those areas.

In the Indian Ocean pressure was in defect at all the three stations throughout practically the whole period; the pressure distribution there was thus favourable to a good monsoon in India.

The vertical pressure gradient was weaker than usual in June along the north-west frontier, and was steep in Bengal in July and August, but over the period as a whole there were no striking departures from normal.

IV. The retreating south-west monsoon period.—The mean pressure was below normal during the whole period in India as well as in Persia and Arabia generally. In November the defect was most marked in Hyderabad so that the isobars on the average of the month ran east and west across the Peninsula.

The vertical gradient was somewhat steep in Rajputana in October and November, and in Kashmir in November. There was a marked deficiency of pressure in December at the Seychelles and at stations in Arabia and Persia.

The year.—Atmospheric pressure over the plains of India was above normal in January and July, was nearly normal in May and August, and was in defect in all the other months, the defect for the whole year being ·019.″

TABLE 21.

Month.	Departure from normal of	
	Pressure.	Mean temperature.
	″	°
January	+·024	+0·5
February	—·049	—0·2
March	—·019	+2·1
April	—·006	+0·9
May	+·001	+0·3
June	—·078	—1·9
July	+·053	+0·1
August	+·004	—0·4
September	—·060	—0·1
October	—·039	—0·2
November	—·024	—1·0
December	—·039	—1·3
Year	—·019	—0·1

Storms of the year.

BAY OF BENGAL.

No.	Month.	Date.	Greatest observed barometric depression.	Intensity of storm.	Details of storm.
1	May	4th to 6th.	·7″	Severe	Conditions where unsettled in the neighbourhood of the Andaman Islands on the first three days of the month, and by 8 hours on the 4th had formed into a storm about 130 miles to the westnorthwest of Port Blair. From there it moved in a course curving towards the Arakan coast which it crossed near Akyab at about midnight of the 5th. By the morning of the 6th it had reached the neighbourhood of Mandalay and disappeared during the day without any appreciable change in its position. Winds of hurricane violence with mountainous seas were experienced by several vessels involved in the storm area on the 5th.
2	June	4th to 6th	·4″	Slight	According to the observations from ships this developed slowly during the first three days of the month off the Arakan coast, lay about 200 miles west of Kyaukpyu

No.	Month.	Date.	Greatest observed barometric depression.	Intensity of storm.	Details of storm.
					on the morning of the 4th, travelled from there in a north-westerly direction, crossed the coast between Saugor Island and Barisal on the morning of the 5th and disappeared on the 6th.
3	September	18th to 29th	1″	Severe	Conditions were disturbed to the southeast of Diamond Island on the 17th and this disturbance travelling north-westwards developed during the 18th into a storm which continued to move in the same direction and reached the neighbourhood of the Sandheads on the morning of the 21st. It had meanwhile developed into a severe disturbance at the centre of which the barometer stood at least 0·6″ below the normal height. It intensified still further during the day, and advancing almost due north passed between 20 and 21 hours approximately over Calcutta, doing considerable damage to property. The lowest reading recorded at the Alipore Observatory during the passage of the centre was 28·55″ about an inch below the normal. The disturbance weakened considerably on the 22nd, and travelling in the neighbourhood of Burdwan, Jubbulpore, Saugor and Kotah, dissipated in the southwest Punjab on the 29th. The storm strengthened greatly when nearing the coast, and the strongest winds recorded in any available ships' logs were only of force 8.
4	October.	15th and 16th	·2″	Slight	This formed on the morning of the 15th to the southwest of the Andamans after two days of disturbed weather; from there it travelled westnorthwestwards towards the Coromandel coast which it crossed near Cuddalore on the evening of the 16th. On the morning of the 17th it was passing over the plateau of Mysore, and by 8 hours of the following day had passed out into the Arabian Sea near Karwar.
5	October.	21st to 25th	·3″	Moderate	This developed to the west of the Andamans during the 18th, 19th and the 20th, and had formed into a storm by 8 hours on the 21st. Advancing almost due north-west, it crossed the coast to the north of Cocanada on the night of the 23rd and disappeared over north Hyderabad on the 25th. The strongest winds recorded on board ships were of force 9.
6	Oct.	25th to 31st	·3″	Moderate	This was the development of a depression which appears to have entered the Andaman Sea from the east on the 25th. It developed into a storm on the 27th with centre about latitude 15°, longitude 92°, advanced in a west-north-westerly direction, and on the morning of the 30th struck the coast between Cocanada and Masulipatam; it disappeared over Hyderabad during the 31st. The strongest winds recorded on board ships were only of force 7.
7	Nov.	1st and 2nd	·3″	Feeble	This became visible on the first between the Orissa and Arakan coasts, passed inland between Akyab and Cox's Bazar, and broke up on the 2nd in the Arakan and Lushai hills. The highest winds recorded were only of force 5.
8	Nov.	7th to 11th	·5″	Considerable.	This appeared over the Andaman Sea on the 6th. It began travelling north-westwards on the 7th, and the centre passed close to Diamond Island at about 18 hours causing there a north-east gale and a rapid fall of the barometer. On the morning of the 10th the storm crossed the coast to the west of Saugor Island, and at 8 hours the centre was close to Midnapore where the barometer stood 29·4″ or ·5″ below the normal height. From there it travelled north-east, was near Sirajganj on the morning of the 11th and disappeared during the succeeding 24 hours. The observations recorded at Diamond Island and at Midnapore and the adjoining observatories show that it was a fairly severe disturbance of an unusually small extent; winds of at least force 9 were experienced at Midnapore.
9	Nov.	21st to 26th	·5″	Severe	This formed as a depression during the 19th and 20th and developed into a storm on the 21st midway between Port Blair and Ceylon; and travelling along a westerly path it crossed the Coromandel coast to the north of Cuddalore, on the night of the 22nd, causing much loss of life and damage to property. Its intensity diminished rapidly as it crossed the Peninsula. From the 24th to the 26th it was recognizable as a depression in the south-east of the Arabian Sea, but it did not develop again into a storm. No ships, for

No.	Month.	Date.	Greatest observed barometric depression.	Intensity of storm.	Details of storm.
					which reports are available, were near the centre of the storm, so that the strongest winds reported over the sea were only of force 8. At Pondicherry, according to newspaper accounts, about 300 lives were lost, and damage to property amounted to about Rupees 10 lakhs.

ARABIAN SEA.

No.	Month.	Date.	Greatest observed barometric depression.	Intensity of storm.	Details of storm.
1	May	25th to 28th	·75″	Very severe	The marine information relating to this storm is scanty. It, however, shows that at 8 hours on the 25th there was a storm with centre at about latitude 12° north, longitude 62° east, that it was moving towards the north-west, and that it probably crossed into Arabia near the Kuria Muria Islands during the day on the 27th. Winds of force 11 and mountainous seas were experienced by *S. S. Abydos* at about latitude 11° north, longitude 61° east, on the night of the 25th.
2	Oct.	18th to 24th	·5″	Considerable.	The disturbance mentioned above as having crossed into the Arabian Sea near Karwar on the 18th continued to travel in a westerly direction until the morning of the 24th when it had reached a position about 250 miles to the east of the Kuria Muria Islands. The storm was of slight intensity only till the 20th; it then intensified and on the 23rd and 24th *S. S. Crewe Hall* experienced winds of force 8, terrific squalls and a high dangerous sea, and *S. S. Bideford* heavy seas with winds of force 9.

Winds.

The mean direction of the wind and the mean diurnal movement of the air as measured by Robinson anemometers are given for all second class stations in Table A in each Monthly Weather Review. The normal values are also stated for the sake of ready comparison. The normal data of these elements, utilized in Table A of the Monthly Weather Reviews of the year 1916, will be found in a collected form in Tables XXII, XXVI and XXVII of Volume XVII of Indian Meteorological Memoirs. The mean 8 hours wind directions for each month are laid down in the first chart in each Monthly Review. They are calculated in the usual manner by finding the resultant of equal winds in the directions actually observed at 8 hours and given in Table B, in each Monthly Review. As a general rule, the mean 8 hours wind directions vary little from the mean wind directions (calculated from the 10 and 16 hours wind data) in Table A of the Monthly Reviews, but in some cases and at certain seasons of the year they differ very considerably. The normal values used in Table B have been published in Volume XVII of the departmental Memoirs.

Up to 1911 the factor representing the ratio of air movement to travel of Beckley cups had in India, as in other countries, been taken as 3·0; but as in that year it had been generally accepted that the factor should be 2·2, the change to 2·2 was made in the Monthly Weather Review of January 1912 (see note on page 8 there).

The following is a summary of the more important features of the air movement over India for each period of the year 1916:—

I.—The cold weather period.

(*a*) Wind velocity was somewhat higher than usual in Mysore, and lower in Hyderabad; elsewhere it did not differ appreciably from the average.

(*b*) In Assam, the United Provinces and the Central Provinces, the winds blew steadier than usual, while in Bengal they were somewhat unsteady.

(*c*) There were no persistent irregularities noticeable in the direction of the air movement on the plains. The absence of southerly winds at the level of Leh, however, is noteworthy, the mean direction for each month being approximately northnortheast as compared with the normal southsouthwest.

II.—The hot weather period.

(*a*) The air movement was appreciably stronger than usual in the Punjab, and weaker in the North-West Frontier Province, Sind, Bombay and Hyderabad.

(*b*) Winds blew with greater steadiness than usual in Assam, the United Provinces and the Punjab. Elsewhere the degree of steadiness was about normal.

(*c*) The only persistent deviation from normal wind directions occurred in Bengal, where winds were more southerly than usual in April and May.

(*d*) According to logs of vessels light irregular wind prevailed during May over the western half of the equatorial belt, except in the neighbourhood of the African coast where the air movement was of about the usual character. The equatorial belt of calms thus occupied in that month a position which is normal for the middle of April.

III.—The south-west monsoon period.

(*a*) Winds were appreciably stronger than usual in the Punjab and Mysore, and weaker in Bengal, the North-West FrontierProvince, Sind, Bombay and Hyderabad.

(*b*) The degree of steadiness was above the average in Assam, the United Provinces and the Punjab, and below it in Burma, Bengal, the North-West Frontier Province, Sind, Rajputana, Bombay and Central India.

(*c*) There was a tendency, on the whole, for the winds on the Konkan and Tenasserim coasts to be more southerly than usual.

(*d*) Winds were much stronger and on the whole steadier than usual at Seychelles in July, August and September, and lighter in those months at Mauritius. The degree of wind steadiness was very low at Zanzibar in September.

IV.—The retreating south-west monsoon period.

(*a*) The velocity was higher than usual in the Punjab, Mysore and Madras, and lower in the North-West Frontier Province, Sind and Rajputana.

(*b*) The wind steadiness was much above the average in Hyderabad and the Central Provinces, and much below in Central India. In Mysore it was very much above normal in October, and very much below in November.

(*c*) The wind direction in October in the Bombay Deccan, Hyderabad, the Madras Deccan and Mysore was such as ordinarily prevails in September; otherwise there were no noteworthy deviations from the normal directions.

(*d*) Winds were much stronger than usual at Seychelles in October, and much lighter at Mauritius and at Zanzibar in October and November. They were very much steadier than usual at Seychelles in November and very much less steady in December.

Ordinarily minimum wind velocities and very variable winds are experienced at Seychelles during November, but this year these conditions obtained during December.

Humidity.

The departures from normal of the mean monthly and annual aqueous vapour pressure and relative humidity for stations in Table A, for the year 1916, are given in Tables 22 and 23. The normal values employed in the determination of the departures are given in Tables XXX and XXXIII of the Indian Meteorological Memoirs, Volume XVII. The Tables 24 and 25 give departure data of 8 hours aqueous vapour pressure and relative humidity for each month of the year and for the year for the fifteen chief political divisions.

Normal values for most of the stations in Table B, have been derived from the 8 hours records of the period 1889-1910 and are given in Part III, Volume XXII of Meteorological Memoirs.

TABLE 22.—*Departure of the monthly and annual mean vapour pressure data of 1916 from the average of past years.*

Division.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
Bengal	Calcutta	—·028	—·038	—·048	+·002	—·039	—·030	—·029	+·001	—·005	+·089	+·046	—·005	—·007
Punjab	Lahore	—·021	—·010	—·021	+·018	—·061	+·144	+·039	+·078	+·091	+·098	—·031	—·028	+·025
Rajputana	Jaipur	—·071	—·052	—·103	—·030	—·147	+·043	—·036	+·057	+·065	+·084	—·071	—·060	—·027
Bombay	Bombay	—·007	—·078	—·008	—·055	—·015	—·013	+·016	+·023	+·021	+·037	+·076	—·019	—·002
Mysore	Bangalore	—·018	+·002	—·083	—·068	+·008	—·020	+·039	+·022	+·009	+·020	+·045	—·007	—·004
Madras	Madras	—·044	+·005	0	—·008	+·021	—·071	+·076	+·013	+·019	+·029	+·047	—·028	+·005
Hill Stations, excluding Kashmir and Baluchistan.	Katmandu	—·004	—·010	—·007	+·039	—·063	—·001	—·032	—·020	+·007	+·023	—·016	—·027	—·009
Extra India	Seychelles	+·003	—·033	—·013	+·035	—·015	+·004	—·016	—·026	—·042	—·054	—·034	—·014	—·017
	Mauritius	+·027	—·024	—·003	+·024	+·039	+·024	—·059	+·003	+·015	+·003	—·012	—·026	+·001

TABLE 23.—*Departure of the monthly and annual mean relative humidity data of 1916 from the average of past years.*

DIVISION.	STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Bengal	Calcutta	− 6	− 8	− 9	− 3	− 8	+ 2	− 4	+ 1	− 1	+ 5	+ 1	− 2	− 3
Punjab	Lahore	−10	− 3	−10	− 2	− 3	+ 6	+ 7	+ 8	+ 9	+ 9	+ 1	− 2	+ 1
Rajputana	Jaipur	−18	− 6	−14	− 4	−12	+ 2	− 8	+ 7	+ 6	+11	− 5	− 6	− 4
Bombay	Bombay	− 4	− 5	− 4	− 7	− 2	+ 1	+ 1	0	+ 1	+ 5	+ 6	− 3	− 1
Mysore	Bangalore	0	0	− 8	− 7	+ 2	+ 2	+ 3	+ 3	+ 2	+ 4	+ 7	0	+ 1
Madras	Madras	− 6	− 2	+ 2	− 2	+ 1	− 6	+ 9	− 1	− 3	0	+ 3	− 5	− 1
Hill Stations, excluding Kashmir and Baluchistan.	Katmandu	− 1	− 6	− 8	0	−13	0	− 3	− 4	+ 1	− 2	− 1	− 1	− 3
Extra India	Seychelles	− 3	− 5	− 5	− 1	− 3	− 3	− 3	− 3	− 5	− 6	− 3	− 4	− 4
	Mauritius	+ 4	− 2	− 3	+ 3	+ 3	+ 3	− 4	0	+ 3	+ 3	+ 1	+ 1	+ 1

TABLE 24.—*Departure of the mean monthly and annual aqueous vapour pressure from the normal in the fifteen chief political divisions of India in 1916.*

DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	"	"	"	"	"	"	"	"	"	"	"	"	"
Burma	−·032	−·013	−·023	−·021	−·018	−·019	−·017	−·003	−·011	−·019	−·017	−·027	−·018
Assam	+·017	+·009	+·018	+·003	−·002	+·005	−·033	−·013	−·008	−·001	+·041	−·005	+·003
Bengal	−·027	−·019	+·003	−·002	−·003	−·025	−·020	−·008	−·002	+·047	+·025	−·011	−·003
Bihar and Orissa	−·048	−·038	−·083	+·021	−·068	−·012	+·001	+·009	+·016	+·121	+·055	−·006	−·003
United Provinces	−·040	−·025	−·064	−·019	−·162	+·050	+·001	0	+·032	+·119	−·023	−·016	−·012
Punjab	−·032	−·015	−·038	−·023	−·091	+·097	+·001	+·045	+·063	+·104	−·043	−·029	+·003
North-West Frontier Province	0	+·011	−·032	+·003	−·085	+·114	−·007	+·067	+·048	+·095	−·050	−·015	+·012
Sind	+·015	−·030	+·062	+·021	−·014	+·071	+·006	+·097	+·057	+·019	−·107	−·027	+·014
Rajputana	−·046	−·036	−·045	−·007	−·126	−·013	−·042	+·044	+·059	+·119	−·048	−·048	−·016
Bombay	+·001	−·018	−·015	−·032	−·031	+·004	+·014	+·026	+·043	+·057	+·056	−·013	+·008
Central India	−·046	−·017	−·039	−·011	−·062	+·028	−·002	+·015	+·031	+·135	+·004	−·019	+·001
Central Provinces	−·044	−·017	−·100	−·091	−·065	+·025	+·020	+·017	+·032	+·163	+·100	−·003	+·002
Hyderabad	−·007	−·055	−·084	−·094	+·014	+·017	+·038	+·016	+·031	+·092	+·133	−·001	+·008
Mysore	−·047	−·003	−·011	−·001	+·017	−·013	+·016	+·009	+·002	−·012	+·037	−·009	−·001
Madras	−·043	−·007	−·005	−·006	+·009	−·030	+·035	+·018	+·006	+·004	+·054	−·014	+·002
Mean of India	−·029	−·021	−·037	−·022	−·051	+·013	+·001	+·020	+·027	+·074	+·019	−·018	−·002

TABLE 25.—*Departure of the mean monthly and annual relative humidity from the normal in the fifteen chief political divisions of India in 1916.*

DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Burma	—1	—2	—2	0	—2	+1	—1	0	0	—1	+1	—1	—1
Assam	—1	—4	—2	+1	—3	—3	—1	—2	—1	0	+1	—1	—1
Bengal	—2	—3	—2	+4	—4	+1	—1	0	+1	+4	+1	0	0
Bihar and Orissa	—6	—7	—12	+2	—10	+4	0	+1	0	+9	+4	+2	—1
United Provinces	—9	—8	—15	—5	—12	+8	+3	+1	+2	+7	—1	+1	—2
Punjab	—11	—3	—13	—5	—4	+9	+4	+8	+7	+11	+1	—1	0
North-West Frontier Province	—1	+5	—13	—1	—2	+9	+1	+10	+6	+9	—3	+4	+2
Sind	0	—5	+3	+1	—1	+4	—1	+5	+3	+3	—4	+1	+1
Rajputana	—14	—7	—11	—1	—8	+2	—6	+7	+7	+16	—1	—5	—2
Bombay	—1	—1	—6	—2	—3	+3	+1	+2	+5	+8	+8	+1	+1
Central India	—8	—3	—9	0	—9	+11	—2	+3	+1	+16	+7	+5	+1
Central Provinces	—6	—3	—13	—10	—5	+11	+1	0	+2	+16	+11	+3	+1
Hyderabad	0	—6	—7	—9	+1	+8	+5	+1	+4	+13	+16	+1	+2
Mysore	—4	0	—1	—1	+3	+3	+1	+2	+2	+4	+8	+2	+2
Madras	—3	—1	0	—2	+1	0	+5	+2	+2	+2	+5	0	+1
Mean of India	—5	—4	—7	—2	—4	+5	+1	+2	+3	+8	+4	0	0

I.—The cold weather period.—Humidity, both absolute and relative, was in defect over practically the whole country, a departure which corresponds with the fact that rainfall was also well below the average in this period.

II.—The hot weather period.—Except in Sind, where vapour pressure was somewhat higher than usual, and in Assam, Bengal, Mysore and Madras, where hygrometric conditions were normal, the air was drier than usual throughout the plains of India.

Over Persia the distribution of humidity was irregular. At Kalat, Quetta and Kabul the relative humidity was much higher than usual though the absolute humidity did not differ appreciably from the normal.

III.—The south-west monsoon period.—The air was normal or slightly drier than usual in Burma and northeast India, and damper over the greater part of the rest of the plains of India. The excess was most marked in both absolute and relative humidity in the Punjab and the North-West Frontier Province.

These departures were in the main parallel with the anomalies of rainfall.

Humidity was in excess in Baluchistan and Kabul, but there was a remarkably large defect in the neighbourhood of the Persian Gulf during June.

IV.—The retreating south-west monsoon period.—The air was damper than usual except in Burma and Sind.

The excess was most pronounced in Central India, the Central Provinces and Hyderabad, so that the humidity departures agree well in the main with those of rainfall. Judging from the information available it would seem that the period as a whole was characterised, by unusual dryness over the area between north-west India and Arabia.

The year.—Vapour tension and relative humidity were both above normal in June, August, September, October and November. October was the dampest month in the year both absolutely and relatively. Absolute humidity was nearly normal in July and relative humidity in July and December. In the rest of the year they were both in defect. As the anamolous features of different months very nearly balanced each other both the vapour pressure and relative humidity of the year were very nearly normal.

A comparison of the monthly departures with the corresponding rainfall data shows that the abnormalities of the two elements were parallel during most of the months of the year.

Cloud.

Normal values of the mean monthly and annual amount of cloud at stations in Table A have been obtained from the whole of the available data up to the end of the year 1899 and given in Tables XXXV and XXXVI of the Indian Meteorological Memoirs, Volume XVII. These means are the arithmetical averages of the cloud amounts as registered at 10 and 16 hours, and hence represent the mean amount during the day period rather than of the whole 24 hours.

The normals used in Table B are in the case of the majority of stations based on the 8 hours records of the period 1889—1910, and are given in the Volume XXII, Part III, of the Memoirs.

Departure data of this element of meteorological observation for first and second class stations for the year 1916 are given in Table 26. Table 27 gives the departures of the 8 hours cloud for the fifteen chief political provinces of India.

Table 26.—Departure of the monthly and annual mean cloud amount of 1916 from the average of past years.

Division.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Bengal	Calcutta	−0·4	−0·7	−0·5	−0·1	−1·6	+1·6	−0·1	+0·6	+0·6	+2·3	−0·2	−0·7	+0·1
Punjab	Lahore	−0·2	−1·4	−0·7	0	−0·3	−2·4	−1·2	+1·4	−0·6	0	−0·8	−1·1	−0·6
Rajputana	Jaipur	−0·2	−1·2	−0·2	−0·8	−0·9	+0·4	−1·3	+0·9	+1·0	+1·3	−0·8	−1·6	−0·3
Bombay	Bombay	−0·4	+0·1	0	+0·1	+1·3	+1·8	+0·3	−0·5	+0·8	+2·8	+1·0	−1·0	+0·5
Madras	Madras	−1·7	−1·3	−1·1	−1·2	−1·6	+0·5	−1·4	−0·3	−0·4	+0·2	−0·2	−1·2	−0.8
Hill stations, excluding Kashmir and Baluchistan.	Katmandu	+0·8	−0·2	−0·6	−0·1	−1·1	+1·5	+0.7	0	+0·8	+0·2	−0·7	+0·3	+0·1
Extra India	Seychelles	−0·4	+0·2	−2·0	+0·2	+0·8	−1·4	+1·5	−0·3	+0·4	−1·1	−1·3	−0·9	−0·4
	Mauritius	+1·5	−0·9	−1·5	−0·2	+2·0	+0·1	+0·2	+0·9	+1·3	+0·8	+0·5	+1·2	+0·5

TABLE 27.—*Departure of the mean monthly and annual cloud amount from normal in the fifteen chief political divisions of India in 1916.*

Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Burma	+0·7	+0·3	+1·0	+0·3	−0·1	+0·7	−0·9	−0·5	+0·4	+0·4	+0·7	+1·0	+0·3
Assam	0	−0·3	−0·9	+0·1	−0·8	−1·5	−0·5	−1·0	−0·1	+0·9	+0·6	+1·6	−0 2
Bengal	−0·4	−0·7	−0·3	+0·8	−0·5	+0·7	−0·1	+0·4	+0·5	+1·9	+0·1	−0·6	+0·1
Bihar and Orissa	−0·8	−0·7	−0·3	+0·6	−0·3	+1·5	0	+0·6	+0·4	+2·9	+1·2	−0·6	+0·4
United Provinces	−1·5	−0·6	−0·7	+0·2	−0·5	+1·6	0	+0·1	+0·6	+1·5	0	−0·9	0
Punjab	−0·1	−0·3	−0·8	+0·1	+0·2	+0·5	+0·9	+1·2	+0·9	+0·6	−0·4	−0 9	+0·2
North-West Frontier Province	+0·7	+0·3	−0·5	+1·3	+0·1	+1·2	+0·7	+2·5	−0·1	−0·3	−0·7	−0·5	+0·4
Sind	+0·8	−1·0	−0·1	−0·7	−0·3	0	−1·7	+2·1	−0·1	+0·7	−1·1	−1·1	−0·2
Rajputana	+0·1	−1·4	−0·6	−0·9	+0·4	+1·6	−0·7	+1·7	+1·3	+1·6	−0·9	−1·1	+0·1
Bombay	−0·2	+0·2	+0·3	0	+0·8	+0·6	−0·7	+0·4	+0·9	+2·1	+0·9	−0·2	+0·4
Central India	−0·7	−0·8	+0·1	+0·4	0	+2·4	−1·2	+0·6	+0·3	+3·0	+0·7	−0·7	+0·3
Central Provinces	−0·8	+0·2	0	+0·3	+0·6	+1·4	−0·7	0	+0·2	+2·2	+1·7	−1·0	+0·3
Hyderabad	−0·5	+0·3	−0·3	+0·1	+0·7	+1·1	+0·6	+0·8	+1·4	+2·5	+1·8	−1·1	+0·6
Mysore	−1·4	−0·5	−0·4	−0·2	−0·1	+0·1	−1·2	−0·7	−0·1	+0·9	+0·4	−1·2	−0·4
Madras	−1·0	−0·5	−0·4	−0·2	−0·2	+0·6	−0·5	0	+0·2	+0·9	+0·3	−0·7	−0·1
Mean of India	−0·4	−0·3	−0·2	+0·1	+0·1	+0·9	−0·4	+0·4	+0·6	+1·6	+0·5	−0·5	+0·2

I.—The cold weather period.—On the mean of the period cloud amount was in excess in Burma and the North-West Frontier Province, nearly normal in Assam, the Punjab, Sind, Bombay, Central Provinces and Hyderabad, and in defect elsewhere over the plains of India.

The cloud proportion was, on the whole, high in Arabia, Persia, Baluchistan and at Kabul.

II.—The hot weather period.—There was appreciably less cloud than usual in Assam, but over the remainder of the plains the skies were clouded to about the normal extent.

The cloud proportion was, on the whole, higher than the average in Persia, Baluchistan, and Kabul as well as on the hills of north-east India.

III.—The south-west monsoon period.—Skies were less clouded than usual in Assam and Mysore, but elsewhere in the plains cloud amount was either nearly normal or in excess, the excess being 1·0 or more in the North-West Frontier Province, Rajputana and Hyderabad. It may be noted that the rainfall of the period was in excess in every division except Assam.

In Arabia, Persia, Baluchistan, Kabul and in the hill districts of northern India generally the proportion of cloud was higher than usual.

IV.—The retreating south-west monsoon period.—In most parts of the country the sky was covered to more than the average extent in October, but in December the skies were unusually clear except in Burma and Assam. On the mean of the whole period the quantity of cloud was in appreciable defect in the North-West Frontier Province and Sind, and was normal in the United Provinces, the Punjab, Rajputana, Mysore and Madras; elsewhere it was in decided excess.

In Persia, Arabia, Baluchistan, Kashmir and the hills of the North-West Frontier Province skies were clearer than usual. Cloud was, on the other hand, unusually heavy for the time of the year over the hills of northeast India.

The year.—On the average of all the recording stations in the plains, skies were appreciably more clouded than usual in June, and from August to November, and were unusually free from cloud in January, July and December.

The general departures of cloud were parallel with those of rainfall in ten months out of the twelve, and with those of absolute humidity in nine.

TABLE 28.

—	Departure from normal of Indian area.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Cloud amount at 8 hrs.	— 0·4	— 0·3	— 0·2	+ 0·1	+ 0·1	+ 0·9	— 0·4	+ 0·4	+ 0·6	+ 1·6	+ 0·5	— 0·5	+ 0·2
Vapour pressure at 8 hrs.	—·029	—·021	—·037	—·022	—·051	+ ·013	+ ·001	+ ·020	+ ·027	+ ·074	+ ·019	—·018	—·002
Relative humidity at 8 hrs.	— 5	— 4	— 7	— 2	— 4	+ 5	+ 1	+ 2	+ 3	+ 8	+ 4	0	0
Rainfall (percentage departure)	— 89	— 28	— 62	— 9	— 13	+ 27	— 6	+ 24	+ 21	+ 89	+ 19	— 66	+ 16

Snowfall.

(A).—The cold weather of 1915-16 and the succeeding hot weather :—

(*a*) In the Persian area the winter began several weeks after the normal date and lasted longer than usual, more especially in the north.

(*b*) In Afghanistan as represented by Kabul the precipitation was lighter than usual from November to March, and remarkably heavy in April. There are no data available regarding Kabul itself for May, but on the Paghman, Qila Qazi, Shakardara and Hindu Kush ranges snow lay 2 to 3 feet deep on the 24th May.

(*c*) The precipitation in Baluchistan was in excess in January, April, and May, and in defect during the rest of the season.

(*d*) In the mountain region of the North-West Frontier Province the snowfall was apparently light from November to January and also in March, unusually heavy in February, and about normal in April and May.

(*e*) The precipitation of the season was distinctly below normal in Kashmir, the defect occurring chiefly in January and March. There were a few falls of snow in May, but they were confined to the higher ranges.

(*f*) In the Punjab Himalayas the snowfall was heavier than usual in February, and deficient during the rest of the period from November to April. On the Dalhousie range snow is reported to have fallen as low as 2,300 feet on the 6th of February. In May snow fell near the middle of the second week in the Simla, Kulu and Chamba hills, the lowest descent being to 8,000 feet on the Bhandal range. On the ranges near Kilba the snowline had retreated to a level of about 13,000 feet by the beginning of June.

(*g*) In the Kumaon hills the snowfall was on the whole lighter than usual; the accumulations at the end of May were distinctly less than the average on the higher elevations, and rather in excess on the middle ranges.

(*h*) In the Assam Himalayas the snowfall, although unevenly distributed, was on the whole about the average.

In general it appears that notwithstanding the marked prolongation of winter conditions there was less than the average amount of snowfall, and it is almost certain that the accumulations at the end of May were on the whole below the average depth except perhaps on the ranges around Kabul and in a few localities in the western Himalayas.

(B).—The southwest monsoon period, June to September :—

During June there were some light local falls of snow, such as usually occur during that month, and did not affect the previous accumulations which in general continued below the average depth.

In July there were a few local falls in the western Himalayas, mainly on the higher elevations, and the accumulations of snow at the end of the month were in general distinctly below the average.

According to the available information there was little or no snowfall during August except near the region of perpetual snows in the Kumaon Himalayas. The accumulations at the end of the month in Almora were on the whole less than usual. The ranges near Kilba where as a rule appreciable accumulations exist in August were, as in July, clear of snow.

Except locally in the Almora hills the snowfall of September in the western Himalayas, for which alone information is available, was lighter than usual.

(C).—The period October to December :—

During October in the mountain zone bordering upper India there were a few falls, mainly on the higher elevations, and the accumulations of snow still existing at the end of the month were in general distinctly below the average. In the central and eastern sections of the North-East Frontier Tract, the snowfall was heavier than usual and occurred to very low levels.

In November there was much less snowfall than usual except on the ranges near Kabul. The accumulations existing at the end of the month on the ranges in the North-West Frontier Province, Kashmir and Almora were decidedly below the average.

During December unusually heavy snow fell in Chitral and the North-East Frontier Tract, but elsewhere the month's fall was distinctly below the average.

Rainfall.

The rainfall data of India are now issued annually in a separate volume entitled "Rainfall of India." The twenty-sixth volume, that of 1916, contains the whole rainfall data of 2,890 stations which are there classified under their respective administrative divisions according to the following scheme :—

Province.	Number of stations.
Burma	213
Assam	125
Bengal	230
Bihar and Orissa	296
United Provinces of Agra and Oudh	276
Punjab	189
Kashmir	39
North-West Frontier Province	36
Baluchistan	90
Rajputana	186
Bombay	289
Central India	117
Central Provinces	183
Hyderabad	19
Mysore	77
Coorg	10
Madras (including Puddukkottai, Travancore and Cochin)	515
Total	2,890

The information includes monthly statements of—

(*a*) the actual rainfall, day by day, of all the rainfall stations ;

(*b*) the total rainfall of the month ;

(*c*) the number of rainy days during the month ;

(*d*) the average or normal rainfall of the month of all stations for which rainfall data of at least five years are available ;

(*e*) the average or normal number of rainy days of the month for all stations for which rainfall data of five years or upwards are available.

Symon's rain-gauges are now used at all rain-gauge stations with the exception of those in Mysore. The time of measuring rainfall is 8 hours by local time throughout India, and the amounts registered give the rainfall of the previous 24 hours, and hence generally of the previous civil day.

The tables 29 to 31 give summaries of the rainfall data of the year. The first and second tables give average rainfall data based on the returns of about 2,400 rain-gauge stations for the 15 chief political divisions and the 33 sub-divisions respectively, while the third table (Table 31) contains data of the number of rainy days for the 33 sub-divisions for the four seasons into which the year has been divided.

The normals employed in this section are based on all the available records ending in 1910 and are given in parts I and II of Volume XXII of Memoirs of the Indian Meteorological Department.

TABLE 29.—*Average over the 15 chief political divisions of the actual and normal rainfall for the four seasons of the year 1916, and for the whole year.*

Division.	January and February.				March to May.				June to September.				October to December.				Whole year.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"		"	"	"		"	"	"		"	"	"		"	"	"	
Burma	0·09	0·30	−0·21	−70	8·36	10·42	−2·06	−20	59·89	58·53	+1·36	+ 2	11·30	8·87	+2·43	+27	79·64	78·12	+1·52	+ 2
Assam	1·95	2·0[illegible]	−0·09	−4	24·75	25·07	−0·32	−1	59·64	65·31	−5·67	− 9	10·42	6·40	+4·02	+63	96·76	98·82	−2·06	− 2
Bengal	0·49	1·36	−0·87	−64	9·93	12·43	−2·50	−20	64·25	55·66	+8·59	+15	13·57	5·33	+8·24	+155	88·24	74·78	+13·46	+18
Bihar and Orissa	0·54	1·59	−1·05	−66	1·84	4·00	−2·16	−54	45·36	42·55	+2·81	+ 7	8·66	3·29	+5·37	+163	56·40	51·43	+4·97	+10
United Provinces	0·76	1·55	−0·79	−51	0·56	1·26	−0·70	−56	43·66	33·89	+9·77	+29	2·50	1·88	+0·62	+33	47·48	38·58	+8·90	+23
Punjab	0·79	1·98	−1·19	−60	0·99	1·77	−0·78	−44	20·46	15·18	+5·28	+35	1·11	0·71	+0·40	+56	23·35	19·64	+3·71	+19
North-West Frontier Province	2·18	2·89	−0·70	−24	4·03	4·44	−0·41	− 9	13·40	8·47	+4·93	+58	0·67	1·14	−0·47	−41	20·28	16·93	+3·35	+20
Sind	0·08	0·59	−0·51	−86	0·09	0·41	−0·32	−78	10·77	5·29	+5·48	+104	0·05	0·16	−0·11	−69	10·99	6·45	+4·54	+70
Rajputana	0·20	0·62	−0·42	−68	0·48	0·71	−0·23	−72	26·55	19·51	+7·04	+36	0·99	0·65	+0·34	+52	28·22	21·49	+6·73	+31
Bombay	0	0·17	−0·17	−100	1·87	1·47	+0·40	+27	44·06	40·67	+3·39	+ 8	8·04	3·21	+4·83	+150	53·97	45·52	+8·45	+19
Central India	0·34	0·87	−0·53	−61	0·44	0·64	−0·20	−31	43·09	33·27	+9·82	+30	3·73	1·29	+2·44	+189	47·60	36·07	+11·53	+32
Central Provinces	0·75	0·95	−0·20	−21	0·92	1·46	−0·54	−37	44·49	39·48	+5·01	+13	7·11	2·37	+4·74	+200	53·27	44·26	+9·01	+20
Hyderabad	0·21	0·33	−0·12	−36	1·88	1·77	+0·11	+6	34·44	26·89	+7·55	+28	10·93	3·85	+7·08	+184	47·46	32·84	+14·62	+45
Mysore	0	0·22	−0·22	−100	6·59	5·47	+1·12	+20	26·97	22·30	+4·67	+21	13·00	6·05	+4·95	+61	46·56	36·05	+10·51	+29
Madras	0·11	1·01	−0·90	−89	3·24	4·63	−1·39	−30	29·03	24·19	+4·84	+20	16·50	13·75	+2·75	+20	49·11	43·58	+5·53	+13
Mean of India	0·45	0·99	−0·56	−57	3·58	4·40	−0·82	−19	39·86	34·86	+5·00	+14	7·53	4·17	+3·36	+81	51·42	44·43	+7·00	+16

TABLE 30.—*Average over the 33 sub-divisions of the actual and normal rainfall for the four seasons of the year 1916, and for the whole year.*

Sub-division.	January and February.				March to May.				June to September.				October to December.				Whole year.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Actual.	Normal.	Departure from normal	Percentage departure from normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"		"	"	"		"	"	"		"	"	"		"	"	"	
1. Bay Islands	0	2·02	−2·02	−100	19·21	20·55	−1·34	− 7	03·23	64·92	− 1·69	− 3	22·37	20 73	+ 1·64	+ 8	104·81	108·22	− 3·41	—
2. Lower Burma	0·03	0·37	−0·3	− 92	12·43	15·14	- 2 71	−18	99·73	103·1[illegible]	3·45	− 3	13·42	10·46	+ 2·96	+ 28	125·61	129·15	− 3·54	− 3
3. Upper Burma	0·13	0·27	−0·14	− 52	5·72	7·37	−1·65	− 22	34·19	29·65	+ 4·54	+ 15	9 94	7·77	+ 2 17	+ 28	49·98	45·06	+ 4·92	+ 11
4. Assam	1·95	2·04	−0·09	− 4	24·75	25·07	−0·32	− 1	59·64	65·31	− 5·67	− 9	10 42	6·40	+ 4·02	+ 63	96·76	98·82	− 2·06	− 2
5. Bengal	0·49	1·36	−0·87	− 64	9·93	12·43	−2·50	−20	64·25	55·66	+ 8·59	+ 15	13·57	5·33	+ 8·24	+155	88·24	74·78	+13·46	+ 18
6. Orissa	0·19	1·42	−1·23	− 87	2·59	5·68	−3·09	− 54	42·52	44·25	− 1·73	— 4	12·36	5·41	+ 6·95	+128	57·66	56·76	+ 0·90	+ 2
7. Chota Nagpur	0·64	2·31	−1·67	− 72	1 54	3·58	−2·04	− 57	38·05	43·48	− 5·43	− 12	9 90	2·49	+ 7·41	+298	50·13	51·86	− 1·73	− 3
8. Bihar	0·64	1·32	−0·68	− 52	1·61	3·38	−1·77	−52	50·38	41·25	+ 9·13	+ 22	6·12	2·63	+ 3·49	+133	58·75	48·58	+10·17	+ 21
9. United Provinces, East	0·72	1·21	−0·49	− 40	0·50	1·10	−0·60	−55	43·50	34 51	+ 8 99	+ 26	2·45	2·41	+ 0·04	+ 2	47·17	39·23	+ 7·94	+ 20
10. Do. do., West	0·79	1·83	−1·04	− 57	0·62	·38	−0·76	−55	43·78	33·34	+10 44	+ 31	2·54	1·43	+ 1·11	+ 78	47·73	37·98	+ 9·75	+ 26
11. Punjab, East and North	0·93	2·30	−1·37	− 60	0·95	1·90	−0·95	−50	23 72	17·98	+ 5·74	+ 32	1 29	0·85	+ 0·44	+ 52	26·80	23·03	+ 3·86	+ 17
12. Punjab, Southwest	0·33	1·05	−0·72	− 69	1·10	1·35	−0·25	−19	10·41	6 53	+ 3·88	+ 59	0·51	0 35	+ 0·16	+ 46	12·35	9·28	+ 3·07	+ 33
13. Kashmir	5·47	7·09	−1·62	− 23	5·17	9·07	−3 90	−43	26·36	22·19	+ 4 17	+ 19	1·46	2·89	− 1·43	— 49	38 46	41·24	− 2·78	− 7
14. North-West Frontier Province.	2·18	2·88	−0·70	− 24	4·03	4·44	−0·41	− 9	13·40	8·47	+ 4·93	+ 58	0·67	1·14	−0·47	— 41	20·28	16·93	+ 3·35	+ 20
15. Baluchistan	2·59	2·70	−0·11	− 4	1·46	2·01	−0·55	−27	4·68	1·8[illegible]	+ 2·79	+148	0·07	1·03	-0·96	− 93	8·80	7·63	+ 1·17	+ 15
16. Sind	0·08	0·59	−0·51	− 86	0·09	0 41	−0·32	−78	10·77	5 29	+ 5·48	+104	0·05	0·16	−0·11	— 69	10·99	6·45	+ 4·54	+ 70
17. Rajputana, West	0·06	0·48	0·42	− 87	0·73	0·56	+0·17	+30	15·68	11·74	+ 3·94	+ 34	0·76	0·26	+ 0·50	+192	17·23	13·04	+ 4 10	+ 32
18. Do., East	0·29	0·68	−0·39	− 57	0·39	0·78	−0·39	− 50	31·78	22·92	+ 8·86	+ 39	1·10	0·83	+ 0·27	+ 33	33·56	26·21	+ 8·35	+ 32
19. Gujarat	0	0·16	−0·16	−100	0·30	0·24	+0·06	+25	30·82	31·42	− 0·60	− 2	1·52	0·83	+ 0·69	+ 83	32·64	32·65	− 0·01	0
20. Central India, West	0·28	0·59	−0·31	− 52	0·69	0·48	+0·21	+44	43·12	31·50	+11·62	+ 37	2·82	1·01	+ 1·81	+179	46·91	33·58	+13·33	+ 40
21. Do. do., East	0·48	1·16	−0·76	− 66	0·14	0·79	−0·65	−82	43·27	35·05	+ 8·22	+ 23	4·54	1·58	+ 2·96	+187	43·35	33·58	+ 9·77	+ 25
22. Berar	0·29	0·61	−0·32	− 52	1·28	0·95	+0·33	+35	40·70	28·17	+12·53	+ 44	4·90	2·46	+ 2·44	+ 99	47·17	32·19	+14·98	+ 47
23. Central Provinces, West	0·85	1·05	−0·20	− 19	0·80	1·14	−0·34	−30	47·18	40·97	+ 6·21	+ 15	8·57	2·18	+ 6·39	+293	57·40	45·34	+12·06	+ 27
24. Do. do., East	1·01	1·12	−0·11	− 10	0·78	2·10	−1·32	−63	44·94	46 37	− 1·43	− 3	7·44	2·46	+ 4·98	+202	54·17	52·05	+ 2 12	+ 4
25. Konkan	0	0·13	−0·13	−100	1·77	1·84	−0·07	− 4	113·56	102·44	+11·12	+ 11	13·22	4·90	+ 8·32	+170	128 55	109·31	+19·24	+ 18
26. Bombay Deccan	0·01	0·20	−0·19	− 95	2·94	2·14	+0·80	+37	27·60	24·42	+ 3·18	+ 13	10·41	4·13	+ 6·28	+152	40·96	30·89	+10·07	+ 33
27. Hyderabad, North	0·31	0·28	+0·03	+ 11	1·55	1·53	+0·02	+ 1	35·48	29·50	+ 5·98	+ 20	7·14	3·59	+ 3·55	+ 99	44·48	34·90	+ 9·58	+ 27
28. Do., South	0·10	0·37	−0·27	− 73	2·26	2·05	+0·21	+10	33·27	23·97	+ 9·30	+ 39	15·17	4·19	+10·98	+ 262	50·80	30·58	+20·22	+ 66
29. Mysore	0	0·23	−0·23	−100	6·59	5·47	+1·12	+20	26 97	22·30	+ 4·67	+ 21	13·00	8·05	+ 4·95	+ 61	46·56	36·05	+10·51	+ 29
30. Malabar	0·08	0·59	−0·51	− 86	9·05	10·67	−1·62	−15	105·21	102·29	+ 2·92	+ 3	16·80	13·96	+2·84	+ 20	131·14	127·51	+ 3·63	+ 3
31. Madras, Southeast	0·13	1·42	−1·29	− 91	2·87	4·71	−1·84	−39	15·41	11·70	+ 3·71	+ 32	15·62	17 24	− 1·62	− 9	34·03	35·07	− 1·04	− 3
32. Madras Deccan	0·02	0·25	−0·23	− 92	2·52	2·47	+0·05	+ 2	23·05	14·93	+ 9·02	+ 60	13·68	6·70	+ 6·98	+104	40·17	24·35	+15·82	+ 65
33. Madras Coast, North	0·11	0·74	−0·63	− 85	2·25	3·53	−1·18	−33	30·34	24·70	+ 5·64	+ 23	18·98	10·64	+ 8·34	+ 78	52·74	39·57	+13·13	+ 33

TABLE 31.—*Average over the 33 sub-divisions of the actual and normal number of rainy days for the four seasons of the year 1916, and for the whole year.*

Sub-division.	January and February.			March to May.			June to September.			October to December.			Whole year.		
	Actual.	Normal.	Departure from normal.	Actual.	Normal.	Departure from normal.	Actual.	Normal.	Departure from normal.	Actual.	Normal.	Departure from normal.	Actual.	Normal.	Departure from normal.
1. Bay Islands	0	3·0	−3·0	15·0	21·7	−6·7	77·0	78·4	−1·4	27·5	26·7	+0·8	119·5	129·8	−10·3
2. Lower Burma	0·1	0·6	−0·5	15·3	15·7	−0·4	90·0	90·9	−0·9	16·2	14·3	+1·9	121·6	121·5	+0·1
3. Upper Burma	0·4	0·7	−0·3	9·1	11·0	−1·9	45·8	42·0	+3·8	13·9	11·0	+2·9	60·2	64·7	+4·5
4. Assam	5·2	5·0	+0·2	30·8	32·9	−2·1	63·8	68·3	−4·5	11·9	8·7	+3·2	111·7	114·9	−3·2
5. Bengal	0·8	2·5	−1·7	11·6	15·6	−4·0	63·1	60·0	+3·1	13·2	6·0	+7·2	88·7	84·1	+4·6
6. Orissa	0·5	2·4	−1·9	5·0	9·2	−4·2	56·4	53·8	+2·6	14·2	6·8	+7·4	76·1	72·2	+3·9
7. Chota Nagpur	1·6	4·3	−2·7	3·1	7·0	−3·9	52·8	52·8	0	13·0	3·8	+9·2	70·5	67·9	+2·6
8. Bihar	1·5	2·8	−1·3	2·7	5·5	−2·8	53·6	45·7	+7·9	7·3	3·1	+4·2	65·1	57·1	+8·0
9. United Provinces, East	1·6	2·7	−1·1	1·2	2·4	−1·2	48·9	38·1	+10·8	4·5	2·5	+2·0	56·2	45·7	+10·5
10. Do. do. West	1·9	3·6	−1·7	1·4	3·1	−1·7	44·5	34·1	+10·4	3·3	1·9	+1·4	51·1	42·7	+8·4
11. Punjab, East and North	2·4	4·3	−1·9	2·6	4·2	−1·6	25·3	19·5	+5·8	1·4	1·5	−0·1	31·7	29·5	+2·2
12. Do., Southwest	0·9	2·6	−1·7	3·0	3·4	−0·4	13·1	8·6	+4·5	0·9	0·8	+0·1	17·9	15·4	+2·5
13. Kashmir	8·5	9·9	−1·4	11·8	14·6	−2·8	28·5	24·1	+4·4	2·7	4·5	−1·8	51·5	53·1	−1·6
14. North-West Frontier Province	6·6	5·6	+1·0	9·5	9·0	+0·5	15·9	12·1	+3·8	1·1	2·1	−1·0	33·1	28·8	+4·3
15. Baluchistan	5·7	6·0	−0·3	4·2	5·3	−1·1	7·3	3·3	+4·0	0·3	2·6	−2·3	17·5	17·2	+0·3
16. Sind	0·3	1·6	−1·3	0·4	1·0	−0·6	13·2	6·1	+7·1	0·2	0·3	−0·1	14·1	9·0	+5·1
17. Rajputana, West	0·2	1·1	−0·9	1·5	1·5	0	19·3	14·8	+4·5	1·1	0·5	+0·6	22·1	17·9	+4·2
18. Do., East	0·6	1·7	−1·1	0·8	1·9	−1·1	37·9	27·8	+10·1	2·3	1·3	+1·0	41·6	32·7	+8·9
19. Gujarat	0	0·4	−0·4	0·5	0·5	0	41·2	34·8	+6·4	2·6	1·3	+1·3	44·3	37·0	+7·3
20. Central India, West	0·9	1·4	−0·5	1·1	1·3	−0·2	46·0	37·9	+8·1	4·9	1·7	+3·2	52·9	42·3	+10·6
21. Do. do., East	1·2	2·4	−1·2	0·5	1·9	−1·4	45·5	37·2	+8·3	6·4	2·1	+4·3	53·6	43·6	+10·0
22. Berar	0·7	1·2	−0·5	2·3	2·3	0	51·3	38·7	+12·6	8·9	3·6	+5·3	63·2	45·8	+17·4
23. Central Provinces, West	1·7	2·1	−0·4	1·3	2·6	−1·3	56·0	47·2	+8·8	9·7	3·1	+6·6	68·7	55·0	+13·7
24. Do. do, East	1·8	2·1	−0·3	2·1	4·3	−2·2	54·8	51·1	+3·7	9·3	3·6	+5·7	68·0	61·1	+6·9
25. Konkan	0	0·3	−0·3	2·9	2·5	+0·4	92·6	84·5	+8·1	15·2	7·0	+8·2	110·7	94·3	+16·4
26. Bombay Deccan	0	0·5	−0·5	5·5	4·0	+1·5	43·1	37·4	+5·7	14·4	6·3	+8·1	63·0	48·2	+14·8
27. Hyderabad, North	0·6	0·6	0	3·3	3·4	−0·1	49·5	41·0	+8·5	13·6	5·2	+8·4	67·0	50·2	+16·8
28. Do., South	0·2	0·8	−0·6	4·6	4·3	+0·3	45·8	37·7	+8·1	17·7	6·4	+11·3	68·3	49·2	+19·1
29. Mysore	0	0·4	−0·4	10·5	9·0	+1·5	39·0	33·6	+5·4	16·9	12·1	+4·8	66·4	55·1	+11·3
30. Malabar	0·3	0·8	−0·5	12·7	13·0	−0·3	92·7	85·3	+7·4	22·0	7·8	+14·2	127·7	106·9	+20·8
31. Madras, Southeast	0·4	2·0	−1·6	5·0	7·0	−2·0	22·0	18·2	+3·8	20·3	12·6	+7·7	47·7	39·8	+7·9
32. Madras Deccan	0·1	0·2	−0·1	4·8	4·3	+0·5	34·7	25·1	+9·6	16·0	4·4	+11·6	55·6	34·0	+21·6
33. Madras Coast, North	0·3	0·8	−0·5	4·3	5·5	−1·2	42·7	35·3	+7·4	19·8	10·9	+8·9	67·1	52·5	+14·6

I.—The cold weather period :—

(*a*) The period was singularly free from rain-producing depressions, being in fact one of the driest on record, and the total rainfall over the plains of India fell short of the normal by 0·5″ or 57 per cent. The defect was common to practically the whole country ; and it equalled or exceeded half an inch in the provinces of Bengal, Bihar and Orissa, the United Provinces, the Punjab, the North-West Frontier Province, Sind, Central India and Madras, over the greater part of which areas the normal quantity of rainfall received during the period ranges between half an inch and two inches.

(*b*) In Baluchistan the recorded fall was almost equal to the average, while in Kashmir it was in defect by 23 per cent. In Persia, on the other hand, the aggregate of the season was well above normal.

(*c*) In sub-equatorial regions the rainfall was nearly normal at Zanzibar and Mauritius but greatly in defect at Seychelles.

TABLE 32.

Station.	Rainfall of period, January and February.			
	Actual.	Normal.	Departure from Normal.	Percentage departure from normal.
	″	″	″	
Aden	0·10	0·61	−0·51	−84
Bushire	4·90	4·74	+0·16	+ 3
Tehran	3·89	2·73	+1·16	+42
Jask	2·86	1·65	+1·21	+73
Muscat	5·02	1·86	+3·16	+170
Meshed	2·37	1·71	+0·66	+39
Kabul	2·37	2·93	−0·56	−19

II.—The hot weather period :—

(*a*) The dryness of the previous season persisted through March and April, and rainfall was again in defect over by far the greater part of the country. In May, however, cold weather actions caused somewhat heavier precipitation than usual along the north-west frontier, and thunderstorms were unusually abundant over the central parts of the country, but in most other places the weather was drier even than usual. The total rainfall of the season was above normal by 27 per cent. in Bombay and 20 per cent. in Mysore, within 10 per cent of the average in Assam, the North-West Frontier Province and Hyderabad, and deficient in all other provinces. The defect was greatest and amounted to about 2″ in Burma, Bengal and Bihar and Orissa.

(*b*) The general deficiency of rainfall during this period extended to Kashmir and Baluchistan but in Persia generally and at Kabul the total fall was appreciably above normal ; Kabul had 8·10″ in April against a normal of 2·86″.

(*c*) At the stations in the Indian Ocean rainfall was in defect in March. At Zanzibar it was greatly in excess in April and below normal in May. The total fall of the season was well above the average at Zanzibar and Mauritius and normal at Seychelles.

TABLE 33.

Station.	Departure from normal of rainfall in			
	March.	April.	May.	Period, March to May.
	″	″	″	″
Aden	−0·62	−0·20	−0·12	−0·94
Busrah	+0·23	+1·00	−0·45	+0·78
Bushire	−0·07	+1·57	−0·02	+1·48
Tehran	+4·14	+1·41	+1·96	+7·51
Ispahan	...	0·00	−0·01	...
Jask	−0·04	+2·26	0·00	+2·22
Muscat	−0·56	+3·76	0·00	+3·20
Meshed	+0·55	−0·29	−0·48	−0·22
Kabul	−2·85	+5·24	+0·85	+3·24

TABLE 34.

Station.	Departure from normal of rainfall in			
	March.	April.	May.	Period, March to May.
	″	″	″	″
Zanzibar	−3·72	+19·50	−7·07	+8·71
Seychelles	−2·29	+1·02	+2·29	+1·02
Mauritius	−2·14	+0·55	+3·94	+2·35

III. The south-west monsoon period :—The monsoon rains were on the whole exceptionally heavy, and in this respect contrasted very favourably with those of 1915.

The Arabian Sea monsoon arrived on the west coast at about the average date, while the Bay current appeared in northeast India upwards of a week earlier than usual. The establishment of monsoon conditions in the interior occurred in the normal manner. Both currents were more active than usual until the 26th June, when a break set in over by far the greater part of the country ; this lasted up to the 2nd July in the Peninsula and another five days in northern and central India. Strongly marked

monsoon conditions prevailed generally from the 8th to the 20th July, but during the rest of the month the monsoon was somewhat inactive outside the Peninsula.

During August and September the currents were remarkably vigorous, and abundant rainfall occurred in almost all parts of the country, but particularly over most of the comparatively dry zone of northwest India.

A conspicuous feature of the season was the small number of cyclonic storms.

The rainfall of the whole season was in defect by 9 per cent in Assam and by 12 per cent in Chota Nagpur; within 5 per cent of the normal in the Bay Islands, Lower Burma, Orissa, Gujarat, the Central Provinces East and Malabar, and in excess in the rest of the country. The excess was large (*i.e.* upwards of 50 per cent) in the North-West Frontier Province, the Punjab Southwest, Baluchistan, Sind and the Madras Deccan, and considerable (between 20 and 50 per cent) in Bihar, the United Provinces, the Punjab East and North, Rajputana, Central India, Berar, Hyderabad, Mysore, Madras Southeast and the Madras Coast North.

On the general average of all the rainfall-recording stations in the plains of India there was an excess of 5″ or 14 per cent, which is the largest on record.

Rainfall was above normal in Kashmir and Arabia. In Persia it was irregularly distributed but so far as may be judged from the imperfect information available it was on the whole up to the small average. The weather was practically dry at Kabul.

During the season as a whole rainfall was in defect at all the three stations in the Indian Ocean.

TABLE 35.

Station.	Rainfall of period, June to September.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	″	″	″	
Aden	0·88	0·37	+0·51	+138
Busrah	0	0·19	—0·19	—100
Bushire	0	0·01	—0·01	—100
Ispahan	0	0·08	—0·08	—100
Jask	0·29	0·06	+0·23	+383
Muscat	0·58	0·17	+0·41	+241
Meshed	0·54	0·45	+0·09	+20
Kabul	0·01	0·55	—0.54	— 98

IV. The retreating south-west monsoon period.—

Meteorologically there was a strong resemblance between this period and the corresponding season of 1915. In October the monsoon was remarkably active and provided abundant rainfall over nearly the whole country. Four disturbances occurred in the course of the month, the first of the series being the cause of widespread monsoon rainfall on the 3rd and 4th over the Punjab where, as a rule, the final burst of the monsoon rainfall is recorded in the second or third week of September. A very vigorous monsoon prevailed also in November, and rainfall was heavy for the time of the year in most parts of the country with the exception of northwest India, where weather was drier even than usual. Three storms arose over the Bay and travelled inland; the third was a severe disturbrbance when crossing the coast near Madras on the early morning of the 23rd and caused much loss of life and property. A burst of unseasonable rainfall occurred in its connection in the central parts of the country on the 24th and 25th. The monsoon was weaker than usual in December, and withdrew from the south of the Peninsula on the 9th, a week before the customary date. Conditions were, however, disturbed in the Andaman Sea during the last week, and were responsible for a late burst of rain over the greater part of Burma on the 27th. In northern India weather was unusually dry except along the northwest frontier, where a disturbance of the winter type occasioned rain and snow about the middle of the month. The snowfall is said to have been heavy in Chitral, amounting to about six feet on the Lowarai Pass.

Notwithstanding the prevalence of unusually dry weather over most of the country during December the total rainfall of the whole season exceeded the normal in all the larger provinces with the exception of Sind and the North-West Frontier Province. The excess was less than an inch in amount in the United Provinces, the Punjab and Rajputana, between 2 inches and 3 inches in Burma, Central India, and Madras, and upwards of 3 inches in Mysore, Hyderabad, the Central Provinces, Bombay and north-east India.

Hardly any precipitation occurred in Baluchistan and it was much below the average in Kashmir, Persia and Arabia as well as at Kabul.

Taking the period as a whole rainfall was greatly in defect at the three stations in the Indian Ocean.

TABLE 36.

Station.	Departure from normal of rainfall in			
	October.	November.	December.	Period, October to December.
	″	″	″	″
Aden	—0·08	—0·10	—0·01	—0·19
Busrah	—0·08	—0·87	—0·68	—1·63
Bushire	—0·10	—1·56	—1·64	—3·30
Tehran	...	...	—1·07	...
Ispahan	...	—0·63	—0·75	...
Jask	—0·04	—0·32	—0·65	—1·01
Muscat	+0·71	—0·35	—0·62	—0·26
Meshed	—0·21	—0·48	—0·75	—1·44
Kabul	+0·43	—0·68	—0·51	—0·76

The year.—I.—During the cold season the weather was much less disturbed than usual, and the rainfall was more or less below the normal over nearly the whole country.

II.—The period March to May was also unusually dry, Bombay, Mysore and Hyderabad being the only divisions where the seasonal fall exceeded the normal. In Bihar and Orissa, the United Provinces and Sind the recorded amounts were upwards of 50 per cent. in defect.

III.—The monsoon was exceptionally active and provided abundant rainfall over most parts of the country.

IV.—Weather was abnormally wet in October and November, and was remarkably dry in December.

V.—The total rainfall of the year which was one of the wettest on record exceeded the normal by 7″ or 16 per cent, a greater excess than this having occurred only twice before in 1878 and 1893. The excess was not distributed over the whole year, for the first five months as well as July and December were drier than usual.

In Persia, as far as information is available, and at Kabul the rainfall of the year was above the average, the excess at Kabul being due to the excessive fall in April.

Of the stations in the Indian Ocean the year's fall was practically normal at Zanzibar and Mauritius, but was greatly in defect at Seychelles.

TABLE 37.

Station.	Annual rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal
	″	″	″	
Aden	1·11	2·24	−1·13	−50
Busrah	8·40	6·23	+2·17	+35
Bushire	9·40	11·07	−1·67	− 5
Jask	6·82	4·17	+2·65	+64
Muscat	10·45	3·94	+6·51	+165
Meshed	8·46	9·37	−0·91	−10
Kabul	14·27	12·89	+1·38	+11

TABLE 38.

Period.	Rainfall of India (when the size of areas is taken into account) in 1916.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	″	″	″	
Cold weather	0·43	0·99	−0·56	−57
Hot "	3·58	4·40	−0·82	−19
Southwest monsoon	39·86	34·86	+5·00	+14
Retreating southwest monsoon.	7·53	4·17	+3·36	+81
Whole year	51·42	44·42	+7·00	+16

S. SITARAMAYYA.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 12 stations in India, etc., in the year 1916.

TABL

Abstract of observations taken at 10 hrs. and 16 hr

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure. Mean of 10 hrs.	Mean of 16 hrs.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and to gravity at 45° Lat.	Temperature of air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hrs.	Mean 16 hrs.	Mean of daily means.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	III.—Bengal.																	
5	Calcutta	21	29·823	29·703	·120	29·761	—·027	29·729	87·7	71·4	16·3	105·4	49·2	56·2	81·7	85·1	79·0	+1·0
	VI.—Punjab.																	
11	Lahore	702	29·106	29·017	·089	29·016	—·055	29·720	88·4	63·1	25·3	112·1	34·2	77·9	78·3	87·2	74·7	0
	IX.—Rajputana.																	
18	Jaipur	1,431	28·408	28·302	·106	28·349	—·028	29·713	90·0	64·9	25·1	112·5	35·0	77·5	80·7	87·0	77·0	—0·1
	X.—Bombay.																	
25	Bombay	37	29·850	29·749	·101	29·798	—·029	29·776	86·1	75·7	10·4	94·1	59·2	34·9	80·9	83·2	79·8	+0·5
	XIV.—Mysore.																	
30	Bangalore	3,021	26·939	26·827	·112	26·887	—·014	29·719	84·4	64·4	20·0	88·7	60·1	28·6	76·5	81·5	73·0	+0·1
	XV.—Madras.																	
31	Pudukkottai	318	29·593	29·457	·136	29·525	...	29·769	93·2	73·9	19·3	98·5	69·1	29·4	84·9	90·0	83·5	...
	Madras	22	29·869	29·737	·132	29·815	—·028	29·769	91·1	74·9	16·2	97·1	70·3	26·8	86·1	86·5	81·9	+0·1
	Hill stations, excluding Kashmir and Baluchistan.																	
	Sarain	...	23·131	23·071	·060	23·093	...	23·055	62·9	43·3	19·6	69·9	36·5	33·4	55·7	58·1	53·7	...
	Katmandu	4,384	25·688	25·581	·107	25·621	+·056	25·575	78·0	54·3	23·7	84·0	48·0	36·0	67·4	74·1	65·9	+1·1
	Kodaikanal	7,688	22·826	22·765	·061	22·795	...	22·730	65·9	50·8	15·1	70·8	46·8	24·0	62·1	60·0	58·4	...
	Extra India.																	
	Seychelles	15	29·968	29·872	·091	29·928	—·021†	29·963	82·7	77·8	4·9	84·8	75·2	9·6	80·9	81·8	79·0	+0·1
	Mauritius	181	...	...	...	29·793	—·091	29·930	79·7	67·0	12·7	83·1	61·3	21·8	...	...	72·8	—0·5

N. B.—Elevations in italics indicate barometric determinations.
NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau stations the elevations of which exceed 3,200 feet.

A.

at 12 stations in India, etc., in the year 1916.

Temperature, Wet-bulb.				Vapour tension in inches of mercury.					Humidity.					Cloud.				Rainfall.		Station.	Number of sub-division.
Mean minimum.	Mean 10 hrs.	Mean 16 hrs.	Mean of three previous columns.	From minimum.	Mean 10 hrs.	Mean 16 hrs.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hrs.	Mean 16 hrs.	Mean of daily means.	Departure from normal.	Mean 10 hrs.	Mean 16 hrs.	Mean of two previous columns.	Departure from normal.	Total rainfall for the year.	Heaviest rainfall during the year.		
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
																				III.—Bengal.	
69·0	73·7	73·8	72·2	·709	·752	·704	·737	—·007	88	67	58	74	— 3	4·5	4·7	4·6	0	82·78	5·20	Calcutta	5
																				VI.—Punjab.	
58·4	66·1	69·2	64·6	·487	·524	·508	·515	+·017	76	51	38	57	+ 1	2·4	2·1	2·3	—0·6	24·84	7·66	Lahore	11
																				IX.—Rajputana.	
57·0	65·0	66·3	63·0	·447	·441	·407	·438	—·027	65	39	31	48	— 5	2·9	3·9	3·4	—0·3	23·68	2·00	Jaipur	18
																				X.—Bombay.	
70·9	75·[illegible]	76·0	74·0	·702	·805	·809	·790	—·002	78	75	71	77	— 1	4·4	4·2	4·3	+0·5	86·07	6·52	Bombay	25
																				XIV.—Mysore.	
61·9	67·0	67·0	65·3	·531	·557	·496	·537	—·005	88	62	49	69	+ 1	5·3	5·7	5·5	...	53·04	4·51	Bangalore	29
																				XV.—Madras.	
...	74·0	74·5	...	...	·695	·647	...	...	...	59	47	...	...	5·0	5·9	5·5	...	36·99	2·88	Pudukkottai	31
72·6	76·7	77·4	75·5	·777	·795	·818	·814	+·005	90	64	65	75	— 1	4·2	4·3	4·3	—0·7	46·33	3·53	Madras.	
																				Hill stations, excluding Kashmir and Baluchistan.	
...	45·0	46·5	...	...	·275	·290	...	...	...	57	57	...	...	4·7	†5·5	5·1	...	68·53	8·43	Sarain.	
51·9	60·1	62·8	58·2	·391	·465	·463	·440	—·009	85	66	54	70	— 3	4·3	†5·1	4·7	+0·2	48·12	2·71	Katmandu.	
46·4	54·0	55·1	51·8	·273	·337	·386	·332	...	72	63	76	70	...	4·6	7·3	5·9	...	55·39	2·37	Kodaikanal.	
																				Extra India.	
71·5	75·7	76·0	74·4	·668	·621	·623	·796	—·016	72	77	75	77	— 4	5·7	6·9	5·9	—0·37	67·36	4·69	Seychelles.	
...	...	...	67·9	...	...	...	·620	0	...	...	...	76	+ 1	...	...	5·8	...	49·79	3·14	Mauritius.	

† Departure from old normals.

Table B.—Abstract of observations taken at 8 hrs. at 218 stations in India, etc., in the year 1916.

(1) Provincial means.

(2) Data of stations.

1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,300 stations.

Division.	Pressure departure from normal of year.	Temperature of air.							Wind	Hygrometry.				Cloud.		Rainfall.		
		Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Departure of velocity from normal.	Mean humidity of year.	Departure from normal of year.	Mean vapour tension of year.	Departure from normal of year.	Mean cloud amount of year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.
	"	°	°	°	°	°	°	°				"	"			"	"	"
rma	—·016	87·4	—0·3	70·5	—0·2	79·0	0·2	16·9	0	84	—1	·738	—·018	5·4	+0·2	79·64	78·12	+1·52
sam	—·016	83·8	+0·1	66·8	+0·7	75·3	+0·4	17·0	+0·2	88	—1	·703	+·003	5·4	—0·1	96·76	98·82	—2·06
ngal	—·015	86·3	0	69·8	+0·4	78·1	+0·2	16·5	—0·2	84	0	·748	—·003	4·5	+0·2	88·24	74·78	+13·46
har and Orissa	—·014	88·1	0·2	69·0	+0·4	78·5	+0·1	19·2	0	75	—1	·662	—·004	3·9	+0·3	56·40	51·43	+4·97
ited Provinces of Agra and Oudh	—·016	88·4	—0·8	66·1	+0·1	77·3	—0·4	22·3	—0·2	67	—2	·567	—·009	2·9	0	47·48	38·58	+8·90
njab	—·014	88·5	—0·4	63·9	+0·1	76·3	—0·2	25·0	+0·5	63	0	·498	+·003	2·7	+0·1	23·35	19·64	+3·71
rth-West Frontier Province	—·025	87·7	+0·1	61·5	+0·7	74·6	+0·3	26·1	—0·7	65	+1	·493	+·006	2·9	+0·4	20·28	16·93	+3·35
d	—·017	91·1	+0·1	68·7	+0·4	80·0	+0·3	22·4	—0·8	64	+1	·598	+·016	2·3	—0·2	10·99	6·45	+4·54
jputana	—·022	90·5	—1·1	67·0	—0·1	78·8	—0·6	23·5	—0·2	52	—2	·466	—·016	2·9	+0·1	28·22	21·49	+6·73
mbay	—·028	89·1	—0·4	69·4	+0·3	79·2	0	19·7	—1·0	69	+1	·639	+·002	3·9	+0·4	53·97	45·52	+8·45
ntral India	—·022	87·8	—0·8	65·4	+0·5	76·6	—0·2	22·5	—0·2	63	+1	·522	+·003	3·8	+0·3	47·53	36·07	+11·46
ntral Provinces	—·023	89·2	—0·8	67·6	+0·6	78·4	—0·1	21·6	+0·1	62	0	·581	+·003	3·9	+0·3	53·27	44·26	+9·01
derabad	—·024	90·5	—0·5	69·9	+0·7	80·2	+0·1	20·5	—1·0	66	+2	·598	+·014	4·2	+0·7	47·46	32·84	+14·62
sore	—·021	84·8	—0·5	65·3	+0·4	75·0	—0·1	19·5	+0·6	77	+1	·586	—·001	5·0	—0·3	46·56	36·04	+10·52
dras	—·021	90·1	—0·4	74·1	+0·1	82·1	—0·1	16·0	+0·4	77	+1	·768	—·001	4·5	—0·1	49·11	43·58	+5·53

TABLE

(2) *Abstract of observations taken at 8 hrs. at 21*

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure, 8 hrs., in inches. Mean 8 hrs. pressure reduced to 32°.	Departure from normal of year.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure of year.	Lowest pressure of year.	Temperature of air. Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	I.—Burma.																
2	Victoria Point	147	29·765	...	29·843	29·936	29·611	78·3	85·0	...	74·2	...	79·6	...	10·8	95·0	67·2
	Mergui	66	29·849	—·019	29·845	30·048	29·661	76·6	86·3	—1·2	71·6	—0·2	78·9	—0·7	14·6	97·5	59·8
	Tavoy	19	29·892	—·031	29·844	30·100	29·682	75·9	87·5	—0·3	71·7	+0·1	79·7	—0·1	15·8	98·4	53·9
	Moulmein	94	29·827	—·002	29·860?	30·071	29·575	76·5	87·8	—0·3	71·7	—0·8	79·7	—0·5	16·1	98·8	57·0
	Rangoon	18	29·885	—·007	29·841	30·158	29·614	76·0	88·3	—1·0	72·2	—0·8	80·3	—0·9	16·1	101·4	59·2
	Bassein	27	29·868	—·013	29·832	30·148	29·575	76·9*	87·6*	+0·2*	72·6*	—0·1*	80·1*	+0·1*	15·0*	101·5	58·4
	Diamond Island	41	29·840	—·025	29·816	30·103	29·550	80·0	84·9	—0·4	76·5	+0·8	80·7	+0·2	8·4	90·4	63·6
	Toungoo	164	29·732	—·005	29·840	30·020	29·439	75·5	89·4	—0·7	68·7	—1·8	79·1	—1·3	20·7	102·5	53·1
	Kyaukpyu	18	29·857	...	29·815	30·162	29·497	77·0	84·4	...	72·8	...	78·6	...	11·6	95·3	56·5
	Akyab	20	29·852	—·015	29·813	30·164	29·471	75·1	85·1	—0·8	7 ·6	—1·5	77·9	—1·1	14·6	92·3	53·6
3	Minbu	165	29·712	—·013	29·823	30·042	29·390	75·8	90·8	—0·8	7 ·2	—0·2	81·0	—0·5	19·5	109·6	51·0
	Yamethin	641	29·227	—·014	29·832	29·515	28·918	74·7	90·3	—1·0	70·1	+0·5	80·2	—0·3	20·2	106·0	51·8
	Mandalay	250	29·626	—·008	29·827	29·957	29·305	77·3	93·7	+1·1	71·8	+0·5	82·7	+0·8	22·0	111·6	52·2
	Monywa	280	29·588	—·022	29·820	29·914	29·265	75·5	92·5	+1·3	71·0	—0·1	81·8	+0·6	21·5	112·6	58·9
	Lashio	2,820	27·075	—·034	27·021	27·362	26·789	66·0	81·6	—0·5	61·5	+1·2	71·5	+0·3	20·1	98·1	43·0
	Bhamo	361	29·501	—·005	29·824	29·865	29·169	69·8	86·4	+0·5	64·7	—0·4	75·6	+0·1	21·7	105·4	42·6
	Myitkyina	458	29·392	—·023	29·818	29·755	29·069	69·4	84·4	+0·1	66·0	+0·2	75·2	+0·1	18·3	103·6	43·4
	II.—Assam.																
4	Dibrugarh	353	29·510	—·025	29·833	29·911	29·131	70·1	80·7	—0·1	66·1	+1·2	73·4	+0·5	14·7	96·2	43·6
	Sibsagar	333	29·548	—·015	29·847	29·952	29·171	70·1	80·8	—0·7	64·9	—0·9?	72·8	—0·8?	16·0	96·0	39·5
	Tezpur	252	29·620	—·010	29·837	30·008	29·229	70·4	83·3	+0·2	67·4	+0·6	75·4	+0·4	15·9	97·0	47·7
	Gauhati	196	29·680	—·010	29·835	30·046	29·267	72·9	84·5	—0·1	67·2	+1·3	75·8	+0·6	17·3	96·1	45·3
	Dhubri	115	29·736	—·015	29·807	30·141	29·332	72·8	82·5	—0·4	68·9	+1·0	75·7	+0·2	13·6	99·3	46·3
	Silchar	104	29·769	—·019	29·828	30·121	29·356	72·4	86·2	+0·1	67·9	+0·4	77·1	+0·3	18·3	98·5	45·8
	Srimangal	66	29·774	...	29·791	30·145	29·375	71·8	88·4	+0·9	65·5	0	76·9	+0·5	23·9	100·4	38·8
	III.—Bengal.																
5	Cox's Bazar	36	29·826	...	29·807	30·144	29·414	75·5	85·2	...	69·4	...	77·3	...	15·8	93·3	46·7
	Chittagong	67	29·774	—·015	29·808	30·175	29·3 4	73·9	85·0	+0·2	6 ·4	0	77·2	+0·1	15·7	95·4	42·0
	Noakhali	43	29·830	—·006	29·811	30·179	29·366	75·5	85·1	+0·5	70·2	+1·4	77·7	+0·9	14·8	94·4	42·8
	Barisal	12	29·849	—·008	29·798	30·210	29·339	76·1	85·7	—0·2	70·6	+0·3	78·1	+0·1	15·1	98·7	46·1
	Narayanganj	26	29·820	—·017	29·796	30·187	29·362	75·4	86·1	—0·2	70·8	+0·2	78·5	+0·1	15·3	100·7	46·7
	Mymensingh	63	29·788	—·015	29·803	30·163	29·365	73·4	85·6	+0·9	69·8	+1·2	77·7	+1·1	15·8	101·9	43·1
	Bogra	75	29·769	—·015	29·797	30·158	29·391	73·0	86·3	0	66·6	+0·5	77·4	+0·3	17·7	109·7	45·3
	Dinajpur	133	29·716	—·012	29·796	30·140	29·276	72·5	85·6	—0·5	67·6	+0·9	76·6	+0·2	19·0	109·9	44·0
	Jalpaiguri	283	29·562	—·015	29·810	29·979	29·179	70·3	84·2	+0·3	66·5	+0·4	75·4	+0·3	17·7	96·2	42·0
	Sagar Island	10	29·836	—·011	29·781	30·246	29·198	77·2	84·9	—0·7	72·0	—1·6	78·5	—1·1	12·9	97·4	48·3

N.B.—Elevations in italics indicate barometrical determinations.
* Mean of 11 months.

...tions in India, etc., in the year 1916.

Wind direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour of year.	Normal velocity of year.	Departure from normal of year.	Hygrometry, 8 hrs. Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs in inches of mercury of year.	Departure from normal of year.	Cloud. Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Rainfall. Number of rainy days during year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.	Heaviest rainfall during year.	Station.
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
																								I.—Burma.
92	10	109	64	34	14	21	14	8	5·3	...	...	81	...	·784	...	5·8	...	147	...	137·81	...	...	3·11	Victoria Point.
93	6	12	20	24	6	2	1	2	2·0	1·4	+0·6	90	+ 3	·814	—·017	4·2	— 0·3	141	—14·7	145·47	163·22	—17·75	6·66	Mergui.
41	33	46	11	25	30	6	1	4	1·9	1·1	+0·8	86	— 3	·776	—·030	4·6	+ 0·7	116	—31·0	206·76	215·84	— 9·08	9·60	Tavoy.
18	3	59	108	83	55	27	7	6	5·0	2·3	+3·6	87	0	·780	—·021	5·5	+ 0·5	128	—11·9	167·20	187·86	—20·66	8·00	Moulmein.
28	48	67	44	31	64	39	25	20	3·7	3·1	+0·6	86	— 1	·786	—·020	8·9	+ 3·77	125	+ 3·6	104·54	97·63	+ 6·91	4·83	Rangoon.
82	9	18	22	21	36	18	33	27	3·3	3·2	+0·1	87*	— 2*	·819*	—·007*	5·6	+ 1·1	124	— 1·8	118·92	109·77	+ 9·15	6·12	Bassein.
12	44	61	37	22	32	59	47	52	7·8	6·4	+1·4	79	— 1	·811	—·018	4·5	— 0·6	111	— 1·9	117·03	116·61	+ 0·42	5·40	Diamond Island.
69	51	46	10	80	81	11	1	17	2·3	2·4	—0·1	86	0	·764	—·021	5·9	0	122	+ 7·7	76·23	82·26	— 6·03	3·75	Toungoo.
363	4	9	22	42	8	2	5	11	1·2*	...	...	86	...	·808	...	6·7	...	135	...	176·41	...	...	8·48	Kyaukpyu.
95	49	72	49	46	16	25	5	9	3·1	2·3	+0·8	88	— 1	·797	—·010	5·2	+ 0·2	135	+11·2	269·02	191·44	+77·58	18·33	Akyab.
42	9	1	12	175	33	5	7	79	3·2	6·4	—3·2	76	0	·690	—·014	4·6	+ 0·7	55	— 1·3	45·39	34·33	+11·06	4·70	Minbu.
168	4	1	7	91	70	10	2	13	1·7	4·2	—2·5	79	0	·687	—·020	3·4	— 0·6	78	+15·6	50·24	38·65	+11·59	5·60	Yamethin.
191	5	3	7	90	59	7	3	1	2·4	3·7	—1·3	73	— 2	·698	—·017	3·2	— 0·4	52	+ 1·7	31·30	32·97	— 1·67	3·80	Mandalay.
82	79	17	13	111	27	1	0	36	2·1	...	...	75	— 4	·674	—·040	5·2	+ 0·5	45	+ 0·9	30·56	32·18	— 1·32	5·11	Monywa.
201	16	53	5	4	10	57	7	13	2·3	...	...	84	— 2	·549	—·014	6·0	— 0·3	86	—13·8	48·54	62·25	—13·71	3·70	Lashio.
284	34	32	1	2	0	7	2	4	0·9	1·8	—0·9	90	+ 1	·677	0	6·7	+ 1·6	95	— 4·6	64·53	71·69	— 7·16	4·45	Bhamo.
335	2	11	7	4	3	2	0	1	1·5	...	...	87	+ 1	·648	—·026	6·2	+ 0·3	97	— 8·0	73·91	76·14	— 2·23	5·56	Myitkyina.
																								II.—Assam.
227	12	51	47	12	5	3	5	4	0·9	...	...	89	— 2	·668	+·005	5·1	— 0·8	120	—14·8	106·88	166·50	+ 0·38	6·38	Dibrugarh.
103	66	100	13	14	23	20	7	21	2·4	1·8	+0·6	90	— 4	·689	—·016	7·1	— 0·2	115	—14·1	93·68	96·27	— 2·59	4·54	Sibsagar.
268	1	31	54	5	0	2	2	3	2·9	...	...	89	0	·690	+ ·011	4·9	— 0·2	96	—10·5	67·94	69·46	— 1·52	3·26	Tezpur.
336	2	14	8	2	0	0	1	3	1·1	...	...	85	— 4	·711	+·018	5·9	— 0·7	85	— 7·8	50·15	62·88	—12·73	3·10	Gauhati.
34	6	118	125	24	29	21	6	3	4·5	3·8	+0·7	86	— 1	·719	+·018	6·2	+ 1·7	100	+ 6·1	93·00	94·62	— 1·62	7·71	Dhubri.
274	5	51	29	1	1	2	2	1	1·1	1·7	—0·6	88	0	·724	—·001	5·2	— 0·4	129	— 7·6	110·33	124·56	—14·23	3·77	Silchar.
...	...	...	...	...	...	...	...	...	...	...	...	88	+ 1	·718	—·011	3·3	...	117	— 6·7	86·12	95·88	— 9·76	3·02	Srimangal.
																								III.—Bengal.
118	11	35	56	101	37	5	0	4	2·9	...	...	87	...	·786	...	4·4	...	106	...	150·74	...	...	5·85	Cox's Bazar.
310	1	39	53	59	5	0	2	0	1·8	3·6	—1·8	90	+ 4	·778	+·017	4·5	— 0·2	90	— 3·6	115·91	98·23	+17·68	6·52	Chittagong.
176	38	51	9	116	55	17	1	2	2·7	...	...	86	— 1	·779	—·001	4·2	+ 0·6	110	— 2·5	121·01	120·30	+ 0·71	6·12	Noakhali.
164	18	36	14	15	84	36	7	3	1·7	2·3	—0·6	84	— 1	·782	—·019	5·2	+ 0·8	107	+ 5·7	86·38	79·72	+ 6·66	4·43	Barisal.
102	17	8	31	53	82	34	14	25	2·1	3·6	—1·5	83	— 3	·763	—·013	4·7	— 0·6	94	+ 3·0	84·75	70·45	+14·30	3·54	Narayanganj.
315	0	5	68	46	22	2	1	5	1·5	2·0	—0·5	87	0	·750	+·012	5·8	+ 0·8	103	— 3·4	100·11	93·04	+ 7·07	8·07	Mymensingh.
176	25	33	53	10	43	20	5	11	1·4	2·2	—0·8	86	+ 3	·734	+·016	4·9	+ 1·3	95	+10·8	81·04	67·90	+13·14	4·12	Bogra.
79	20	46	91	39	27	25	26	15	2·4	2·6	—0·2	84	+ 1	·706	+·014	3·9	— 0·5	87	+ 7·9	98·49	68·92	+29·57	7·72	Dinajpur.
308	4	2	12	20	16	3	0	1	1·5*	...	...	89	+ 3	·691	+·006	3·7	+ 0·4	12	+25·8	163·42	122·42	+41·00	7·27	Jalpaiguri.
15	59	50	35	15	82	84	17	10	8·5	5·9	+2·6	85	0	·821	—·010	5·0	— 0·4	88	+ 2·7	82·10	70·21	+11·89	5·67	Saugor Island.

* Mean of 11 months.

TABLI

(2) *Abstract of observations taken at 8 hrs. at 21*

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure, 8 hrs., in inches. Mean 8 hrs. pressure reduced to 32°.	Departure from normal of year.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure of year.	Lowest pressure of year.	Temperature of air. Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	III.—Bengal—*concld.*																
	Midnapore	149	29·670	−·027	29·770	30·104	29·100	76·5	89·7	−0·3	70·9	+0·4	80·4	+0·1	18·8	114·0	43·5
	Calcutta	21	29·811	−·019	29·779	30·231	29·247	75·1	87·7	+0·9	71·3	+0·8	79·5	+0·9	16·4	105·4	49·2
	Jessore	30	29·816	−·007	29·763	30·223	29·295	75·3	86·8	−0·7	69·9	+0·1	78·3	−0·3	16·9	103·8	43·1
	Burdwan	99	29·727	−·023	29·775	30·173	29·159	74·8	89·0	+0·1	70·1	−0·4	79·6	−0·1	18·8	114·6	47·0
	Berhampore	67	29·765	−·017	29·782	30·203	29·231	73·9	87·8	+0·1	70·3	+0·8	79·1	+0·5	17·5	115·1	47·2
	IV.—Bihar and Orissa.																
6	Balasore	50	29·793	−·007	29·789	30·212	29·239	75·6	88·9	+0·3	70·7	+0·2	79·8	+0·3	18·2	111·6	47·6
	Hukitala (False Point)	29	29·816	−·011	29·786	30·212	29·254	...	...	...	...	...	...	...	...	...	...
	Cuttack	80	29·766	−·006	29·788	30·173	29·189	76·5	90·4	−0·8	72·5	0	81·5	−0·4	17·9	110·5	50·2
	Puri	24	29·823	−·011	29·788	30·218	29·263	77·9	86·5	+0·2	75·3	+0·8	80·9	+0·5	11·2	98·8	55·3
	Angul	455	29·379	−·011	29·787	29·763	28·777	75·7	88·4*	−1·7	69·9	+0·6	78·8*	−0·5	20·1	111·8	48·0
	Sambalpur	486	29·350	−·018	29·792	29·752	28·959	75·4	90·0	−0·8	69·2	−0·7	79·6	−0·7	20·8	111·0	44·2
7	Chaibasa	*733*	29·076	−·022	29·773	29·491	28·501	73·3	90·1	+0·5	68·7	+1·0	79·4	+0·7	21·4	113·2	42·6
	Ranchi	2,128	27·701	−·006	29·768	28·050	27·218	71·2	83·7	−0·7	66·2	+0·7	74·9	0	17·6	107·7	41·4
	Purulia	*816*	29·011	−·005	29·791	29·385	28·345	74·6	90·5	+1·1	69·3	+0·9	79·9	+1·0	21·2	118·5	45·1
	Daltonganj	*730*	29·071	−·035	29·769	29·513	28·570	70·9	89·6	+0·2	65·8	+0·5	77·7	+0·3	23·9	115·1	36·5
8	Purnea	124	29·707	−·020	29·789	30·147	29·294	71·4	85·8	−0·8	67·1	+0·8	76·5	0	18·6	111·1	41·3
	Monghyr	155	29·655	...	29·765	30·113	29·190	74·2	87·1	...	68·9	...	78·0	...	18·2	112·4	44·3
	Darbhanga	165	29·662	−·015	29·785	30·119	29·189	73·3	86·1	+0·1	67·3	−0·8	76·7	−0·3	18·8	110·0	42·6
	Pusa	188	29·634	...	29·782	30·094	29·193	72·7	87·9	...	65·8	...	76·8	...	22·1	114·1	39·3
	Patna	183	29·639	−·015	29·780	30·099	29·149	75·5	86·2	−1·4	69·3	+0·7	77·7	−0·3	16·9	109·9	44·4
	Buxar	239	29·571	−·020	29·772	30·037	29·109	73·2	88·8	+0·1	68·3	+0·2	78·4	+0·1	20·4	113·9	38·8
	Gaya	372	29·454	−·007	29·782	29·902	28·964	76·8	89·5	−0·4	70·0	+1·2	79·8	+0·4	19·4	115·3	44·5
	Naya Dumka	489	29·338	−·008	29·786	29·757	28·799	75·4	88·8	+1·2	68·4	+0·5	78·6	+0·9	20·4	115·6	42·8
	V.—United Provinces of Agra and Oudh.																
9	Gorakhpur	257	29·553	−·016	29·773	30·002	29·136	72·6	87·3	−0·5	67·0	0	77·2	−0·3	20·3	113·3	41·8
	Benares	267	29·549	−·014	29·775	30·010	29·073	74·8	89·0	−0·6	66·9	+0·2	78·0	−0·2	22·1	115·0	37·7
	Allahabad	309	29·502	−·020	29·773	29·963	29·067	74·2	89·1	−1·1	66·5	−0·3	77·8	−0·7	22·5	116·0	38·1
	Cawnpore	416	29·402	−·005	29·784	29·840	28·934	72·1	87·9	−2·2	66·8	+0·1	77·4	−1·1	21·1	115·2	39·7
	Lucknow	368	29·444	−·012	29·777	29·896	29·002	74·6	88·6	−1·1	66·8	+1·2	77·7	+0·1	21·8	114·9	38·6
	Bahraich	407	29·394	−·018	29·773	29·841	28·968	72·3	87·6	−0·7	66·4	+0·7	77·0	0	21·3	113·5	40·2
10	Jhansi	824	28·990	−·024	29·784	29·422	28·560	73·4	90·5	−0·7	67·1	−2·4?	78·8	−1·5?	23·5	116·0	39·7
	Agra	556	29·259	−·015	29·782	29·700	28·777	75·9	90·2	−0·2	67·8	0	79·0	−0·1	22·4	114·8	39·5
	Mainpuri	516	29·289	−·017	29·775	29·707	28·820	72·0	89·1	−1·0	65·6	+0·1	77·3	−0·5	23·5	116·1	38·3
	Bareilly	568	29·229	−·015	29·771	29·664	28·797	71·6	87·2	−0·4	64·6	−0·1	75·9	−0·3	22·6	113·1	38·0
	Roorkee	899	28·903	−·007	29·791	29·326	28·459	68·7	85·7	−1·0	61·9	−0·4	73·8	−0·7	23·8	111·9	33·0

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

* Mean of 11 months.

B—contd.

stations in India, etc., in the year 1916.

Wind direction. Number of winds from									Wind velocity.			Hygrometry, 8 hrs.				Cloud.		Rainfall.					Heaviest rainfall during year.	Station.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour of year.	Normal velocity of year.	Departure from normal of year.	Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Number of rainy days during year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.		
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
																								III.—Bengal—*concld.*
127	24	31	13	45	56	33	6	31	2·5	...	...	74	−2	·709	−·003	3·6	+0·8	83	+2·8	68·64	58·12	+10·52	4·65	Midnapore.
33	28	24	26	41	37	103	10	64	3·6	3·2	+0·4	54	+1	·762	−·008	4·6	+0·2	90	+4·9	82·78	61·81	+20·97	5·29	Calcutta.
204	14	10	8	42	66	16	0	6	2·6	2·2	+0·4	82	−3	·749	−·033	4·5	−0·1	89	+0·2	68·23	65·79	+2·44	5·92	Jessore.
139	20	19	15	28	50	34	16	45	1·6	2·3	−0·7	78	0	·710	−·006	4·5	−0·1	75	−1·8	80·77	58·00	+22·77	4·09	Burdwan.
120	15	18	33	44	66	57	7	6	2·5	2·4	+0·1	81	−2	·712	−·022	4·0	−0·7	82	+6·0	60·75	55·27	+5·48	3·60	Berhampore.
																								IV.—Bihar and Orissa.
102	35	16	6	2	75	80	8	42	2·5	3·5	−1·0	81	0	·747	−·003	3·7	+0·4	82	+4·6	66·55	61·72	+4·83	6·22	Balasore.
15	60	16	4	18	77	96	20	60	8·9	...	...	...	...	...	...	4·9	−0·5	75	+3·0	75·22	62·98	+12·24	4·20	Hukitala (False Point.)
229	0	11	12	2	20	50	41	1	1·8	2·1	−0·3	79	0	·751	+·002	4·4	+0·1	81	+6·9	63·00	59·30	+3·70	3·70	Cuttack.
28	68	32	5	4	57	87	37	48	9·7	...	...	84	+1	·824	+·001	4·9	+1·0	61	+0·7	51·88	53·57	−1·69	5·00	Puri.
119	7	20	15	36	12	8	41	108	3·2	...	...	75	−2	·694	+·004	4·5	+1·1	80	+8·0	52·73	47·93	+4·80	2·68	Angul.
2	79	84	28	23	31	76	11	30	3·0	2·6	+0·4	72	+2	·647	−·004	4·7	+0·8	77	+2·1	70·00	66·54	+3·46	7·80	Sambalpur.*
193	1	9	17	4	24	105	12	1	2·3	1·3	+1·0	72	−5	·622	−·019	4·3	+0·9	62	−12·9	38·92	52·62	−13·70	2·82	Chaibasa.
56	20	12	25	27	30	44	78	74	3·7	4·6	−0·9	67	+1	·528	−·003	4·3	+0·5	82	+1·6	51·10	56·67	−5·57	2·83	Ranchi.
113	11	14	3	36	16	21	51	101	1·9	...	...	69	−4	·615	−·015	4·3	+1·1	80	+3·9	51·54	52·15	−0·61	2·54	Purulia.
234	6	16	29	26	13	23	16	3	2·7	...	...	72	0	·577	−·011	2·7	0	65	+2·5	52·08	42·07	+10·01	3·13	Daltonganj.
42	17	64	88	40	12	52	36	15	2·5	2·3	+0·2	87	+2	·709	+·020	4·2	+0·8	83	+12·9	88·04	61·86	+26·18	8·04	Purnea.
63	3	13	89	61	11	58	53	15	5·0	...	...	74	...	·666	...	3·6	...	62	...	42·51	...	...	3·52	Monghyr.
173	1	22	124	2	1	16	26	1	3·1	2·9	+0·2	79	−2	·678	−·006	3·4	+0·3	63	+3·7	52·29	50·37	+1·92	4·05	Darbhanga.
91	11	30	90	35	19	31	30	11	2·5	...	...	81	...	·677	...	3·9	...	68	...	56·11	...	...	4·31	Pusa. †
139	1	5	132	10	13	26	37	3	3·2‡	2·7	+0·5	71	−1	·665	+·009	3·9	+0·4	66	+9·9	54·80	47·03	+7·77	7·37	Patna.
30	10	26	72	38	16	89	77	8	3·9	...	...	71	+3	·613	+·005	3·9	+0·6	57	+3·7	45·35	41·22	+4·13	2·70	Buxar.
110	8	49	26	45	20	95	10	3	2·5	2·7	−0·2	63	−8	·603	−·040	1·8	−1·6	72	+14·1	57·21	46·57	+10·64	4·00	Gaya.
186	15	14	28	34	31	10	8	40	2·3§	...	...	71	−2	·644	−·005	2·4	−0·9	80	+2·2	72·36	55·73	+16·63	3·94	Naya Dumka.
																								V.—United Provinces of Agra and Oudh.
103	5	19	136	4	1	9	83	6	2·5	1·7	+0·8	74	−1	·627	−·017	1·8	−1·2	68	+10·7	59·34	50·77	+8·57	4·13	Gorakhpur.
81	7	20	37	53	13	99	33	23	2·3	2·7	−0·4	70	−2	·620	−·002	3·4	+0·1	57	+5·0	42·66	39·87	+2·79	3·09	Benares.
150	7	15	53	4	3	23	93	18	2·4	3·8	−1·4	65	−1	·563	−·019	4·4	+0·9	55	+6·2	62·56	39·16	+23·40	6·03	Allahabad.
106	15	18	34	27	27	44	70	25	1·9	2·7	−0·8	70	−1	·579	+·010	1·5	−1·0	64	+19·6	52·16	36·06	+16·10	5·25	Cawnpore.
222	0	3	57	13	6	12	48	5	1·2	2·2	−1·0	65	−4	·584	+·005	3·2	0	56	+8·3	44·51	38·05	+6·46	3·60	Lucknow.
120	11	9	79	45	6	23	40	33	2·1	2·3	−0·2	69	−6	·578	−·057	1·8	−0·6	47	−3·6	41·15	44·62	−3·67	3·90	Bahraich.
54	17	25	18	11	10	131	80	20	3·6	2·4	+1·2	57	−1	·483	−·061	2·4	+0·3	50	+3·3	48·89	37·57	+11·32	3·39	Jhansi.
118	11	22	39	23	29	61	41	23	2·9	3·3	−0·4	54	−6	·522	−·003	3·2	+0·5	37	−0·9	30·16	27·32	+2·84	3·67	Agra.
108	21	10	37	38	19	28	64	41	1·5	1·4	+0·1	65	0	·544	−·001	3·1	−0·1	44	+5·9	35·05	27·42	+7·63	2·91	Mainpuri.
214	1	9	46	26	3	16	40	11	1·2	2·0	−0·8	75	+3	·617	+·042	3·8	+0·9	47	−0·8	62·52	44·96	+17·56	6·52	Bareilly.
233	3	6	6	72	0	0	0	47	2·1	1·8	+0·3	70	−1	·515	0	2·8	0	55	+7·4	48·32	42·30	+6·02	3·52	Roorkee.

* Wind observations for 364 days.
† " " " 348 "
‡ Mean of 11 months.
§ " " 10 "

TABLE

(2) *Abstract of observations taken at 8 hrs. at 218*

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure, 8 hrs., in inches.						Temperature of air.								
			Mean 8 hrs. pressure reduced to 32°.	Departure from normal of year.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure of year.	Lowest pressure of year.	Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	VI.—Punjab.																
11	Delhi	718	29·092	—·008	29·790	29·522	28·617	71·6	88·0	—0·7	67·5	0	77·7	—0·3	29·5	112·4	37·0
	Hissar	725	29·079	—·008	29·785	29·514	28·573	71·0	90·9	—0·5	63·7	—0·4	77·3	—0·5	27·2	114·4	32·3
	Patiala	*818*	28·970	—·025	29·775	29·395	28·473	69·4	87·0	—0·1	64·0	+0·5	75·4	+0·2	23·0	111·4	36·0
	Ambala	892	28·899	—·015	29·782	29·330	28·433	68·9	88·2	+0·6	62·6	—0·1	75·4	+0·3	25·6	113·7	32·1
	Ludhiana	812	28·987	—·006	29·789	29·409	28·484	69·1	87·8	—0·1	64·4	+0·5	76·1	+0·2	23·5	113·3	35·0
	Lahore	702	29·088	—·013	29·781	29·527	28·562	68·7	88·5	—1·7	62·9	+1·2	75·7	—0·3	25·5	112·1	34·2
	Sialkot	836	28·963	—·012	29·789	29·407	28·448	68·1	86·7	—0·8	61·1	—1·7	73·9	—1·3	25·7	113·7	32·2
	Rawalpindi	1,674	28·128	—·020	29·804	28·546	27·642	66·4	84·6	+0·5	57·9	+0·2	71·3	+0·3	26·7	113·5	30·1
12	Khushab	612	29·194	—·008	29·792	29·652	28·618	71·6	89·3	—0·4	68·7*	—0·6*	81·0*	—1·3*	24·6*	111·6	31·1
	Lyallpur	605	29·183		29·773	29·647	28·627	69·5	89·0		62·0		75·5		27·0	115·8	31·8
	Montgomery	558	29·235	—·014	29·774	29·697	28·688	71·8	90·5	—1·1	64·6	+0·4	77·5	—0·3	25·9	117·2	33·2
	Multan	426	29·364	—·021	29·763	29·880	28·760	72·4	91·8	—0·1	66·9	+1·3	79·3	+0·6	24·8	118·6	37·2
	VII.—North-West Frontier Province.																
14	Peshawar	1,113	28·698	—·030	29·818	29·151	28·161	65·9	86·3	+1·0	59·5	+0·2	72·8	+0·6	26·8	116·7	31·2
	Dera Ismail Khan	590	29·219	—·020	29·796	29·703	28·652	69·7	89·1	—0·9	63·6	+1·2	76·4	+0·1	25·5	115·8	33·5
	VIII.—Sind.																
16	Jacobabad	186	29·620	—·010	29·769	30·140	29·046	74·1	96·0	+0·4	66·5	+1·0	81·3	+0·7	29·5	120·5	30·1
	Hyderabad	96	29·718	—·023	29·768	30·168	29·188	74·1	92·7	—0·7	68·2	0	80·5	—0·3	24·5	116·9	36·2
	Karachi	13	29·836	—·017	29·800	30·255	29·324	75·1	84·6	+0·5	71·5	+0·3	78·1	+0·4	13·1	106·8	45·9
	IX.—Rajputana.																
1	Bikaner	*771*	29·038	—·011	29·785	29·487	28·558	73·3	92·5	+0·5	67·0	—2·3*	79·8	—0·9*	25·5	118·4	37·9
	Jodhpur	780	29·041	—·024	29·791	29·428	28·574	74·0	91·5	—1·1	68·2	+0·4	79·8	—0·3	23·3	113·6	34·7
18	Jaipur	1,431	28·394	—·025	29·796	28·769	27·975	72·8	90·0	—0·9	64·8	—0·9	77·4	—0·9	25·1	112·5	35·1
	Ajmer	1,611	28·221	—·027	29·809	28·586	27·803	68·9	87·1	—1·7	65·1	+0·1	76·1	—0·8	22·0	109·2	33·8
	Kotah	832	28·989	—·023	29·784	29·384	28·560	76·9	91·6	—0·7	69·9	—0·2	80·7	—0·5	21·8	115·0	42·6
	X.—Bombay.																
19	Deesa	466	29·385	—·017	29·811	29·733	28·961	75·3	95·2	+1·1	67·4	+0·4	81·4	+0·7	27·8	119·0	34·4
	Bhuj	334	29·509	—·026	29·798	29·880	29·070	75·9	90·7	—0·5	67·0	—1·6	78·9	—1·1	23·7	113·0	36·1
	Jamnagar	61	29·798	—·032	29·805	30·149	29·374	76·3	88·9	—0·7	67·9	—0·4	78·4	—0·5	20·9	109·9	38·7
	Dwarka	37	29·829	—·031	29·812	30·164	29·413	77·0	85·1	+1·0	73·4	+0·9	79·3	+0·9	11·6	98·3	48·4
	Rajkot	429	29·420	—·033	29·803	29·735	29·038	74·8	92·3	—0·7	66·2	+0·2	79·3	—0·3	26·1	113·9	36·3
	Veraval	*18*	29·843	—·032	29·804	30·140	29·476	76·1	84·4	—0·5	73·2	+1·2	78·8	+0·3	12·2	99·7	48·5
	Bhavnagar Para	55	29·803	—·034	29·805	30·134	29·414	76·6	93·6	0	69·3	0	81·4	0	24·3	112·8	39·2
	Surat	39	29·827	—·031	29·809	30·147	29·453	76·9	91·0	—0·6	70·6	+0·9	80·8	+0·1	20·3	108·1	45·7
	Ahmadabad	163	29·704	—·018	29·818	30·052	29·294	77·8	95·1	+0·7	70·9	+0·2	83·0	+0·5	24·3	117·8	42·9
25	Bombay	37	29·841	—·033	29·818	30·106	29·529	78·5	86·1	+0·2	75·7	+0·7	80·9	+0·4	10·4	94·1	59·2
	Ratnagiri	207	29·667	—·034	29·815	29·904	29·358	78·9	85·7	—1·6	73·7	+0·6	79·7	—0·5	12·0	93·5	61·3

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

* Mean of 9 months.

B.—contd.

stations in India, etc., in the year 1916.

Wind direction. Number of winds from									Wind velocity.			Hygrometry, 8 hrs.				Cloud.		Rainfall.						Station.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour of year.	Normal velocity of year.	Departure from normal of year.	Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Number of rainy days during year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.	Heaviest rainfall during year.	
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
																								VI.—Punjab.
58	17	25	38	52	5	10	90	81	3·3	2·5	+0·8	58	−1	·490	−·005	2·6	−0·6	40	+2·9	29·43	27·52	+ 1·91	2·82	Delhi.
53	29	7	38	52	38	76	52	21	4·1	3·5	+0·6	56	−4	·465	−·028	3·1	+0·5	25	+1·8	21·88	13·88	+ 8·00	3·25	Hissar.
61	44	16	83	39	15	11	37	60	4·0			69	+2	·538	−·004	2·5	−0·2	39	+2·5	27·48	25·46	+2·02	2·81	Patiala.
104	71	7	85	42	5	4	15	33	3·0	1·5	+1·5	68	−4	·508	−·029	3·1	+0·3	48	+5·7	39·81	30·19	+ 9·62	5·45	Ambala.
287	8	9	1	25	13	5	6	13	1·4	1·4	0	63	−2	·484	−·020	1·5	−1·5	34	−2·7	29·41	29·05	+ 0·36	3·53	Ludhiana.
194	22	28	14	50	18	7	12	21	1·5	1·8	−0·3	69	+2	·523	+·011	3·0	+0·4	30	+2·3	24·84	19·69	+ 5·15	7·66	Lahore.
148	38	41	71	23	4	5	13	23	1·7	1·5	+0·2	71	+5	·526	+·019	2·7	+0·4	41	+0·6	32·55	31·66	+ 0·89	4·96	Sialkot.
128	30	32	29	40	19	21	46	31	2·5	1·6	+0·9	63	−2	·451	+·005	4·1	+0·9	51	+3·0	49·87	34·29	+15·58	4·37	Rawalpindi.
132	19	91	78	10	9	13	9	5	5·9	3·6	+2·3	52	−3	·458	+·003	3·1	+1·0	22	−1·2	14·68	14·44	+ 0·24	2·55	Khushab.
127	6	51	21	57	24	37	8	35	1·8			64		·496		2·9		21	+1·5	10·61	12·66	− 2·05	2·53	Lyallpur.
52	40	46	39	44	57	34	20	34	4·1	4·3	−0·2	58	+6	·496	+·045	2·1	0	15	−3·2	10·48	10·46	+ 0·02	2·45	Montgomery.
196	65	23	4	23	24	18	2	9	1·2	1·5	−0·3	61	+2	·546	+·037	1·6	0	12	−0·2	6·25	6·73	− 0·48	0·93	Multan. (a)
																								VII.—North-West Frontier Province.
277	25	3	0	5	34	12	3	7	1·0	2·4	−1·4	67	+4	·476	+·025	3·1	+0·1	35	+9·9	19·70	13·29	+ 6·41	3·18	Peshawar.
323	28	49	9	12	2	6	8	29	1·4	1·3	+0·1	63	−2	·509	−·013	2·7	+0·7	13	−3·5	8·65	9·37	− 0·72	2·02	Dera Ismail Khan.
																								VIII.—Sind.
212	15	3	36	60	9	7	1	23	2·1	2·5	−0·4	60	+2	·575	+·042	1·7	−0·1	7	−0·6	3·80	3·65	+ 0·15	0·94	Jacobabad.
47	94	5	1	10	72	115	14	8	5·8	8·1	−2·3	61	+3	·551	+·016	1·5	−0·8	16	+6·4	14·01	7·11	+ 6·90	1·81	Hyderabad.
19	41	71	13	3	3	42	133	42	9·4	9·2	+0·2	71	−2	·668	−·009	3·8	+0·3	16	+6·8	21·87	7·78	+14·09	5·65	Karachi.
																								IX.—Rajputana.
111	5	12	37	38	49	71	35	13	3·8	4·3	−0·5	54	+1	·507	+·007	1·8	−0·6	26	+6·6	21·10	11·49	+ 9·61	3·77	Bikaner.
62	21	94	18	3	20	120	24	4	3·8			46	−3	·434	−·017	3·4	+0·3	26	+7·5	25·96	13·34	+12·62	6·89	Jodhpur.
108	35	47	34	12	2	17	53	63	3·5	3·2	+0·3	52	−3	·455	−·025	2·8	−0·3	43	+6·5	23·68	24·07	− 0·39	3·00	Jaipur.
218	3	10	6	2	7	47	50	23	3·1	3·6	−0·5	59	−4	·447	−·059	3·5	+0·7	38	+7·9	28·30	21·09	+ 7·21	3·20	Ajmer.
129	14	24	2	13	5	58	46	75	2·7			51	+1	·485	+·014	2·8	+0·6	45	+10·0	44·06	28·12	+15·94	5·36	Kotah.
																								X.—Bombay.
26	11	70	64	16	19	78	38	50	6·8	7·5	−0·7	59	+ 3	·564	+·041	3·7	+0·5	35	+6·7	25·44	24·10	+ 1·34	3·78	Deesa.
107	27	6	10	2	3	13	190	8	6·3	8·1	−1·8	63	− 4	·597	−·034	2·9	−0·1	24	+7·1	14·04	14·15	− 0·11	2·30	Bhuj.
77	6	35	31	10	20	87	73	28	7·3			74	+ 7	·711	+·069?	3·4	+1·3	28	+7·2	25·92	19·28	+ 6·64	3·63	Jamnagar.
11	51	65	16	2	7	80	89	45	9·2			75	− 2	·723	−·026	3·9	+0·6	25	+8·1	11·10	14·38	− 3·28	1·42	Dwarka.
37	25	36	29	12	22	97	67	41	8·0	6·6	+1·4	64	− 2	·589	−·020	4·5	+1·6	42	+11·1	28·85	26·54	+ 2·31	2·11	Rajkot.
31	90	50	4	4	7	42	82	56	8·0	6·1	+1·9	72	+ 1	·680	+·011	3·4	−0·1	35	+10·8	23·85	17·95	+ 5·90	3·75	Veraval.
36	32	14	9	3	5	85	69	123	4·5	7·3	−2·8	72	+ 9	·700	+·097?	3·9	+0·7	29	−0·8	19·16	20·66	− 1·10	3·70	Bhavnagar Para.
101	44	44	25	27	43	41	17	20	3·2	5·5	−2·3	69	− 1	·668	−·004	4·2	+0·9	63	+16·9	57·28	41·12	+16·16	4·15	Surat.(b)
45	16	85	20	10	13	68	16	93	4·2	3·6	+0·6	56	− 2	·556	−·005	3·3	−0·2	36	+1·9	25·24	29·62	− 4·38	3·14	Ahmadabad.
8	31	72	83	52	23	25	52	25	6·5	8·6	−2·1	78	0	·789	+·021	4·8	+0·5	91	+17·7	85·96	71·88	+14·08	6·52	Bombay.
12	57	49	49	79	40	34	33	19	6·8	6·2	+0·6	73	0	·724	+·002	4·4	+0·5	121	+28·3	152·74	101·22	+51·52	5·94	Ratnagiri.

(a) Wind observations for 364 days.
(b) " " " 362 "

TABLE

(2) *Abstract of observations taken at 8 hrs. at 218*

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure, 8 hrs., in inches. Mean 8 hr., pressure reduced to 32°.	Departure from normal of year.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity at 45° lat.	Highest pressure of year.	Lowest pressure of year.	Temperature of air. Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	X.—Bombay—*concld.*																
	Marmagao	60	29·826	—·037	29·821	30·058	29·559	77·8	84·9	—1·0	74·4	—0·6	79·7	—0·8	10·6	94·4	64·6
	Karwar	44	29·861	—·019	29·840	30·093	29·612	75·6	85·4	—0·7	72·8	+0·1	79·1	—0·3	12·6	93·8	59·1
26	Malegaon	1,430	29·435	—·022	29·818	28·757	28·074	75·2	93·5	+1·7	66·3	+1·3	79·9	+1·4	27·2	115·6	43·3
	Ahmadnagar	2,154	27·731	—·030	29·807	28·056	27·416	73·6	88·6	—0·8	64·7	+0·9	76·5	0	23·9	109·1	44·7
	Poona	1,846	28·041	—·022	29·836	28·339	27·741	72·1	89·0	—0·5	65·5	+0·9	77·3	+0·2	23·5	107·2	45·1
	Sholapur	1,590	28·273	—·036	29·801	28·547	27·966	75·7	91·3	—1·6	68·5	+0·4	79·9	—0·6	22·8	108·3	49·0
	Bijapur	*1,948*	27·929	—·029	29·804	28·183	27·647	74·6	89·6	—2·1	68·1	+0·5	78·3	—0·8	20·5	104·4	47·6
	Belgaum	2,562	27·359	—·018	29·837	27·610	27·098	70·7	83·8	—0·7	63·7	—0·2	73·7	—0·5	20·1	101·3	48·9
	XI.—Central India.																
20	Neemuch	1,626	28·223	—·023	29·803	28·570	27·821	73·0	88·3	—0·6	64·9	+0·4	76·6	—0·1	23·4	112·9	39·3
	Indore	1,823	28·028	—·027	29·803	28·354	27·630	72·9	88·3	+0·2	64·8	+1·1	76·6	+0·7	23·6	114·0	36·1
21	Nowgong	754	29·061	—·022	29·786	29·480	28·651	71·2	88·1	—1·3	64·9	—0·8	76·5	—1·1	23·2	115·9	37·0
	Sutna	1,041	28·769	—·017	29·780	29·175	28·354	72·3	86·6	—1·6	67·0	+1·1	76·8	—0·3	19·6	113·8	36·0
	XII.—Central Provinces.																
22	Buldana	2,134						74·4	87·2	—0·4	68·5	+0·6	77·9	+0·1	18·7	109·9	47·5
	Akola	925	28·019	—·030	29·799	29·260	28·564	76·5	92·8	—0·2	68·5	+1·3	80·7	+0·5	24·2	117·2	44·8
	Amraoti	1,215	28·637	—·026	29·794	28·972	28·283	76·7	91·3	—0·8	70·3	+1·3	80·8	+0·3	21·0	115·0	47·7
23	Khandwa	1,044	28·801	—·025	29·809	29·158	28·423	73·2	91·3	—0·7	67·7	+0·7	79·4	0	23·6	116·8	35·1
	Hoshangabad	1,006	28·845	—·014	29·813	29·231	28·444	74·4	89·2	—1·2	67·1	+0·2	78·2	—0·5	22·2	115·5	39·6
	Saugor	1,807	28·022	—·031	29·780	38·391	27·630	73·1	87·3	—0·6	67·0	+0·5	77·1	—0·1	20·3	113·4	41·4
	Jubbulpore	1,327	28·490	—·026	29·783	28·873	28·032	71·8	87·4	—1·1	65·5	+1·1	76·4	0	21·9	112·8	36·3
	Seoni	2,033	27·818	—·013	29·791	28·165	27·368	73·6	86·0	—1·9	64·0	—0·7	75·0	—1·3	22·0	109·7	39·5
	Nagpur	1,017	28·818	—·022	29·790	29·188	28·386	76·0	91·0	—1·1	69·0	+0·2	80·0	—0·5	22·0	113·6	44·3
24	Pendra	3,040	27·801	—·008	29·787	28·155	27·294	72·6	85·3	—0·2	65·7	+0·6	75·5	+0·2	19·7	110·8	39·2
	Raipur	970	28·852	—·026	29·778	29·227	28·345	75·0	90·0	—0·3	70·0	+0·9	79·9	+0·2	20·0	113·7	45·6
	Chanda	*634*	29·202	—·037	29·767	29·569	28·837	77·1	92·2	—0·6	69·5	+0·9	80·9	+0·1	22·8	114·1	43·6
	Jagdalpur	1,813	28·035		29·791	28·344	27·649	72·6	88·1		65·6		76·8		23·5	105·4	43·1
	XIII.—Hyderabad.																
27	Aurangabad	1,905	27·972	—·033	29·807	28·254	27·655	75·6	89·5	—1·3	67·2	—1·6P	78·3	—1·5P	22·3	110·2	47·1
	Nizamabad	1,248	28·604	P	29·798	28·917	28·287	76·9	91·9	+0·3	69·4	+1·0	80·6	+0·7	22·4	111·2	45·7
	Bidar	*2,165*						76·1	87·8	—0·7	68·8	+1·0	78·3	+0·1	19·0	106·4	52·4
28	Gulbarga	1,503	28·363	—·032	29·800	28·648	28·067	74·9	92·3	—0·3	69·1	+0·1	80·7	—0·1	23·2	111·2	48·8
	Raichur	*1,311*	28·567	—·008	29·818	28·837	28·274	77·8	91·7	—0·6	72·5	+0·8	82·1	+0·1	19·2	106·8	55·6
	Hyderabad (Deccan)	1,738	28·141	—·030	29·804	28·411	27·815	75·2	89·1	—1·4	70·1	+0·6	79·6	—0·4	19·0	107·3	49·5
	Hanamkonda	877	28·981	—·016	29·805	29·315	28·656	78·2	91·2	—0·6	72·5	+0·7	81·8	+0·1	18·7	109·0	53·9

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

B—contd.

stations in India, etc., in the year 1916.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour of year.	Normal velocity of year.	Departure from normal of year.	Hygrometry, 8 hrs. Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Cloud. Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Rainfall. Number of rainy days during year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.	Heaviest rainfall during year.	Station.
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
																								X.—Bombay—*concld.*
18	41	46	84	31	27	15	62	41	6·5	6·7	—0·2	87	+ 4	·820	+·016	5·8	+1·5	118	+23·7	124·23	93·85	+30·38	5·52	Marmagao. (a)
270	25	7	1	2	20	20	0	21	1·9	3·0	—1·1	88	+ 5	·783	+·036	4·4	+0·6	127	+23·3	145·22	122·45	+22·77	4·02	Karwar.
102	10	9	4	3	17	148	35	38	4·8	6·5	—1·7	59	+ 1	·529	+·013	3·7	+0·7	40	+14·0	28·51	22·71	+ 5·80	2·22	Malegaon.
45	41	9	5	25	21	36	83	101	4·6	8·3	—3·7	59	— 3	·487	—·028	3·1	+0·1	49	+13·2	32·55	22·29	+10·26	5·18	Ahmadnagar.
0	1	0	34	2	1	146	168	14	6·8	7·6	—0·8	73	+10?	·583	+·080?	2·2	—1·5	64	+17·2	33·85	27·23	+ 6·62	3·15	Poona.
34	21	32	21	59	10	51	52	85	6·5	7·1	—0·6	60	+ 5	·531	+·035	4·5	+0·6	66	+23·9	48·80	29·50	+19·30	3·05	Sholapur. (a)
45	36	11	16	35	31	56	78	58	4·5	4·7	—0·2	62	— 5	·526	—·053	3·3	—0·4	56	+19·5	39·03	20·93	+18·10	3·65	Bijapur.
188	1	17	42	7	5	50	53	3	8·3	11·0	—2·7	76	+ 6	·569	+·032	4·6	+0·2	85	+ 4·0	54·87	49·67	+ 5·20	2·66	Belgaum.
																								XI.—Central India.
67	34	6	95	3	11	22	117	11	5·5	6·4	—0·9	57	— 1	·488	—·011	3·6	+0·8	43	+ 7·6	38·96	28·57	+10·39	4·62	Neemuch. (a)
91	24	36	27	16	5	10	102	55	4·5	3·0	+1·5	63	+ 1	·525	+·003	4·1	+0·5	62	+17·1	43·29	32·79	+10·50	4·62	Indore.
98	31	12	45	15	50	36	88	11	1·9	1·9	0	67	+ 2	·535	—·004	4·0	+0·3	57	+ 8·7	45·50	43·35	+ 2·15	5·99	Nowgong.
101	24	11	29	15	50	60	69	7	2·9	4·4	—1·5	65	+ 4	·541	+·025	3·4	—0·3	57	+ 2·1	55·43	44·44	+10·99	8·84	Sutna.
																								XII—Central Provinces.
10	4	11	42	34	12	33	117	103	4·7	5·7	—1·0	60		·508		4·1		67	+14·7	49·43	35·05	+14·38	2·98	Buldana.
58	5	24	36	21	9	36	102	75	4·3	4·4	—0·1	57	0	·521	+·011	5·0	+1·4	62	+15·8	45·65	32·79	+12·86	3·03	Akola.
92	8	60	49	14	5	31	59	39	4·6	4·2	+0·4	56	— 2	·509	—·020	4·1	+0·6	63	+15·2	48·70	33·84	+14·86	3·68	Amraoti. (b)
120	6	23	17	7	8	6	78	51	4·9	4·4	+0·5	62	+ 5	·521	+·027	3·1	0	55	+14·0	39·68	29·91	+ 9·77	3·15	Khandwa.
96	0	92	27	11	1	130	0	9	2·1	2·3	—0·2	62	— 2	·531	—·010	3·3	—0·1	72	+16·4	61·88	49·10	+12·78	4·12	Hoshangabad.
32	16	41	36	49	25	33	100	34	5·1	3·2	+1·9	54	— 2	·446	—·030	3·7	+0·6	65	+ 8·7	43·59	46·25	— 2·66	3·45	Saugor.
44	22	18	27	95	47	52	45	16	2·0	2·3	—0·3	64	— 3	·511	—·013	3·8	+0·5	73	+ 8·9	57·72	55·51	+ 2·21	4·80	Jubbulpore.
118	52	33	10	13	26	35	43	36	3·0	2·7	+0·3	60	— 2	·493	—·014	3·9	+0·7	78	+ 7·6	60·66	52·63	+ 8·03	5·26	Seoni.
34	90	38	23	18	8	20	54	81	4·0	4·1	—0·1	60	+ 1	·539	+·004	4·2	+0·4	81	+18·1	61·72	49·16	+12·56	3·75	Nagpur.
154	37	14	4	26	47	34	10	49	3·4			63	+ 3	·505	+·025	3·0	—0·4	81	+ 6·6	56·62	51·50	+ 5·12	2·85	Pendra. (a)
39	20	30	46	14	35	81	69	32	3·5	4·3	—0·8	67	+ 4	·588	+·028	3·3	—0·5	55	— 8·5	40·19	49·99	— 9·80	5·56	Raipur.
114	16	22	16	30	20	62	56	30	3·6	2·7	+0·9	67	+ 3	·616	+·030	4·0	+0·4	73	+ 9·3	57·06	53·43	+ 3·63	3·50	Chanda.
30	42	13	33	16	75	72	73	12	3·0			77		·619		4·8		87		46·17			2·46	Jagdalpur.
																								XIII.—Hyderabad.
37	26	36	52	36	8	38	99	34	7·1			58	+ 4	·513	+·027	4·7	+1·4	64	+19·7	46·13	28·37	+17·76	5·50	Aurangabad.
91	31	27	10	24	24	62	62	35	3·1			63	— 3	·566	—·050	4·3	+0·8	67	+12·1	39·13	40·87	— 1·74	2·15	Nizamabad.
32	10	36	27	33	19	126	35	47	5·8			64	— 3	·563	—·035	4·8	+2·1	73	+19·3	50·65	37·55	+13·10	3·40	Bidar. (a)
49	20	42	59	17	17	46	88	28	4·8	7·4	—2·6	64	0	·553	—·027	3·6	0	68	+19·6	43·83	33·14	+10·69	3·13	Gulbarga.
1	9	32	37	65	23	97	44	58	6·9	7·1	—0·2	71	+ 8	·675	+·078	3·0	—0·5	64	+19·3	48·97	28·62	+20·35	6·25	Raichur.
125	3	12	19	19	7	65	80	36	3·9	4·0	—0·1	75	+ 7	·654	+·066	4·8	+0·9	69	+19·6	56·10	31·32	+24·78	4·30	Hyderabad (Deccan).
24	33	2	8	98	100	29	39	43	3·5			69	+ 3	·665	+·036	4·4	+0·3	67	+16·5	48·10	34·75	+13·35	2·65	Hanamkonda.

(a) Wind observations for 365 days.
(b) " " 357 "

TABL

(2) *Abstract of observations taken at 8 hrs. at 21*

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure, 8 hrs., in inches. Mean 8 hrs. pressure reduced to 32°.	Departure from normal of year.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure of year.	Lowest pressure of year.	Temperature of air. Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	XIV.-Mysore.																
29	Chitaldrug	2,405	27·506	—·018	29·817	27·751	27·265	73·2	87·0	0	67·9	+0·5	77·4	+0·3	19·1	101·0	54·9
	Hassan	3,149	26·811	—·016	29·835	27·021	26·605	69·2	82·7	—0·6	63·3	+0·9	72·9	+0·1	19·4	97·7	50·6
	Bangalore	3,021	26·931	—·022	29·830	27·148	26·713	69·9	84·4	—0·1	64·4	+0·2	74·4	+0·1	20·0	98·0	51·2
	Mysore	2,518	27·413	—·026	29·834	27·617	27·207	72·0	85·0	—1·4	65·7	—0·1	75·3	—0·8	19·3	98·0	53·5
	XV.—Madras.																
30	Mangalore	72	29·839	—·031	29·843	30·028	29·619	78·9	87·0	—0·4	74·1	+0·6	80·5	+0·1	12·9	96·6	64·8
	Calicut	27	29·883	—·025	29·839	30·056	29·650	77·9	85·4	—1·3	74·5	+0·2	80·0	—0·5	11·0	93·4	63·8
	Cochin	9	29·906	—·026	29·842	30·066	29·705	79·1	87·8	0	74·8	—0·1	81·3	—0·1	13·0	94·3	67·5
	Trivandrum	198	29·715	—·017	29·844	29·874	29·505	78·3	85·6	+1·5	74·2	—1·0	79·9	+0·3	11·3	92·4	66·3
31	Pamban	37	29·853	—·027	29·818	30·086	29·651	81·2	87·4	—0·4	78·4	+1·0	82·9	+0·3	9·0	94·2	72·5
	Madura	447	29·443	—·026	29·822	29·689	29·225	80·7	92·5	—1·3	75·2*	+0·8*	83·9*	—0·3*	17·3*	103·6	66·0
	Pudukkottai	318	29·584	—·016	29·834	29·797	29·364	79·8	93·2	—0·2	73·9	—0·1	83·5	—0·1	19·3	107·0	63·1
	Negapatam	31	29·861	—·019	29·821	30·097	29·644	81·2	90·3	+0·2	76·0	—0·2	83·2	0	14·3	103·1	65·2
	Trichinopoly	255	29·644	—·019	29·832	29·897	29·426	80·5	93·9	—0·4	74·1	—0·1	84·0	—0·3	19·9	106·5	61·5
	Coimbatore	1,341	28·571	—·010	29·850	28·822	28·366	75·7	89·2	—0·8	69·6	—0·1	79·4	—0·5	19·6	102·2	55·7
	Salem	913	28·990	—·011	29·839	29·241	28·778	77·8	92·5	—0·6	71·4	+0·4	82·0	—0·1	21·2	106·4	57·8
	Cuddalore	37	29·850	—·022	29·817	30·120	29·610	79·9	89·9	—0·7	74·7	+0·2	82·3	—0·3	15·1	103·3	63·4
	Vellore†	707	29·173	—·030	29·820	29·465	28·942	77·9	92·6	+1·2	71·8	—0·7	82·2	+0·3	20·8	107·7	55·4
	Madras	22	29·860	—·025	29·814	30·146	29·589	80·9	91·1	+0·1	75·0	+0·2	83·0	+0·1	16·1	104·7	62·6
32	Cuddapah	428	29·444	—·032	29·881	29·733	29·171	80·8	95·1	—0·7	75·3	+0·8	85·2	+0·1	19·9	111·6	57·7
	Bellary	1,475	28·401	—·029	29·810	28·669	28·144	77·9	92·5	—0·9	71·0	+0·1	81·8	—0·3	21·5	107·3	53·7
	Kurnool	923	28·959	—·010	29·825	29·238	28·662	77·1	92·6	—1·3	71·9	+1·1	82·3	—0·1	20·6	109·5	50·1
33	Nellore	66	29·800	—·028	29·801	30·110	29·504	80·0	92·3	—1·7	75·0	—0·1	83·6	—0·9	17·3	108·6	63·1
	Masulipatam	15	29·856	—·025	29·806	30·177	29·505	79·6	89·1	—1·4	74·3	—0·2	81·7	—0·8	14·8	107·4	59·4
	Cocanada	26	29·848	—·011	29·811	30·180	29·472	79·3	89·0	—0·5	74·7	—0·3	81·8	—0·4	14·3	105·8	59·6
	Waltair, (Vizagapatam.)	226	29·638	—·016	29·796	29·984	29·184	79·3	87·1	+0·1	74·8	—0·6	80·9	—0·3	12·3	96·8	60·3
	Calingapatam	19	29·831		29·788	30·195	29·355	78·5	88·8		74·1		81·4		14·7	102·0	55·9
	Gopalpur	33	29·807	—·014	29·781	30·200	29·276	77·5	86·5	+0·5	74·5	+1·4	80·5	+0·9	11·9	96·5	54·9
	Bay Islands.																
1	P. V. Fraser	8	29·827		29·780	30·197	29·170	80·5									
	Port Blair	58	29·830	—·024	29·818	30·044	29·582	80·5	86·7	—0·5	76·4	—0·6	81·5	—0·5	10·3	95·8	68·9
	Table Island (b)		29·789	—·023	29·815	29·984	29·571	80·2	83·9	—0·9	76·8	—0·2	80·4	—0·5	7·0	88·1	64·6
	Kashmir.																
12	Muzaffarabad		27·465			27·838	27·009	61·8	80·4		56·5		68·4		23·9	108·0	31·9
	Srinagar	5,204	24·865	—·022	24·836	25·185	24·402	50·8	67·9	+1·8	45·3	+1·2	56·6	+1·5	22·7	94·7	15·9
	Gulmargt	8,560	21·762	—·027	21·750	21·913	21·630	61·6	68·6	+1·9	48·9	+2·0	58·8	+1·9	19·7	81·9	27·8
	Dras	10,059	20·793	—·002	20·761	21·094	20·381	31·8	49·7	—1·3	24·2	+2·9	36·9	+0·8	25·5	79·7	—28·9

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

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

* Mean of 10 months.
† " " 11 "
(b) " " 5 "
‡ " " 4 "

B.—contd.

stations in India, etc., in the year 1916.

Wind direction. Number of winds from									Wind velocity.			Hygrometry, 8 hrs.				Cloud.		Rainfall.						Station.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour of year.	Normal velocity of year.	Departure from normal of year.	Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Number of rainy days during year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.	Heaviest rainfall during year.	
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
																								XIV.—Mysore.
33	5	3	40	44	8	96	112	25	5·4	5·9	−0·5	71	+1	·579	−·001	4·8	0	46	− 2·3	27·17	25·34	+1·83	2·76	Chitaldrug.
78	6	5	55	32	2	55	102	30	5·3	2·6	+2·7	80	+3	·576	−·003	4·9	−0·7	82	+15·3	43·49	35·91	+7·58	2·41	Hassan. (a)
5	2	32	56	32	25	65	123	26	6·4	4·6	+1·8	79	+1	·581	0	5·6	+0·5	71	+11·8	53·09	35·51	+17·58	4·51	Bangalore.
48	9	46	24	12	10	98	90	29	5·7	7·3	−1·6	77	0	·607	−·001	4·7	−1·2	64	+ 8·4	43·41	31·30	+12·11	3·34	Mysore.
																								XV.—Madras.
16	42	50	150	29	14	8	38	19	4·9	2·1	+2·8	79	+2	·778	+·005	5·2	0	127	+10·6	122·41	127·08	−4·67	4·09	Mangalore.
129	18	36	68	17	7	8	20	63	4·2	6·3	−2·1	87	+4	·828	+·020	5·4	+0·5	118	+4·0	115·50	117·00	−1·50	3·83	Calicut.
33	5	69	171	48	3	9	15	13	5·1	4·0	+1·1	79	−2	·788	−·021	4·5	−0·4	130	+1·5	120·28	113·83	+6·45	6·55	Cochin.
63	76	62	22	4	1	0	17	121	4·6	4·4	+0·2	80	−2	·770	−·020	6·1	+0·6	99	+5·0	62·96	63·33	−0·37	4·30	Trivandrum.
75	45	46	14	23	77	57	10	19	7·4	7·5	−0·1	81	+1	·852	−·017	3·6	+0·1	46	−0·2	32·07	37·19	−5·12	5·15	Pamban.
3	63	59	37	8	7	10	70	104	4·4	3·1	+1·3	71	0	·742	−·006	6·3	+2·0	37	−12·0	26·10	34·30	−8·20	1·93	Madura.
81	86	53	5	4	9	26	42	60	3·9	...	...	72	−2	·732	−·022	4·3	−1·6	60	−4·6	36·90	33·70	+3·20	2·88	Pudukkottai.
6	4	57	9	34	8	56	126	66	7·6	5·0	+2·6	82	+7	·869	+·061	5·6	+0·5	46	−9·8	36·67	53·56	−16·89	4·45	Negapatam.
29	49	40	4	6	19	82	90	47	4·0	4·2	−0·2	71	−1	·731	−·011	4·0	−0·6	40	−6·1	28·17	32·86	−4·69	3·73	Trichinopoly.
112	36	69	15	8	37	80	18	1	3·6	3·1	+0·5	78	−5	·695	−·037	3·5	−1·4	49	+4·0	27·59	22·10	+5·49	2·34	Coimbatore.
169	1	16	35	4	34	8	99	0	3·4	3·1	+0·3	78	+1	·744	−·001	4·3	−0·2	60	−4·4	45·51	40·20	+5·31	6·52	Salem.
66	21	6	1	5	24	128	41	74	(c) 3·8	1·8	+2·0	78	−3	·790	−·047	4·9	+0·6	52	−4·2	50·91	50·89	+0·02	7·03	Cuddalore.
194	1	0	3	9	1	5	99	23	3·1	...	...	79	+4	·751	+·033	3·7	−0·2	62	+5·3	54·44	41·81	+12·63	4·38	Vellore.
18	17	9	4	6	61	125	73	53	4·5	5·0	−0·5	78	+1	·812	+·001	4·0	−0·9	60	+2·1	46·33	49·47	−3·14	3·53	Madras.
27	43	11	36	60	24	16	53	95	...	...	...	68	+1	·710	+·001	3·6	−0·7	64	+18·0	43·06	31·63	+11·43	2·60	Cuddapah.
60	15	13	31	34	25	39	88	61	4·5	4·8	−0·3	66	+5	·622	+·053	4·1	−0·5	45	+9·5	27·62	19·98	+7·64	2·84	Bellary.
100	4	13	25	23	14	64	75	48	4·8	...	...	68	0	·638	0	4·3	+0·5	58	+10·5	41·33	26·92	+14·41	5·76	Kurnool.
78	27	28	6	7	73	42	52	53	3·4	4·8	−1·4	78	+2	·793	−·001	4·8	−1·0	53	+11·0	37·41	34·97	+2·44	3·26	Nellore.
48	63	44	8	21	37	46	56	43	5·2	4·7	+0·5	81	−1	·821	−·036	4·8	−0·2	74	+20·9	66·14	40·00	+26·14	3·75	Masulipatam.
51	55	51	6	7	7	66	77	46	5·7	5·8	−0·1	81	+4	·826	+·036	5·2	+0·6	76	+23·1	49·94	38·96	+10·98	6·08	Cocanada.
68	17	42	17	7	26	124	58	7	4·6	...	...	78	+6	·783	+·036	4·3	−0·8	56	+6·0	39·87	37·26	+2·61	2·75	Waltair (Vizagapatam).
79	36	14	3	3	19	64	83	65	5·9	...	...	81	...	·811	...	2·8	...	54	+5·8	34·28	36·49	−2·21	5·09	Calingapatam.
8	96	9	4	5	67	79	5	93	8·0	8·6	−0·6	81	0	·788	+·005	3·4	+1·0	50	−7·0	42·25	44·87	−2·62	6·96	Gopalpur.
																								Bay Islands.
21	45	40	15	21	48	133	30	13	...	...	...	80	...	·847	...	4·5	...	66	...	41·99	...	...	5·43	P. V. Fraser.
88	40	53	27	13	32	34	35	49	5·0	5·5	−0·5	81	−4	·843	−·046	5·4	−0·6	132	−8·0	115·69	118·49	−2·80	4·70	Port Blair.
2	10	29	18	13	28	19	15	2	...	...	...	85	+1	·877	−·002	6·4	−1·0	45	−6·7	31·02	38·50	−7·48	1·84	Table Island.
																								Kashmir.
360	8	6	1	2	16	23	2	2	1·0	...	...	68	...	·409	...	3·3	...	79	...	57·73	...	...	4·45	Muzaffarabad.
138	18	10	7	71	44	16	26	36	2·4	2·6	−0·2	77	−9	·338	−·010	4·3	−0·3	53	−6·7	17·63	27·24	−9·61	0·99	Srinagar.
41	16	38	13	6	0	1	1	6	2·7	...	...	74	−5	·397	+·001	5·0	+1·1	33	−2·1	14·23	16·36	−2·13	1·30	Gulmarg.
303	4	0	0	1	2	13	27	16	3·5	...	...	66*	−2†	·244*	−·017†	3·9	−0·2	46	−11·1	16·10	21·78	−5·68	0·82	Dras.

(a) Wind observations for 365 days.

* Mean of 7 months.
† " " 5 "
(c) " " 11 "

TABL

(2) *Abstract of observations taken at 8 hrs. at 21*

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure, 8 hrs., in inches.					Temperature of air.									
			Mean 8 hrs. pressure reduced to 32°.	Departure from normal of year.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure of year.	Lowest pressure of year.	Mean of 8 hrs. dry-bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Kashmir—*concld.*																
	Leh	*11,503*	19·700	—·004	19·668	19·945	19·289	39·2	57·1	+1·7	30·7	+1·1	43·9	+1·4	26·4	84·4	1·4
	Skardu	7,505	22·850	—·026	22·820	23·248	22·489	48·4	65·3	+3·0	43·2	+2·8	54·2	+2·9	22·0	99·3	12·8
	Gilgit	4,890	25·108	—·021	25·081	25·571	24·668	59·7	74·7	+2·1	52·8	+0·2	63·7	+1·1	21·9	104·7	25·7
	Baluchistan.																
15	Fort Sandeman	4,614	25·357	...	25·326	25·655	25·010	58·8	80·5	...	52·9	...	66·7	...	27·7	110·2	14·5
	Quetta	5,502	24·611	—·017	24·571	24·837	24·298	49·0	73·8	+0·2	42·9	—1·4	58·3	—0·6	30·9	98·7	11·7
	Chaman	4,311	25·644	—·031	25·606	25·963	25·288	50·8	77·2	—0·3	52·0	—0·9	65·1	—0·6	24·4	104·9	20·0
	Kalat	6,630	23·717	...	23·679	23·963	23·437	45·7	71·5	—2·2	40·0	+4·3*	55·8	+1·1*	31·5	97·0	8·7
	Dalbandin	2,772	27·079	...	27·042	27·455	26·701	50·4	85·5	...	52·5	...	69·0	...	33·0	112·6	16·8
	Pasni	...	29·842	...	29·802	30·251	29·351	73·3	87·7	...	64·1	...	75·9	...	23·7	114·3	31·0
	Panjgur	...	26·700	...	26·658	27·045	26·362	59·9	83·4	...	50·2	...	69·8	...	27·2	108·8	26·2
	Robat	...	26·877	...	26·835	27·210	26·495	62·5	85·1	...	62·7†	...	77·3†	...	29·1†	112·1	26·7
	Seistan (*a*)		28·131			28·600	27·630	59·6	80·3		54·8		67·6		25·5	109·4	21·7
	Hill stations, excluding Kashmir and Baluchistan.																
	Parachinar	6,000	24·414	—·007	24·390	24·661	24·095	55·9	70·2	+0·2	47·7	—0·3	59·0	—0·1	22·5	92·2	18·6
	Cherat	4,256	25·678	+·005	25·646	25·903	25·271	61·3	71·8	—1·2	56·0	—0·6	63·9	—0·9	15·7	101·6	34·9
	Drosh (*a*)	...	25·069	...	...	25·425	24·650	56·3	71·3	—1·6	52·7	+1·1	62·0	—0·3	18·5	106·3	24·2
	Murree	6,333	23·820	—·006	23·788	24·056	23·521	55·1	63·8	—1·3	51·3	+1·1	57·5	—0·1	12·5	91·1	19·8
	Simla	7,232	23·083	—·001	23·045	23·310	22·819	54·5	60·8	—0·1	50·4	+0·7	55·6	+0·3	10·4	79·6	25·0
	Sarain	...	23·110	—·025	23·079	23·315	22·835	48·3	62·9	+1·2	43·2	+0·6	53·0	+0·9	19·7	80·0	20·0
	Kalabagh ‡	...	20·108	—·007	20·071	20·230	19·690	49·3	54·8	+0·3	45·4	+1·6	50·1	+0·9	9·4	61·8	14·7
	Chakrata	7,072						59·4§	68·1§	+0·5§	54·0§	+0·7§	61·0§	+0·6§	14·0§	86·0	32·5
	Mukteswar	7,592	22·824	—·011	22·783	23·051	22·554	53·9	63·7	—0·4	49·4	+1·1	56·5	+0·3	14·3	83·0	28·8
	Darjiling	7,432	22·935	—·000	22·890	23·163	22·715	52·3	61·3	+2·5	48·6	+1·2	54·9	+1·9	12·7	76·0	30·9
	Shillong	4,020	25·111	—·004	25·063	25·347	24·832	60·9	69·8	—0·3	54·1	+0·8	61·9	+0·3	15·7	88·8	31·7
	Cherrapunji	4,309	25·653	—·012	25·614	25·894	25·383	62·6	69·2	+0·7	57·4	+0·2	63·3	+0·5	11·8	83·0	41·1
	Maymyo	3,546	26·424	—·001	26·369	26·668	26·106	63·7	76·8	—0·2	57·1	+1·1	66·9	+0·5	19·7	93·0	36·9
	Pachmarhi	3,528	26·396	—·038	26·343	26·728	26·018	68·0	79·7	—0·1	61·3	+0·3	70·5	+0·1	18·4	105·0	37·1
	Mount Abu	3,945	26·002	—·025	25·952	26·272	25·600	67·8	75·7	—0·2	62·1	+0·1	68·9	—0·1	13·6	97·2	32·4
	Mercara	3,781	26·204	—·029	26·137	26·362	26·011	66·8	70·3	—0·3	59·9	—1·4	68·1	—0·9	16·4	92·0	51·0
	Cotacamund	7,327	23·038	—·012	22·974	23·170	22·678	58·0	66·7	+1·2	48·5	—0·7	57·6	+0·3	18·3	77·7	31·1
	Kodaikanal	7,088	22·813	—·020	22·748	22·925	22·667	56·8	65·9	+1·3	50·8	—0·3	58·3	+0·5	15·1	76·3	40·3
	Extra India.																
	Singapore (*b*)	10	29·832	—·103	29·763	29·977	29·593	82·8	88·1	+0·3	74·2	+0·4	81·1	+0·3	13·9	93·5	69·0
	Penang (*b*)	17	29·845	—·070	29·787	29·908	29·708	82·3	89·0	—0·4	73·1	—0·7	81·0	—0·5	15·9	94·0	66·0
	Trincomalee	99	29·783	—·024	29·811	29·982	29·573	78·0	90·7	+2·1	75·8	—0·5	83·3	+0·8	14·8	101·0	68·5

N. B.—Elevations in italics indicate barometrical determinations.
NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau-stations, the elevations of which exceed 3,200 feet.
(*a*) Ancroid. (*b*) 9 hrs. observatories.

* Mean of 7 months.
† " 8 "
‡ " 6 " (May to October.)
§ " 9 "

B—contd.

stations in India, etc., in the year 1916.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour of year.	Normal velocity of year.	Departure from normal of year.	Hygrometry, 8 hrs. Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Cloud. Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Rainfall. Number of rainy days during year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.	Heaviest rainfall during year.	Station.
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
																								Kashmir—*concld.*
281	9	17	6	14	28	10	1	0	2·6	1·5	+1·1	49*	0 †	·200*	+·016†	4·4	−0·4	11	+1·4	3·34	3·26	+0·08	0·59	Leh.
301	0	0	8	3	6	17	29	2	3·1	...	...	47‡	−10*	·246‡	−·030‡	4·4	−0·4	8	−11·0	2·22	7·48	− 6·26	0·82	Skardu.
343	1	0	2	1	0	16	2	1	0·2	...	...	56	+ 7§	·328	+·071§	3·8	−1·1	9	−6·9	2·66	5·11	− 2·45	0·40	Gilgit.
																								Baluchistan.
340	3	8	4	0	0	5	6	0	1·8	...	...	54	...	·298	...	0·9	...	25	...	10·77	...	...	1·12	Fort Sandeman.
293	4	10	17	20	12	2	3	5	2·2	2·1	+0·1	66‖	+13‡	·332‖	+·009‡	2·5	+0·6	19	− 5·3	8·61	10·02	−1·41	1·84	Quetta.
37	3	3	115	107	72	22	5	2	4·2	5·9	−1·7	52§	+ 8§	·323§	+·069§	2·3	+0·3	23	+ 4·4	8·02	6·68	+1·34	0·62	Chaman.
359	0	0	1	0	3	1	0	1	4·5	...	...	63¶	+19†	·263¶	+·022†	2·0	...	17	− 0·8	7·01	6·74	+0·27	0·96	Kalat.††
100	35	91	33	20	19	30	16	23	4·4	...	...	40¶	...	·228¶	...	2·8	...	10	...	5·00	...	...	1·21	Dalbandin.
44	59	10	14	6	6	25	136	67	7·1	...	...	77	...	·661	...	2·3	...	10	...	6·27	...	...	1·66	Pasni.
134	17	108	60	5	6	15	8	13	4·7	...	...	57	...	·338	...	2·1	...	17	...	8·57	...	...	1·62	Panjgur.
63	2	21	13	12	25	158	66	6	4·1	...	...	35	...	·190	...	2·0	...	13	...	4·07	...	...	0·87	Robat.
129	60	3	2	0	1	0	2	168	9·2	...	...	57	...	·299	...	1·1	...	8	...	2·18	...	...	0·61	Seistan.††
																								Hill stations, excluding Kashmir and Baluchistan.
366	0	0	0	0	0	0	0	0	0·7	...	...	57	+2	·289	+·012	2·2	−1·2	66	+2·2	25·91	27·85	−1·94	1·72	Parachinar.
39	203	5	0	19	76	8	5	11	7·1	8·3	−1·2	51	−2	·310	−·006	3·7	+0·7	41	−0·7	24·61	27·48	−2·87	1·59	Cherat.
298	2	22	24	5	1	6	8	0	2·9	...	...	57	−3	·283	−·014	3·6	+0·7	42	+1·8	19·36	16·94	+ 2·42	1·23	Drosh.
130	77	9	14	85	22	8	0	21	4·8	5·3	−0·5	56	0	·265	−·004	3·9	+0·3	75	− 1·3	76·92	57·97	+18·95	5·87	Murree.
...	...	...	...	...	...	...	...	...	...	...	...	57	0	·263	+·007	4·1	0	92	+ 6·9	57·57	63·11	− 5·54	3·54	Simla.
...	...	...	...	...	...	...	...	...	...	...	...	74‡	+8‡	·344‡	+·025‡	4·2	+0·2	93	+ 2·0	68·53	64·55	+ 3·98	3·43	Sarain.
47	65	5	1	0	46	8	0	9	5·5	...	...	77	+8	·277	+·037	5·9	+0·9	87	+19·5	66·46	55·00	+11·46	4·35	Kalabagh.
67	9	107	36	7	1	31	13	6	6·7‖	4·6‖	+2·1	66‖	+1‖	·349‖	+0·15‖	5·4	+2·1	76	−11·5	60·92	72·44	−11·52	5·67	Chakrata.‡‡
84	3	16	77	43	12	5	115	11	5·8	...	...	60	−1	·260	−·012	4·5	+0·4	80	+ 0·4	61·49	50·90	+10·59	5·40	Mukteswar.
340	1	3	3	3	1	1	10	1	0·9	3·5	−2·6	86	+1	·354	+·001	6·8	+1·0	130	+ 8·7	137·18	121·00	+16·18	7·27	Darjiling.§§
194	5	12	24	18	47	55	8	3	2·6	...	...	76	+2	·421	+·009	5·4	+1·1	134	+ 8·3	95·91	84·65	+11·26	5·40	Shillong.
66	14	65	57	15	31	62	49	7	4·7	...	...	81	0	·475	+·006	6·5	+1·1	153	− 8·8	480·25	409·90	+76·35	31·97	Cherrapunji.
301	0	0	0	8	4	49	2	2	1·4	...	...	87	+3	·520	−·010	3·9	−0·4	92	+ 1·4	58·00	56·57	+ 1·43	2·75	Maymyo.
88	15	24	26	23	12	45	68	65	3·8	4·3	−0·5	68	+8	·458	+·028	3·8	+0·1	58	+11·1	105·16	75·33	+29·83	9·17	Pachmarhi.
80	14	64	4	11	9	124	26	34	5·0	5·7	−0·7	54	0	·372	+·005	3·7	+0·4	66	+12·1	86·25	60·80	+25·45	10·37	Mount Abu.
106	7	51	58	0	1	49	73	17	3·2	4·3	−1·1	84	−1	·531	−·011	6·1	−0·2	138	+ 4·7	128·64	126·88	+1·76	5·78	Mercara.‖‖
114	4	5	40	67	35	28	42	31	3·3	...	...	69	+1	·327	+·003	5·9	+0·9	96	− 8·7	48·27	56·20	− 7·93	4·03	Ootacamund.
3	56	61	49	37	9	11	87	53	6·7	...	...	69	0	·315	−·007	4·2	−0·3	88	−19·7	55·42	61·65	− 6·23	2·37	Kodaikanal.
																								Extra India.
127	27	58	15	38	17	39	5	40	...	...	...	...	...	...	...	6·5	+1·3	126	− 7·4	94·17	93·99	+ 0·18	3·32	Singapore.
0	76	83	56	62	15	13	31	30	...	...	...	...	...	...	...	7·2	+5·7	113	−19·6	86·04	106·41	−20·37	4·90	Penang.
4	14	35	22	4	13	144	123	7	6·7	7·3	−0·6	82	−2	·790	−·069	5·5	+2·2	52	−19·8	38·07	62·16	−24·09	3·36	Trincomalee.

* Mean of 7 months.
† " " 6 "
‡ " " 8 "
§ " " 11 "
‖ " " 9 "

¶ Mean of 10 months.
†† Wind observations of 365 days.
‡‡ " " " 277 "
§§ " " " 363 "

‖‖ Wind observations of 364 days.

TABL

(2) *Abstract of observations taken at 8 hrs. at 2*

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure, 8 hrs., in inches.					Temperature of air.									
			Mean 8 hrs. pressure reduced to 32°.	Departure from normal of year.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity at 45° Lat.	Highest pressure of year.	Lowest pressure of year.	Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Extra India—*concld.*																
	Colombo	24	29·898	—·029	29·837	30·054	29·707	76·0	86·3	—0·9	73·9	—1·6	80·1	—1·3	12·4	96·8	64
	Hambantota	64	29·841	...	29·831	30·014	29·670	75·9	86·5	...	74·5	...	80·5	...	11·9	93·8	68
	Minicoy	7	29·945	+·007	...	30·095	29·730	...	...	...	...	...	...	...	...	...	...
	Amini Divi	*13*	29·893	—·036	29·834	30·069	29·671	81·8	88·4	+1·5	76·5	—0·5	82·4	+0·5	11·8	96·2	66
	Gyantse *	13,110	18·505	...	18·466	18·672	18 302	34·3	55·7	...	13·5	...	34·7	...	42·2	74·8	0
	Gangtok	5,667	24·463	+·006	24·418	24·624	24·228	58·5	68·6	+0·4	52·6	+6·8	60·6	+3·6	16·0	80·9	35
	Gartok (c) †	15,100	15·011	...	...	15·200	14·900	40·5	63·1	...	41·2	...	52·8	...	21·8	80·8	34
	Kashgar (c) ¶	4,255	25·555	—·087	...	26·250	24·900	40·8	60·2	+1·1	35·3	0	47·8	+0·5	24·9	96·8	6
	Kabul (c)	...	24·130‖	—·125§	...	24·420	23·030	46·3	76·7	+4·6	44·5	+3·0	60·6	+3·8	32·1	107·6	17
	Meshed	3,104	25·958*	...	29·085*	26·290	25·624	49·7	70·6	+2·0	41·0	—3·5	55·8	—0·7	29·6	101·4	9
	Jask	13	29·843	—·010	29·809	30·340	29·419	75·4	86·7	+0·3	71·8	—1·8	79·3	—0·7	14·9	106·5	46
	Muscat	20	29·839§	—·004§	29·808§	30·331	29·425	79·5	88·3	+3·2	76·6	—1·8	82·5	+0·7	11·8	108·1	56
	Bushire	14	29·837	—·018	29·813	30·376	29·364	73·3	81·6	—0·5	68·2	—0·4	74·9	—0·5	13·4	108·8	42
	Busrah	25	29·824‖	—·062§	29·800§	30·296	29·352	72·8‖	86·9	+2·6	62·3	—2·7	74·7	—0·1	24·6	112·9	31
	Ispahan (c) **	*5,817*	24·261	—·053	...	24·620	24·020	59·2	79·8	—1·0	52·1	+0·5	66·0	—0·3	27·7	102·4	22
	Tehran (c) ††	*4,002*	25·720	—·137	...	26·000	25·400	50·0	63·5	—3·4	45·0	+0·3	54·3	—1·5	18·5	91·5	19
	Aden	94	29·789	—·040	29·816	30·071	29·474	79·8	86·9	—1·1	77·6	—0·4	82·2	—0·7	9·3	100·3	67
	Zanzibar	72	29·977	—·016	29·959	30·169	29·780	78·7	84·1	+0·3	76·2	—0·2	80·2	+0·1	7·9	92·7	69

N.B.—Elevations in italics indicate barometrical determinations.
Note.—The barometric readings are not reduced to sea-level in the case of hill or plateau stations, the elevations of which exceed 3,200 feet.
(*c*) Aneroid.

* Mean of 5 months.
† " " 3 "
‡ " " 11 "
§ " " 10 "
‖ " " 11 "
¶ " " 9 "
** " " 8 "
†† " " 6 "

B—concld.

stations in India, etc., in the year 1916.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour of year.	Normal velocity of year.	Departure from normal of year.	Hygrometry, 8 hrs. Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Cloud. Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Rainfall. Number of rainy days during year.	Departure from normal of year.	Rainfall of year.	Normal rainfall of year.	Departure from normal of year.	Heaviest rainfall during year.	Station.
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
																								Extra India —*concld.*
144	16	61	8	9	3	70	35	20	4·0	5·8	—1·8	88	+ 6	·795	—·059	9·3	+ 4·0	118	+ 9·3	90·70	84·53	+ 6·17	7·95	Colombo.
15	90	50	0	0	0	55	119	37	9·8	...	...	88	...	·790	...	4·0	...	67	...	32·64	38·04	— 5·40	2·31	Hambantota.
36	61	55	14	10	6	20	90	74	4·5	6·9	—2·4	...	...	...	...	4·7	+ 0·1	78	—14·5	55·07	61·84	— 6·77	4·24	Minicoy.
12	82	45	2	3	1	47	81	94	8·1	...	...	78	+ 1	·851	—·009	5·4	0	94	+19·4	70·39	52·36	+18·03	4·40	Amini Divi.
53	1	0	2	66	2	8	1	7	6·1	...	...	...	...	...	...	0	...	1	...	0·78	...	...	0·60	Gyantse.
334	4	16	0	0	0	2	4	6	0·8	...	...	85	+ 3	·436	+ ·017	2·4	—1·5	175	+ 9·6	142·97	135·11	+ 7·86	3·75	Gangtok.
46	0	0	0	28	0	1	0	1	4·5	...	...	...	...	...	...	2·9	...	13	...	5·89	...	...	0·62	Gartok.
201	11	10	2	2	2	0	2	10	1·0†	1·6	—0·6	53*	+ 4*	·255*	+ ·020*	4·0†	+ 0·4	5	+ 0·4	1·31	3·28	— 1·97	0·37	Kashgar.
0	11	26	14	21	12	119	117	26	...	...	...	75†	+ 22†	·338†	+ ·013†	2·4	+ 0·6	24	— 3·8	14·27	12·89	+ 1·38	2·31	Kabul.‡
336	15	2	3	4	4	0	1	1	1·0	...	...	58†	0 †	·303†	—·069†	3·3	+ 0·4	32	+ 9·5	8·46	9·37	— 0·91	0·78	Meshed.
10	78	81	103	15	1	4	9	65	8·4	8·7	—0·3	68	— 4	·623	—·111	1·6	— 0·3	15	+ 6·1	6·82	4·17	+ 2·65	1·70	Jask.
71	3	20	38	44	2	10	15	161	2·8	3·1	—0·3	63	— 5	·642	—·095	2·3	+ 0·4	21	+12·8	10·45	3·94	+ 6·51	3·10	Muscat.§
175	30	39	25	25	10	1	16	45	5·2	5·8	—0·6	73	+ 4	·649	+ ·030	2·9	+ 0·8	21	+ 3·0	9·40	11·07	— 1·67	1·73	Bushire.
53	13	15	21	32	17	56	130	22	4·3	...	...	64‖	...	·536‖	...	1·2**	...	19	+ 4·3	8·40	6·23	+ 2·17	1·37	Busrah.¶
223	2	2	0	1	0	5	11	0	1·2	2·8	—1·6	56*	+ 1*	·381*	—·043*	1·5	—0·2	3	— 3·8	0·90	2·37	—11·47	0·18	Ispahan.
51	8	58	7	5	5	9	2	6	2·7*	...	...	66††	+ 7††	·290††	+ ·019††	3·8	+ 0·9	34	+16·2	14·91	6·32	+ 8·59	1·50	Tehran.
81	51	174	13	19	13	12	1	2	9·7	9·1	+ 0·6	78	+ 4	·793	—·005	4·5	+ 0·5	2	— 2·5	1·11	2·24	— 1·13	0·66	Aden.
37	33	47	5	39	102	92	8	0	4·7	4·9	—0·2	81	— 2	·795	—·020	6·9	+ 0·7	77	—11·8	63·50	63·30	+ 0·20	10·20	Zanzibar.‡‡

† Mean of 3 months.
** " " 8 "
‖ " " 11 "
* " " 6 "
†† " " 5 "

‡ Wind observations of 346 days.
§ " " " 364 "
¶ " " " 362 "
‡‡ " " " 363 "

Table C.—Abstract of observations taken at 8 hrs. at 58 fourth and fifth class stations in India, etc., in the year 1916.

TABI

Abstract of observations taken at 8 hrs. at 58 fourth a

Number of sub-division.	Station.	Temperature of air. Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Wind direction. Number of winds from Calm.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	2
	II.—Assam.																			
6	Bishnath	70·3	83·5		66·0		74·7		17·5	99·2	40·0	...	...	...	...	...	...	...	...	...
	Borjuli	72·5	85·8		63·8		74·8		22·0	99·6	37·1	...	...	...	...	...	...	...	...	...
	Chandkhira	71·4	89·5		53·0		73·8		31·5	101·9	35·0	...	...	...	...	...	...	...	...	...
	Doom Dooma	68·0	84·4		64·2		74·3		20·2	101·1	40·5	...	...	...	...	...	...	...	...	...
	Dikom	69·4	82·6		64·4		73·5		18·2	99·2	38·2	...	...	...	...	...	...	...	...	...
	Golaghat	70·0	82·1		64·2		73·1		17·9	96·9	40·2	...	...	...	...	...	...	...	...	...
	Hailakandi	72·5	86·3		66·4		73·4		19·9	97·0	43·4	...	...	...	...	...	...	...	...	...
	Jorehat	70·2	82·7		66·6		74·6		16·1	97·5	44·6	...	...	...	...	...	...	...	...	...
	Lumding	71·1	85·1		66·5*		76·3*		19·7*	101·9	40·4	...	...	...	...	...	...	...	...	...
	Messa	72·0	88·4		62·4		75·4		26·0	101·6	40·8	...	...	...	...	...	...	...	...	...
	Panerihat	66·2	84·2		63·9		74·0		20·3	96·3	39·8	...	...	...	...	...	...	...	...	...
	III.—Bengal.																			
5	Comilla	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	76·3	87·2		69·1		78·1		18·1	98·3	48·1	...	...	...	...	...	...	...	...	...
	Faridpur	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	75·8	87·7		67·4		77·6		20·4	105·3	41·1	...	...	...	...	...	...	...	...	...
	Pabna	75·4	88·2		69·6		78·9		18·5	105·8	45·7	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	67·9	89·5		62·8		76·1		26·7	100·1	35·6	...	...	...	...	...	...	...	...	...
	Kalchini	74·5	84·7		62·8		73·8		22·0	97·1	40·5	...	...	...	...	...	...	...	...	...
	Nagrakata	74·8	84·9		64·6		74·8		20·3	96·1	45·0	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj (Asansol)	...	...		...		...		...	...	...	...	...	...	...	...	...	...	...	...
	IV.—Bihar and Orissa.																			
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Mean of 11 months.

C.

fifth class stations in India, etc., in the year 1916.

Wind velocity.			Hygrometry, 8 hrs.				Cloud.		Rainfall.						
Mean velocity, miles per hour.	Normal.	Departure from normal.	Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Number of rainy days during year.	Departure from normal of year.	Rainfall for the year.	Normal rainfall for the year.	Departure from normal of year.	Heaviest rainfall during year.	Station.
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
															II.—Assam.
...	...	...	91	− 2	·706	+·029	...	...	113	− 4·6	88·29	88·58	− 0·29	4·52	Bishnath.
...	...	...	85	− 2	·710	+·027	...	...	104	− 6·8	85·34	77·73	+ 7·61	3·95	Borjuli.
...	...	...	93	+ 2	·750	+·036	...	...	118	−12·3	99·37	106·52	− 7·15	4·75	Chandkhira.
...	...	...	89	− 4	·638	−·030	...	...	124	− 5·5	93·21	96·74	− 3·53	4·45	Doom Dooma.
...	...	...	89	− 2	·667	+·014	...	...	126	− 9·1	109·24	102·47	+ 6·77	6·00	Dikom.
...	...	...	92	+ 2	·702	+·007	...	...	118	+ 7·4	87·06	65·66	+21·40	3·35	Golaghat.
...	...	...	87	− 4	·717	+·025	...	...	127	− 9·9	116·45	121·31	− 4·86	4·60	Hailakandi.
...	...	...	92	+ 2	·705	+·018	...	...	118	+ 2·2	78·67	76·37	+ 2·30	3·99	Jorehat.
...	...	...	87	...	·680	...	...	...	84	+ 7·1	48·35	49·01	− 0·66	5·90	Lumding.
...	...	...	71	−10	·584	−·116	...	...	123	+10·3	84·95	83·62	+ 1·33	4·05	Messa.
...	...	...	93	+ 2	·627	+·024	...	...	89	−11·7	72·23	74·30	− 2·07	3·64	Pancrihat.
															III Bengal.
...	...	...	...	...	...	...	...	...	89	−11·1	84·11	88·38	− 4·27	5·70	Comilla.
...	...	...	79	− 5	·743	−·014	...	...	89	−14·8	74·79	79·33	− 4·54	4·24	Brahmanbaria.
...	...	...	...	...	...	...	...	...	93	+ 2·2	82·04	69·30	+12·74	4·69	Faridpur.
...	...	...	80	− 2	·750	+·007	...	...	97	+ 6·9	83·38	66·28	+17·10	4·30	Goalundo.
...	...	...	83	+ 2	·767	+·026	...	...	88	+ 6·7	80·93	60·11	+20·82	3·85	Pabna.
...	...	...	...	...	...	...	...	...	86	+ 4·2	74·25	64·30	+ 9·95	5·72	Sirajganj.
...	...	...	...	...	...	...	...	...	79	+ 5·3	87·90	53·98	+33·92	7·10	Rampur Boalia.
...	...	...	...	...	...	...	...	...	87	+19·2	73·67	52·82	+20·85	8·00	Malda.
...	...	...	...	...	...	...	...	...	86	+ 3·3	91·92	80·53	+11·39	9·55	Rangpur.
...	...	...	90	− 2	·652	−·021	...	...	134	+12·5	164·68	154·04	+10·64	6·35	Dam Dim.
...	...	...	76	− 5	·690	−·021	...	...	141	+25·3	181·65	150·71	+30·94	6·43	Kalchini.
...	...	...	75	− 5	·658	+·008	...	...	134	+ 1·9	153·24	161·05	− 7·81	5·73	Nagrakata.
...	...	...	...	...	...	...	...	...	124	+20·4	188·96	145·69	+43·27	8·13	Cooch Behar.
...	...	...	...	...	...	...	...	...	83	+ 7·0	66·13	57·05	+ 9·08	5·45	Krishnagar.
...	...	...	...	...	...	...	...	...	78	+ 4·7	72·82	54·39	+18·43	7·00	Bankura.
...	...	...	...	...	...	...	...	...	79	+ 5·8	62·51	52·72	+ 9·79	10·71	Raniganj (Asansol).
															IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	81	+ 5·6	56·53	52·25	+ 4·28	4·86	Hazaribagh.
...	...	...	...	...	...	...	...	...	74	+14·0	48·70	49·00	− 0·30	3·90	Bhagalpur.
...	...	...	...	...	...	...	...	...	66	+ 9·9	57·57	49·11	+ 8·46	4·93	Muzaffarpur.
...	...	...	...	...	...	...	...	...	64	+ 5·3	55·27	53·61	+ 1·66	4·16	Motihari.
...	...	...	...	...	...	...	...	...	62	+ 9·8	77·07	41·81	+35·26	9·16	Chapra.
...	...	...	...	...	...	...	...	...	68	+12·9	50·78	44·25	+ 6·53	5·13	Arrah.
...	...	...	...	...	...	...	...	...	68	+14·0	46·76	42·16	+ 4·60	3·43	Deori.

TABL

Abstract of observations taken at 8 hrs. at 58 fourth an

Number of sub-division.	Station.	Temperature of air. Mean of 8 hrs. dry bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Wind direction. Number of winds from: Calm.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	V.—United Provinces of Agra and Oudh.																			
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																			
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XII.—Central Provinces.																			
23	Chhindwara	71·0	86·5	...	64·3	...	75·4	...	22·2	111·0	36·7	238	16	8	5	2	6	18	33	40
	XIII.—Hyderabad.																			
27	Parbhani	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XV.—Madras.																			
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	77·6	92·7	...	70·7	...	81·7	...	21·9	107·4	50·3	...	...	...	...	...	...	...	...	...
33	Guntur	79·2	92·1	...	73·9	...	83·0	...	18·2	110·5	58·7	...	...	...	...	...	...	...	...	...
	Bay Islands.																			
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kashmir.																			
13	Jammu	71·3	85·1	...	66·1	...	75·6	...	19·0	109·1	36·8	0	151	154	14	15	8	6	4	14
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	48·9	66·9	...	33·7	...	50·3	...	33·2	99·0	−13·4	0	119	45	40	63	26	14	6	53
	Baluchistan.																			
15	Harnai	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hill stations, exclusive of Kashmir.																			
	Panighatta	71·9	83·1	...	65·8	...	74·5	...	17·3	95·9	44·0	...	...	...	...	...	...	...	...	...
	Kurseong	63·5	68·7	...	56·9	...	62·8	...	11·9	83·3	40·2	...	...	...	...	...	...	...	...	...
	Gnatong *	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim †	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mussooree	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo ‡	...	63·4	...	42·1	...	52·7	...	21·3	85·4	19·2	149	5	4	29	32	21	49	26	16
	Kailang §	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pishin	...	74·9	...	41·7	...	58·3	...	33·2	100·6	9·0	...	...	...	...	...	...	...	...	...

* Observations of 10 months.
† " " 5 "
‡ " " 11 "
§ " " 7 "

—contd.

fth class stations in India, etc., in the year 1916—contd.

Wind velocity.			Hygrometry, 8 hrs.				Cloud.		Rainfall.						Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Number of rainy days during year.	Departure from normal of year.	Rainfall for the year.	Normal rainfall for the year.	Departure from normal of year.	Heaviest rainfall during year.	
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
															V.—United Provinces of Agra and Oudh.
...	...	...	...	...	...	...	...	...	50	+11·1	45·27	32·27	+13·00	6·67	Meerut.
...	...	...	...	...	...	...	...	...	85	+ 4·6	94·38	85·22	+ 9·16	5·37	Dehra Dun.
															IX.—Rajputana.
...	...	...	...	...	...	...	...	...	42	+10·5	30·95	23·40	+ 7·55	3·25	Udaipur.
															XII.—Central Provinces.
3·4	...	...	65	...	·501	...	3·7	...	74	...	55·17	...	...	4·49	Chhindwara.
															XIII.—Hyderabad.
...	...	...	...	...	...	...	...	...	64	+17·8	43·08	31·75	+11·33	4·18	Parbhani.
															XV.—Madras.
...	...	...	...	...	...	...	...	...	28	—12·4	18·82	27·29	— 8·47	2·03	Tinnevelly.
...	...	...	76	...	·721	...	4·2	...	49	+15·9	30·03	20·29	+ 9·74	2·67	Anantapur.
...	...	...	82	...	·813	...	3·2*	...	64†	+13·8	51·30†	32·55	+18·75	3·54	Guntur.
															Bay Islands.
...	...	...	...	...	...	...	...	...	66	—65·2	103·94	98·51	+ 5·43	5·30	Car Nicobar.
															Kashmir.
...	...	...	57	...	·475	...	2·7	...	53	+ 6·0	55·12	41·81	+13·31	5·40	Jammu.
...	...	...	...	...	...	...	...	...	104	— 5·7	56·44	77·84	—21·40	2·75	Sonamarg.
...	...	...	39*	...	·220*	...	4·6	...	16	— 9·5	3·90	9·85	— 5·95	0·34	Kargil.
															Baluchistan.
...	...	...	...	...	...	...	...	...	25	+ 1·4	13·45	12·04	+ 1·41	1·58	Harnai.
															Hill stations, exclusive of Kashmir.
...	...	...	72	+ 1	·593	—·007	...	...	128	+13·5	163·77	137·53	+26·24	7·34	Panighatta.
...	...	...	94	+14	·576	+·134	...	...	131	0	185·28	153·54	+31·74	9·46	Kurseong.
...	...	...	...	...	...	...	...	...	162	...	179·40	...	...	6·60	Gnatong.
...	...	...	...	...	...	...	...	...	155	...	61·84	...	...	1·32	Lachung.
...	...	...	...	...	...	...	...	...	87	...	114·80	...	...	7·51	Ringim.
...	...	...	...	...	...	...	...	...	104	+15·8	129·33	93·90	+35·42	15·91	Mussooree.
...	...	...	...	...	...	...	4·2	+0·2	24‡	—10·1	9·32‡	14·10	— 4·78	0·81	Poo.
...	...	...	...	...	...	...	...	...	13	— 5·1	4·28	7·20	— 3·92	1·08	Kailang.
...	...	...	...	...	...	...	1·9§	...	21	+ 2·1	8·36	8·11	+ 0·25	1·62	Plahin.

* Mean of 7 months.
† Observations of 11 months.
§ Mean of 9 months.
‡ Observations of 12 months.

TABLE

Abstract of observations taken at 8 hrs. at 58 fourth and

Number of sub-division.	Station.	Temperature of air.										Wind direction.								
												Number of winds from								
		Mean of 8 hrs. dry-bulb of year.	Mean maximum of year.	Departure from normal of year.	Mean minimum of year.	Departure from normal of year.	Yearly mean of mean between maximum and minimum.	Departure from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Calm.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	Extra India.																			
	Chumbi	40·5†	48·8*	...	39·8*	...	40·0§	...	16·4§	69·5	10·0	...	...	...	...	...	...	...	...	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Observations of 10 months.
† " 11 "
§ " 9 "

.—concld.

fth class stations in India, etc., in the year 1916—concld.

Wind velocity.			Hygrometry, 8 hrs.				Cloud.		Rainfall.						Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Mean humidity at 8 hrs. of year.	Departure from normal of year.	Mean vapour tension at 8 hrs. in inches of mercury of year.	Departure from normal of year.	Mean cloud amount at 8 hrs. of year.	Departure from normal of year.	Number of rainy days during year.	Departure from normal of year.	Rainfall for the year.	Normal rainfall for the year.	Departure from normal of year.	Heaviest rainfall during year.	
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
															Extra India.
...	...	...	91‡	...	·328‡	...	2·5§	...	63†	...	24·91†	...	...	2·90	Chumbi.
...	...	...	...	...	...	...	...	...	103	—1·2	67·56	83·58	—16·02	4·21	Pemba.

† Observations of 11 months.
‡ " 7 "
§ Mean of 9 months.

Addenda Sheet of 10 and 16 hrs. Observations in Table A of 1916, Monthly Weather Reviews.

Addenda Sheet of Observations taken at 10 hrs.

Number of sub-division.	Station.	Height of bar-cistern above sea-level in feet.	Pressure. Mean of 10 hrs.	Mean of 16 hrs.	Mean daily range.	Mean of daily mean pressures.	Departure from normal.	Mean reduced to sea-level and to gravity at 45° lat.	Temperature of air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hrs.	Mean 16 hrs.	Mean of daily means.	Departure from normal.	Temperature, wet-bulb. Mean minimum.	Mean 10 hrs.	Mean 16 hrs.	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	22	2
	January 1916.																					
	Extra India.																					
	Mauritius	181	...	...	...	29·663	—·041	29·789	83·8	73·4	10·4	87·3	69·3	18·0	...	...	77·7	—1·1	...	...	...	7
	April 1916.																					
	Extra India.																					
	Mauritius	181	...	...	...	29·728	—·024	29·855	82·2	69·1	13·1	85·6	62·6	23·0	..	...	75·0	—0·4	...	...	...	7
	May 1916.																					
	Extra India.																					
	Seychelles	15	29·922	29·838	·084	29·881	—·060*	29·819	84·7	78·9	5·8	86·5	75·5	11·0	82·7	83·7	80·4	+0·9*	72·6	77·3	77·7	7
	Mauritius	181	...	...	...	29·716	—·118	29·844	78·1	68·5	9·6	81·3	63·7	17·6	...	...	72·7	+0·6	...	...	...	6
	June 1916.																					
	Extra India.																					
	Mauritius	181	...	...	...	29·864	—·047	29·994	75·4	64·2	11·2	78·8	58·8	20·0	...	...	69·3	+0·2	...	...	...	6
	July 1916.																					
	Extra India.																					
	Mauritius	181	...	...	...	29·925	—·024	30·056	73·2	58·8	14·4	76·3	54·5	21·8	...	...	65·8	—2·0	...	...	...	60
	August 1916.																					
	Extra India.																					
	Mauritius	181	...	...	...	29·928	—·027	30·069	75·2	61·5	13·7	78·4	54·1	24·3	...	...	67·6	—0·4	...	...	...	59
	October 1916.																					
	Extra India.																					
	Mauritius	181	...	...	...	29·881	—·006	30·011	78·3	64·8	13·5	82·2	61·3	20·9	...	...	70·9	—1·1	...	...	...	65

* Departure from old normal.

6 hrs. in Table A of 1916, Monthly Weather Reviews.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind Direction.										Wind steadiness.		Wind velocity.		Rainfall.		
														Total number of 10 hrs. and 16 hrs. winds from																
From minimum.	Mean 10 hrs.	Mean 16 hrs.	Mean of daily means.	Departure from normal.	From minimum.	Mean 10 hrs.	Mean 16 hrs.	Mean of daily means.	Departure from normal.	Mean 10 hrs.	Mean 16 hrs.	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.	Station.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
																															January 1916.
																															Extra India.
...	...	..	·762	+·027	...	...	...	80	+ 4	...	...	7·7	+1·5	...	..	..	..	...	...	...	...	...	N 79°E	S 86° E	...	...	159	...	11·37	3·14	Mauritius .
																															April 1916.
																															Extra India.
...	...	...	·715	+·024	...	...	...	82	+ 3	...	...	5·3	+0·2	..	...	...	..	...	...	...	...	...	S 77°E	S 72°E	...	...	91	...	5·58	1·11	Mauritius .
																															May 1916.
																															Extra India.
·715	·867	·873	·831	—·015	73	77	76	77	— 3	5·9	5·8	5·9	+0·8*	13	1	2	5	15	9	4	3	10	S 18°E	S 43°E	23	59	84	120	8·36	6·07	Seychelles .
...	...	...	·650	+ 030	...	...	...	81	+ 3	...	...	6·6	+2·0	..	..	...	...	...	...	...	...	...	S 62°E	S 64°E	...	...	173	...	7·49	2·58	Mauritius .
																															June 1916.
																															Extra India.
...	...	...	·561	+·024	...	...	...	79	+ 3	...	...	4·9	+0·1	..	..	...	...	...	...	...	...	...	S 62°E	S 63°E	...	...	152	...	1·80	0·30	Mauritius .
																															July 1916.
																															Extra India.
...	...	...	·449	—·059	...	...	..	71	— 4	...	...	5·1	+0·2	...	...	..	...	...	...	...	..	...	S 62°E	S 64°E	...	...	145	...	0·75	0·11	Mauritius .
																															August 1916.
																															Extra India.
...	...	...	·502	+·003	...	...	...	74	0	...	...	5·9	+0·9	..	...	...	...	...	...	...	...	..	S 63°E	S 66°E	...	...	147	...	1·10	0·16	Mauritius .
																															October 1916.
																															Extra India.
...	...	...	·549	+·003	...	...	...	73	+ 3	...	...	5·8	+0·8		...	...	...	..	...	...	...	...	S 80°E	S 77°E	...	...	154	...	3·79	1·55	Mauritius .

* Departure from old normal.

Addenda Sheet of 8 hrs. Observations in Table B of 1916, Monthly Weather Reviews.

Addenda Sheet of 8 hrs. Observatio

Number of sub-division.	Station.	Height of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches.							Temperature of air.											
			Mean 8 hrs. pressure reduced to 32°.	Departure from normal.	Mean 8 hrs. pressure reduced to sea-level and to constant gravity, at 45° Lat.	Highest pressure of month.	Date.	Lowest pressure of month.	Date.	Mean of 8 hrs. dry bulb.	Mean of 8 hrs. wet bulb.	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
January 1916.																						
Extra India.																						
Tehran (c) * . . .		4,002	25·745	—·155	...	26·000	2nd	25·5·0	19th	32·7	30·1	46·6	+3·0	(d) 30·2	+4·1	(d) 38·4	+3·5	16·4	58·3	17th	21·0	26th
February 1916.																						
Extra India.																						
Tehran (c) * . . .		4,002	25·741	—·129	...	26·000	4th	25·600	20th	32·5	(v) 35·6?	47·4	—3·5	30·1	—2·0	38·8	—2·7	17·3	55·9	21st	19·0	1st, 2nd
March 1916.																						
Extra India.																						
Tehran (c) * . .		4,002	25·731	—·099	...	25·940	28th	25·540	13th	44·2	(e) 41·7	57·2	—1·4	39·9	+1·3	48·5	—0·1	17·3	67·3	12th	20·1	2nd
April 1916.																						
Extra India.																						
Tehran (c) (e) ‡ . .		4,002	25·666	—·144	...	25·870	30th	25·400	20th	54·8	48·5	67·3	—4·1	47·6	—0·5	57·4	—2·3	19·7	78·2	21st	41·9	16th
May 1916.																						
Extra India.																						
Amini Divi . . .		13	29·841	—·045	29·782	29·948	8th	29·710	23rd	85·1	79·6	92·9	+2·1	80·0	—0·5	86·4	+0·8	12·9	96·0	6th	72·1	30th
Tehran (c) * . .		4,002	25·728	—·152	...	25·870	2nd	25·600	29th & 31st.	66·4	58·4	80·9	—1·9	59·9	+2·5	70·4	+0·3	21·0	89·5	25th	51·0	13th
August 1916.																						
Extra India.																						
Minicoy . . .		7	29·927	+·007	...	29·960	18th	29·871	31st	...	...	...	...	...	...	...	...	...	...	...	...	...
October 1916.																						
Extra India.																						
Amini Divi . . .		13	29·880	—·050	29·821	29·961	6th	29·723	18th	81·0	76·1	87·1	+1·2	77·6	+1·0	82·3	+1·1	9·5	92·1	14th	73·9	16th

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

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

(c) Aneroid.

(v) Mean of 12 days.
(e) " " 29 "
(d) " " 30 "

* 7 hrs. observations.
‡ 7 and 8 hrs. observations.

Table B of 1916, Monthly Weather Reviews.

Wind direction. Number of winds from N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.	Wind velocity. Mean velocity, miles per hour.	Normal.	Departure from normal.	Wind steadiness. Actual percentage.	Departure from normal.	Hygrometry, 8 hrs. Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall of period.	Normal rainfall of period.	Departure from normal.	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
																														January 1916.
																														Extra India.
3	13	1	0	1	0	1	0	N 39° E	N 16° E	2·3	2·1	+0·2	45	— 1	76	— 3	·142	+ ·007	5·7	+1·6	5	+1·0	2·19	1·69	+ 0·50	2·40	2 97	—0·57	1·16	Tehran.
																														February 1916.
																														Extra India.
1	17	2	1	2	1	0	1	N 52° E	N 22° E	2·4	2·6	—0·2	59	+29	75*	...	·173*	...	3·9	+0·9	5	+2 0	1·70	1·04	+ 0·66	4·10	4·01	+0·09	0·48	Tehran.
																														March 1916.
																														Extra India.
1	14	3	2	0	0	0	1	N 54° E	N 14° E	3·0	2·8	+0·2	55	+33	75†	+5	·227†	+ ·038	4·5	+0·5	12	+6·4	6·07	1·93	+4·14	10·17	5·94	+4·23	1·50	Tehran.
																														April 1916.
																														Extra India.
1	6	1	0	1	3	1	4	N 11° W	S 63° W	4·4‡	3·2	+1·2	17	+ 2	63	+ 6	·270	+ ·001	4·5	+1·4	7	+4·0	2·54	1·13	+1·41	12·71	7·07	+5·64	1·28	Tehran.
																														May 1916.
																														Extra India.
9	1	0	1	0	5	4	10	N 45° W		8·1	...	...	58	...	78	+ 2	·937	+ ·006	5·8	0	10	+5·7	9·31	3·14	+6·17	9·31	3·14	+6·17	3·10	Amini Divi.
2	8	0	2	1	5	0	0	N 56° E	S 46° W	2·8‡	2·6	+0·2	10	— 6	62	+15	399	+ ·063	2·8	+0·3	5	+3·1	2·41	0·45	+1·96	2·41	0·45	+1·96	0·80	Tehran.
																														August 1916.
																														Extra India.
2	0	0	0	0	0	2	18	9	N 75° W	N 79° W	5·1	10·9	—5·8	87	— 3	...	...	...	...	5·1	—0·5	4	—6·8	1·25	7 46	—6·21	36·85	31·66	+5·19	0·55	Minicoy.
																														October 1916.
																														Extra India.
3	0	0	0	1	4	9	14	N 68° W	...	9·9	...	...	78	...	79	— 1	·829	—·041	7·0	+0·7	7	—2·1	5·46	5·98	—0·52	67·72	47·24	+20·48	1·52	Amini Divi.

* Mean of 12 days.
† „ „ 29 „
‡ „ „ 28 „

Addenda Sheet of 8 hrs. Observations in Table C of 1916, Monthly Weather Reviews.

Addenda Sheet of 8 hrs. Observations

Number of sub-division.	Station.	Temperature of air.												
		Mean of 8 hrs. dry bulb.	Mean of 8 hrs. wet bulb.	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
	January 1916.													
	Bay Islands.													
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...
	February 1916.													
	Bay Islands.													
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...
	March 1916.													
	Bay Islands.													
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...
	April 1916.													
	Bay Islands.													
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...
	May 1916.													
	Bay Islands.													
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...
	July 1916.													
	Extra India.													
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...
	August 1916.													
	Hill Stations exclusive of Kashmir.													
	Poo	Reported only rainfall.												
	tober 1916.													
	Hill Stations exclusive of Kashmir.													
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...

Table C of 1916, Monthly Weather Reviews.

Wind direction. Number of winds from N. (16)	N. E. (17)	E. (18)	S. E. (19)	S. (20)	S. W. (21)	W. (22)	N. W. (23)	N. W. (24)	Resultant direction. (25)	Normal direction. (26)	Wind velocity. Mean velocity, miles per hour. (27)	Normal. (28)	Departure from normal. (29)	Wind steadiness. Actual percentage. (30)	Departure from normal. (31)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (32)	Departure from normal. (33)	Mean vapour tension at 8 hrs. in inches of mercury. (34)	Departure from normal. (35)	Cloud. Mean cloud amount at 8 hrs. (36)	Departure from normal. (37)	Rainfall. Number of rainy days. (38)	Departure from normal. (39)	Rainfall of month. (40)	Normal rainfall of month. (41)	Departure from normal. (42)	Total rainfall of period. (43)	Normal rainfall of period. (44)	Departure from normal of period. (45)	Heaviest rainfall during month. (46)	Station. (47)
																															January 1916. **Bay Islands.**
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	−4·5	0	3·80	−3·80	12·00	10·71	+1·29	0	Car Nicobar.
																															February 1916. **Bay Islands.**
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	−2·5	0	1·36	−1·36	12·00	12·07	−0·07	0	Car Nicobar.
																															March 1916. **Bay Islands.**
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	−2·7	0	1·50	−1·50	12·00	13·57	−1·57	0	Car Nicobar.
																															April 1916. **Bay Islands.**
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	−2·6	1·49	3·38	−1·89	13·49	16·95	−3·46	1·10	Car Nicobar.
																															May 1916. **Bay Islands.**
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	−8·5	12·63	13·72	−1·09	12·63	13·72	−1·09	3·10	Car Nicobar.
																															July 1916. **Extra India.**
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	+1·9	3·50	3·69	−0·19	20·03	27·22	−7·19	0·54	Pemba.
																															August 1916. **Hill Stations exclusive of Kashmir.**
...	...	...	...	...	...	...	...	...	...	...	...	Reported	only	rainfall.		...	...	...	...	...	...	...	...	1·54	0·34	+1·20	3·06	2·38	+0·68	0·64	Poo.
																															October 1916. **Hill Stations exclusive of Kashmir.**
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	...	4·85	...	...	122·87	...	...	1·40	Gnatong.

Corrigenda in the India Monthly Weather Reviews for the year 1916.

TEXT.

Page.	Column.	Part.	Correction.
11	...	January 1916 . .	*For* "0·12 and — 0·12" *read* "0·11 and — 0·11" respectively against Mysore in the figure columns 4 and 5 in table 14.
12	2	Ditto . .	*For* "0·12 and — 0·12" *read* "0·11 and — 0·11" respectively against Mysore in the figure columns 2 and 3 in table 15.
84	2	August 1916 . .	*For* "+ 1·12" *read* "—1·12" against "Rainfall departure from normal" in the figure column 1 in table 7.
89	...	Ditto . .	*For* "+ 0·21" *read* "+ 5·21" against Sind in the figure column 5 in table 15.
"	...	Ditto . .	*For* "8·86, + 1·89 and + 27" *read* "7·90, + 0·93 and + 13" against Madras Coast North in the figure columns 3, 5 and 6 respectively in table 15.
"	2	Ditto . .	*For* "7·35, + 1·07 and + 17" *read* "7·12, + 0·84 and + 13" against Madras in the figure columns 1, 3 and 4 respectively in table 16.
"	2	Ditto . .	*For* "12·28, + 2·34 and + 24" *read* "12·26, + 2·32 and + 23" against Mean of India in the figure columns 1, 3 and 4 respectively in table 16.
94	1	September 1916 .	*For* "northwards" *read* "northwest wards" in line 7 under the heading "Depressions and cyclonic storms."
110	1	October 1916 . .	*For* "6·34, + 0·57 and 9" *read* "6·30, + 0·61 and + 10" against Burma in the figure columns 2, 3 and 4 respectively in table 15.
125	2	December 1916 .	*For* "M" *read* "feet" in 1st line (symbols, explanatory) of 5.—Alipur (Calcutta) Observatory, Seismic records.

Corrigenda in the India Monthly Weather Reviews for the year 1916—*contd.*

Tables A, B & C.

Page.	Part.	Table.	Meteorological Province or Station.	Heading.	Column No.	Correction.
v	January 1916	B	Mysore	Rainfall	20 and 21	*For* " 0·12 and —0·12 " *read* " 0·11 and —0·11 " respectively.
vii	Ditto	"	Mergui	Wind direction	35	*For* " S 40° W " *read* " S 4° W ".
"	Ditto	"	Noakhali	Rainfall	52	*For* " —0·35 " *read* " —5·33 ".
viii	Ditto	"	Puri	Pressure	5	*For* " + ·09 " *read* " + ·029 ".
"	Ditto	"	Bareilly	Ditto	9	*For* " 29·442 " *read* " 29·342 ".
ix	Ditto	"	Purulia	Wind velocity	36	*For* " 1·3 " *read* " 1·5 ".
xiii	Ditto	"	Sutna	Ditto	38	*For* " —2·2 " *read* " —1·2 ".
"	Ditto	"	Jubbulpore	Hygrometry	42	*For* " —? " *read* " —9? ".
"	Ditto	"	Jagdalpur	Wind direction	30 and 31	*For* " 1 and 5 " *read* " 5 and 1 " respectively.
xvi	Ditto	"	Pasni	Pressure and Temperature.	4, 6, 7, 9, 15, 17, 19, 22 and 24.	*For* " 30·086, 30·043, 30·253, 29·954, 55·2, 66·1, 21·9, 45 and 36·3 " *read* " 30·084, 30·044, 30·251, 29·952, 56·0, 66·5, 21·1, 46·0 and 35·5 " respectively.
"	Ditto	"	Chakrata	Pressure	11	*For* " ·25 " *read* " ·225 ".
xvii	Ditto	"	Gangtok	Wind direction	28	*For* " 1 " *read* " 0 ".
xxii	Ditto	C	Dam Dim	Temperature	3	*For* " 52·8b " *read* " 53·1b ".
"	Ditto	"	Foot note	...	...	*For* " b mean of 18 days " *read* " b mean of 21 days ".
xxiii	Ditto	"	Bishnath	Hygrometry	35	*For* " + 0·38 " *read* " + ·038 ".
"	Ditto	"	Borjuli	Ditto	35	*For* " + ·018 " *read* " + ·021 ".
"	Ditto	"	Dam Dim	Ditto	32, 33, 34 and 35	*For* " 856, 11, ·339a, and + 0·10 " *read* " 86a, —10, ·343a, and + ·019 " respectively.
"	Ditto	"	Foot note	...	...	*For* " a mean of 19 days " *read* " a mean of 21 days ".
xxxiii	February 1916	B	Bengal	Rainfall	19 and 21	*For* " 0·43 and —0·49 " *read* " 0·44 and —0·48 " respectively.
xxxiv	Ditto	"	Tezpur	Temperature	23	Insert " 9th ".
xli	Ditto	"	Poona	Rainfall	51	*For* " 0·03 " *read* " 0·05 ".
xliii	Ditto	"	Raipur	Ditto	51	*For* " 0·6 " *read* " 0·65 ".
xliv	Ditto	"	Pasni	Pressure	4, 6, 7 and 9	*For* " 30·031, 29·990, 30·212 and 29·920 " *read* " 30·035, 29·994, 30·216 and 29·924 " respectively.
xlviii	March 1916	A	Calcutta	Ditto	5	*For* " 29·337 " *read* " 29·737 ".
lxii	Ditto	B	Pasni	Ditto	4, 6, 7 and 9	*For* " 29·939, 29·899, 30·080 and 29·819 " *read* " 29·943, 29·903, 30·084 and 29·823 " respectively.
lxv	Ditto	"	Muscat	Wind direction	34	*For* " N 38° W (e " *read* " N 38° W (e) ".
lxviii	Ditto	C	Bishnath	Temperature	3	*For* 66 ·8*" *read* " 66·9*".
lxix	Ditto	"	Ditto	Hygrometry	34 and 35	*For* " ·620 and + ·100 " *read* " ·623 * and + ·103 " respectively.
"	Ditto	"	Foot note	...	...	Insert " * mean of 27 days ".
xc	April 1916	B	Pasni	Pressure	4, 6, 7 and 9	*For* " 29·850, 29·810, 29·985 and 29·696 " *read* " 29·854, 29·814, 29·989 and 29·700 " respectively.

Corrigenda in the India Monthly Weather Reviews for the year 1916—*contd.*

TABLES A, B & C.—*contd.*

Page.	Part.	Table.	Meteorological Province or Station.	Heading.	Column No.	Correction.
cv	May 1916	A	Bombay	Rainfall	54	*For* "00·6" *read* "0·06".
cxvii	Ditto	B	Trivandrum	Ditto	53 and 55	*For* "6·04 and —2·63" *read* "6·05 and —2·62" respectively.
cxviii	Ditto	"	Pasni	Pressure	4, 6, 7 and 9	*For* "29·748, 29·708, 29·952 and 29·603" *read* "29·752, 29·712, 29·956 and 29·607" respectively.
cxxi	Ditto	"	Aden	Rainfall	56	*For* "3·0" *read* "0·01."
cxxiv	Ditto	C	Hailakandi	Temperature	6, 7, 8, 9 and 10	*For* "75·3, +3·4, 88·3, +2·1 and 15·5" *read* "75·1, +3·2, 82·9, +1·9 and 15·7" respectively.
cxxvi	Ditto	"	Poo	Wind direction	25	*For* "S* 53° W" *read* "S 53° W*".
cxxxvi	June 1916	B	Akyab	Temperature	15	*For* "76·5" *read* "75·5".
"	Ditto	"	Narayanganj	Ditto	18	*For* "—0· " *read* "—0·7".
"	Ditto	"	Mymensingh	Pressure	5	*For* "—·07" *read* "—·076".
cxxxviii	Ditto	"	Jessore	Ditto	5	*For* "—·010" *read* "—·070".
"	Ditto	"	Hissar	Temperature	21	*For* "th" *read* "7th".
cxxxix	Ditto	"	Purnea	Rainfall	50, 52, 53 and 55	*For* "12·27, +1·20, 14·31 and —1·21" *read* "12·33, +1·26, 14·37 and —1·15" respectively.
cxli	Ditto	"	Bombay	Ditto	50, 52, 53 and 55	*For* "23·43, +4·95, 23·50 and +4·31" *read* "23·46, +4·98, 23·53 and +4·34" respectively.
"	Ditto	"	Karwar	Wind direction	35	*For* "S 81° W" *read* "S 82° W".
cxlv	Ditto	"	Trivandrum	Rainfall	53 and 55	*For* "20·64 and —1·00" *read* 20·65 and —0·99" respectively.
cxlvi	Ditto	"	Pasni	Pressure	4, 6, 7 and 9	*For* "29·486, 29·446, 29·640 and 29·351" *read* "29·490, 29·450, 29·644 and 29·355" respectively.
cxlviii	Ditto	"	Tehran	Temperature	14	*For* "12·5" *read* "—12·5".
cli	Ditto	C	Hailakandi	Ditto	6, 7, 8, 9 and 10	*For* "75·3, +0·4, 83·7, +1·5 and 16·7" *read* "75·1, +0·2, 83·5, +1·3 and 16·9" respectively.
clv	Ditto	"	Foot note	.....	...	*For* "*Since 1s June 1916" *read* "* Rainfall since 1st June 1916".
clxiii	July 1916	B	United Provinces	Rainfall	18, 19 and 20	*Insert* "12·56, 11·74 and +0·82".
"	Ditto	"	Mysore	Wind	11	*For* "+13" *read* "—13".
clxv	Ditto	"	Toungoo	Wind velocity	37	*For* "—0·4" *read* "—1·4".
clxvi	Ditto	"	Ranchi	Temperature	20	*For* "89· " *read* "89·7",
"	Ditto	"	Foot note	.....	...	*For* "Mean of 30 days" *read* "* Mean of 30 days".
clxvii	Ditto	"	Calcutta	Wind direction	30	*Insert* "15".
"	Ditto	"	Jessore	Ditto	28 and 29	*Insert* "6 and 6" respectively.
"	Ditto	"	Berhampore	Ditto	29	*For* "1" *read* "13".
"	Ditto	"	Purnea	Rainfall	51 and 53	*For* "46·51 and 16·83" *read* "46·57 and 16·89" respectively.

Corrigenda in the India Monthly Weather Reviews for the year 1916—*contd.*

TABLES A, B and C.—*contd.*

Page.	Part.	Table.	Meteorological Province or station.	Heading.	Column No.	Correction.
clxvii	July 1916	B	Pusa	Wind velocity	35	*For* "2·9" *read* "2·5†."
"	Ditto	"	Foot note	...	.....	*Insert* "† Mean of 29 days."
"	Ditto	"	Mainpuri	Wind direction	24	*Insert* "7."
clxviii	Ditto	"	Patiala	Temperature	15, 16, 17, 18 and 19.	*For* "79·2, — 0·3, 86·5, — 0·5 and 14·6" *read* "78·8, — 0·7, 86·3, — 0·7 and 15·0" respectively.
"	Ditto	"	Karwar	Ditto	21	*For* "2nd" *read* "22nd."
clxix	Ditto	"	Bombay	Rainfall	51 and 53	*For* "46·28 and + 1·92" *read* "46·31 and + 1·95" respectively.
clxx	Ditto	"	Ahmadnagar	Pressure	7	*For* "27·72" *read* "27·723."
"	Ditto	"	Bidar	Temperature	13, 14 and 19	*For* "83·7, — 2·1 and 13·3" *read* "83·8, — 2·0 and 13·4" respectively.
"	Ditto	"	Gulbarga	Ditto	11	*For* "7·3" *read* "74·3."
clxxi	Ditto	"	Sutna	Wind velocity and Rainfall.	36 and 54	*For* "·7 and 1·06" *read* "6·7 and 1·66" respectively.
"	Ditto	"	Bidar	Wind velocity	35	*For* "7·9" *read* "7·5*".
"	Ditto	"	Foot note	...	...	*Insert* "* Mean of 29 days."
clxxiii	Ditto	"	Trivandrum	Rainfall	51 and 53	*For* "26·20 and —2·69" *read* "26·21 and —2·59" respectively.
"	Ditto	"	Cocanada	Wind direction	26	*For* "0" *read* "2."
clxxiv	Ditto	"	Quetta	Temperature	22	*For* "5·7" *read* "57·7."
"	Ditto	"	Murree	Ditto	22	*For* "5·1" *read* "52·1."
clxxvii	Ditto	"	Jask	Wind direction	25	*Insert* "0."
cxci	August 1916	"	Bengal	Rainfall	18, 19 and 20	*Insert* "17·08, 14·39 and + 2·69" respectively.
"	Ditto	"	United Provinces	Ditto	18, 19 and 20	*Insert* "14·39, 11·57 and + 2·82" respectively.
"	Ditto	"	Madras	Ditto	18 and 20	*For* "7·35 and + 1·07" *read* "7·12 and + 0·84" respectively.
cxcv	Ditto	"	Purnea	Ditto	51 and 53	*For* "66·66 and + 23·38" *read* "66·72 and + 23·44" respectively.
cxcvii	Ditto	"	Sub-heading	Ditto	47, 48 and 49	*For* "Normal number of rainy days, Departure from normal, and Rainfall of month" *read* "Departure from normal, Rainfall of month, and Normal rainfall of month" respectively.
cxcviii	Ditto	"	Deesa	Pressure	6	*For* "29·62" *read* "29·612."
"	Ditto	"	Bhuj	Ditto	5	*For* "— ·07" *read* "— ·027."
"	Ditto	"	Poona	Ditto	5	*For* "— ·00" *read* "— ·003."
cxcix	Ditto	"	Bombay	Rainfall	51 and 53	*For* "65·79 and + 7·24" *read* "65·82 and + 7·27" respectively.
"	Ditto	"	Amraoti	Hygrometry	42	*For* "·77" *read* "·777".
"	Ditto	"	Khandwa	Wind direction	32	*Insert* "2."
cci	Ditto	"	Raipur	Wind direction and Wind velocity.	34, 36 and 37	*For* "S 76° W, 4·1 and + 1·5" *read* "S 56° W, 6·1 and —0·5" respectively.

Corrigenda in the India Monthly Weather Reviews for the year 1916—*concld.*

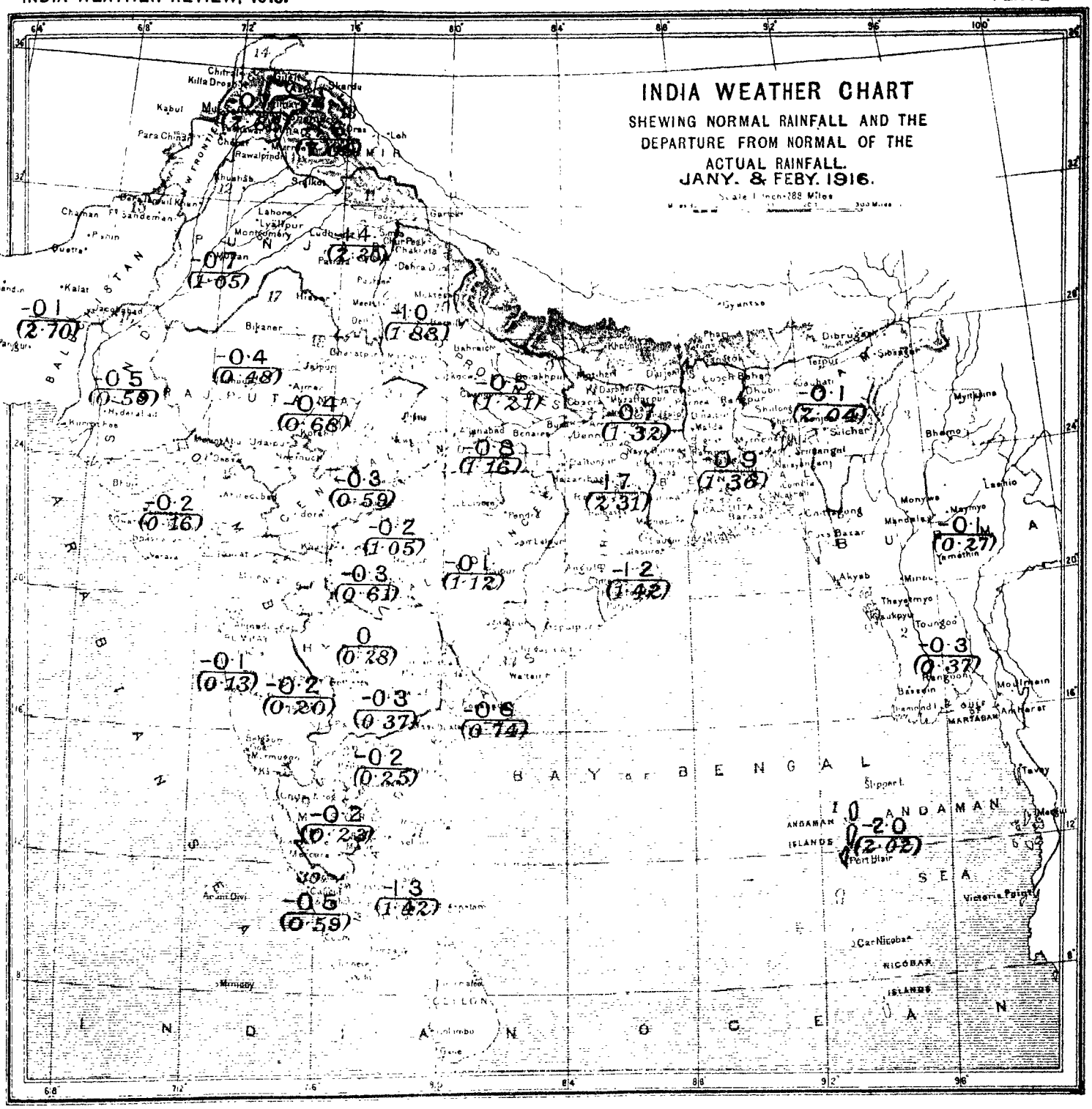
TABLES A, B & C.—*concld.*

Page.	Part.	Table.	Meteorological Province or Station.	Heading.	Column No.	Correction.
cci	August 1916 .	B	Chanda . .	Wind direction and Wind velocity.	34, 36 and 37	*Insert* " S 76° W, 4·1 and + 1·3 " respectively.
"	Ditto .	"	Trivandrum .	Rainfall . .	51 and 53	*For* " 28·65 and —4·24 " *read* " 28·66 and —4·23 " respectively.
cciii	Ditto .	"	Kurnool . .	Wind velocity .	36 and 37	*Omit* figures.
"	Ditto .	"	Nellore . .	Ditto . .	36 and 37	*For* " 5·6 and —1·5 " *read* " 6·9 and —2·8 " respectively.
"	Ditto .	"	Cocanada . .	Ditto . .	36 and 37	*Insert* " 5·6 and + 0·9 " respectively.
ccxiii	Ditto .	C	Pemba . .	Rainfall . .	45	*For* " 11·70 " *read* " —11·70."
ccxlv	October 1916 .	A	Calcutta . .	Vapour tension .	26	*For* " ·89 " *read* " ·889."
ccxlvii	Ditto .	B	Burma . .	Rainfall . .	19 and 20	*For* " 6·34 and + 0·57 " *read* " 6·30 and + 0·61 " respectively.
ccxlix	Ditto .	"	Victoria Point .	Ditto . .	48 and 51	*For* " 12·90 and 126·93 " *read* " 12·80 and 126·83 " respectively.
ccl	Ditto .	"	Foot note . .	...	...	*For* " * Mean of 2 days " *read* " * Mean of 20 days."
ccli	Ditto .	"	Purnea . .	Rainfall . .	51 and 53	*For* " 85·27 and + 26·35 " *read* " 85·23 and + 26·31 " respectively.
ccliii	Ditto .	"	Bombay . .	Ditto . .	51 and 53	*For* " 85·17 and + 13·94 " *read* " 85·20 and + 13·97 " respectively.
cclvii	Ditto .	"	Trivandrum .	Ditto . .	51 and 53	*For* " 50·96 and + 3·75 " *read* " 50·97 and + 3·76 " respectively.
cclix	Ditto .	"	Trincomalee .	Ditto . .	48, 50, 51 and 53	*For* " 2·81, —4·80, 17·47 and —4·88 " *read* " 2·91, —4·70, 17·57 and —4·78 " respectively.
"	Ditto .	"	Hambantota .	Ditto . .	48, 50, 51 and 53	*For* " 1·51, —3·50, 18·38 and + 2·85 " *read* " 1·46, —3·55, 18·33 and + 2·80 " respectively.
cclxxxviii	November 1916 .	"	Foot note .	...	...	*For* " (*i*) Observation of 25 days " *read* " (*i*) Mean of 25 days."
ccxciii	Ditto .	C	Hazaribagh .	Station . .	47	*For* " Haaribagh " *read* " Hazaribagh."
cccxvi	December 1916 .	B	Foot note . .	...	...	*For* " W. = Mean of 1 days " *read* " W = Mean of 11 days."

SGP 121-4 DGO-11-11-19-335.

The country is divided into 33 areas as shewn in the list below. The numbers in that list correspond with the red numbers on the chart, and serve to identify the areas.

1. Bay Islands
2. Lower Burma
3. Upper Burma
4. Assam
5. Bengal
6. Orissa
7. Chota Nagpur
8. Bihar
9. United Provinces, East
10. United Provinces, West
11. Punjab, East and North
12. Do., Southwest
13. Kashmir
14. Northwest Frontier Province
15. Baluchistan
16. Sind
17. Rajputana, West
18. Rajputana, East
19. Gujarat
20. Central India, West
21. Do., East
22. Berar
23. Central Provinces, West
24. Do., East
25. Konkan
26. Bombay, Deccan
27. Hyderabad, North
28. Hyderabad, South
29. Mysore
30. Malabar
31. Madras, Southeast
32. Madras, Deccan
33. Madras Coast, North



The country is divided into 33 areas as shown in the list below. The numbers in that list correspond with the red numbers on the chart, and serve to identify the areas. The numbers in brackets on the chart give the average over the divisions of the normal rainfall; the numbers above these give the departures from normal of the average actual rainfall over the divisions.

1. Bay Islands
2. Lower Burma
3. Upper Burma
4. Assam
5. Bengal
6. Orissa
7. Chota Nagpur
8. Bihar
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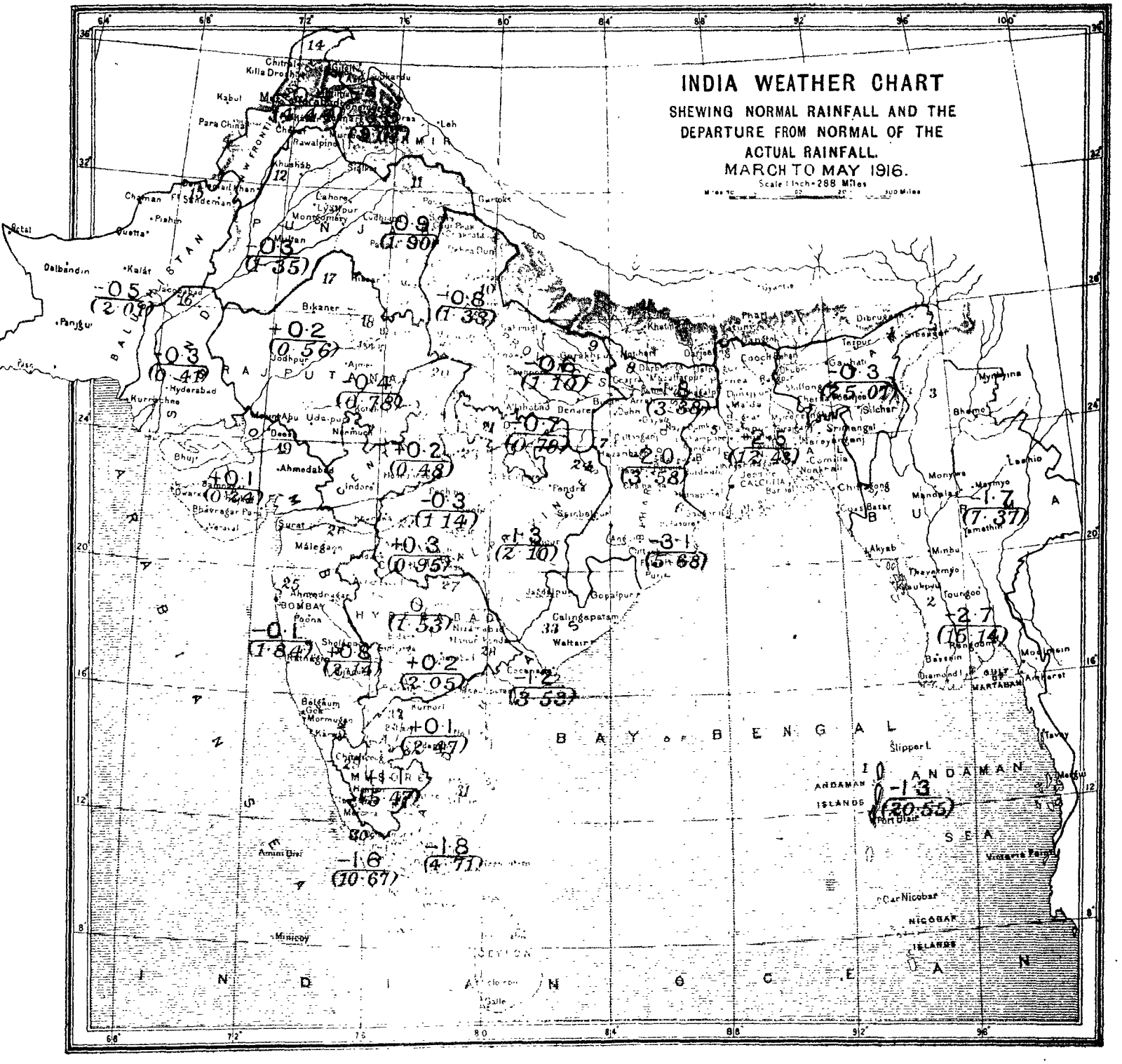
10. United Provinces, West
11. Punjab, East and North
12. Do. Southwest
13. Kashmir
14. Northwest Frontier Province
15. Baluchistan
16. Sind
17. Rajputana, West
18. Rajputana, East
19. Gujarat
20. Central India, West
21. Do., East
22. Berar
23. Central Provinces, West
24. Do., East
25. Konkan
26. Bombay, Deccan
27. Hyderabad, North
28. Hyderabad, South
29. Mysore
30. Malabar
31. Madras, Southeast
32. Madras, Deccan
33. Madras Coast, North



The country is divided into 33 areas as shewn in the list below. The numbers in that list correspond with the red numbers on the chart, and serve to identify the areas. The numbers in brackets on the chart give the average over the divisions of the normal rainfall; the numbers above these give the departures from normal of the average actual rainfall over the divisions.

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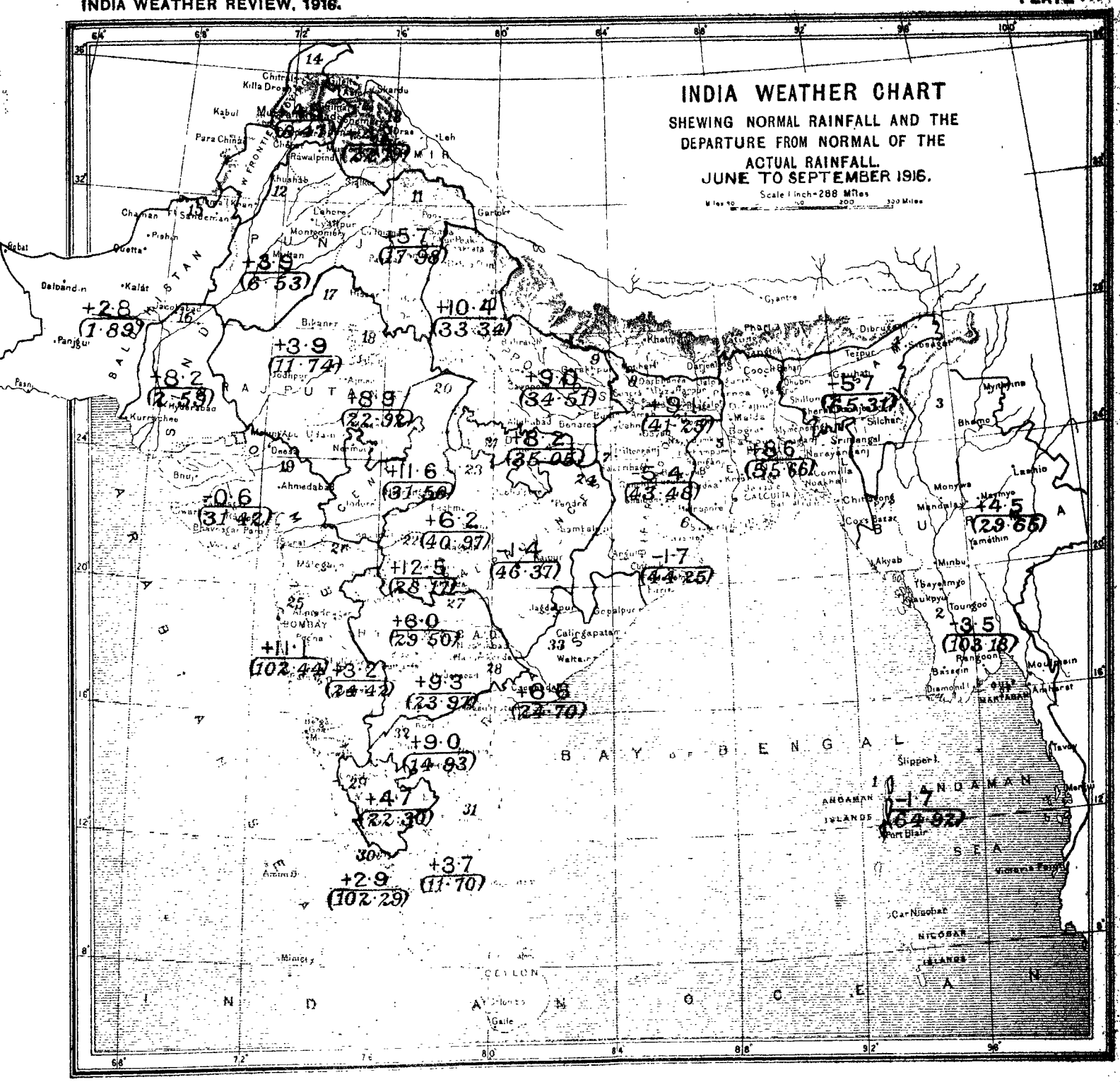
15. Baluchistan
16. Sind
17. Rajputana, West
18. Rajputana, East
19. Gujarat
20. Central India, West
21. Do., East
22. Berar
23. Central Provinces, West
24. Do., East
25. Konkan
26. Bombay, Deccan
27. Hyderabad, North
28. Hyderabad, South
29. Mysore
30. Malabar
31. Madras, Southeast
32. Madras, Deccan
33. Madras Coast, North



The country is divided into 33 areas as shown in the list below. The numbers in that list correspond with the red numbers on the chart, and serve to identify the areas. The numbers in brackets on the chart give the average over the divisions of the normal rainfall; the numbers above these give the departures from normal of the average actual rainfall over the divisions.

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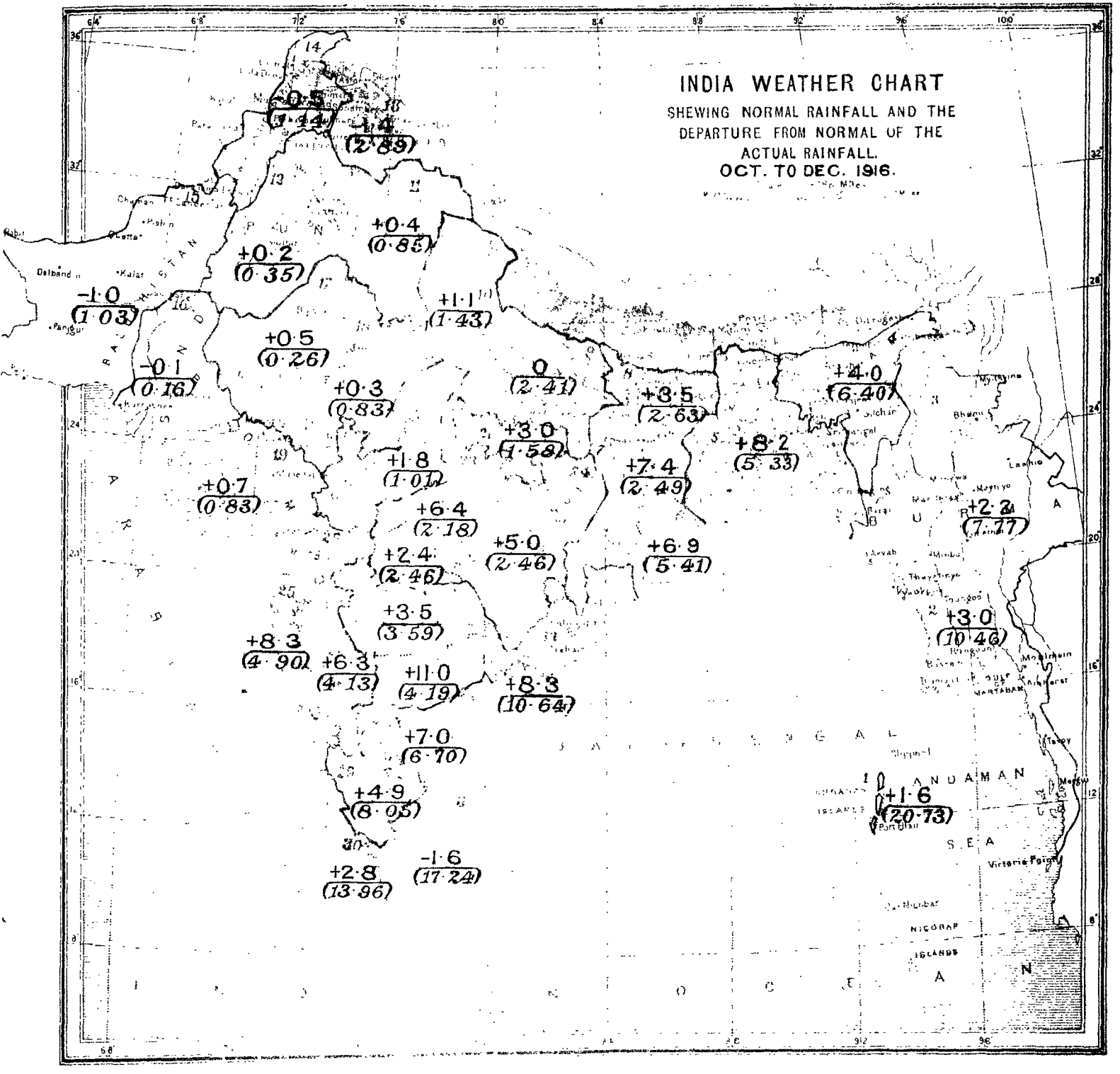
27. Hyderabad, North
28. Hyderabad, South
29. Mysore
30. Malabar
31. Madras, Southeast
32. Madras, Deccan
33. Madras Coast, North



The coloured [illegible] below. The numbers in that list correspond with the red numbers on the chart, and serve to identify divisions. The [illegible] the chart give the average over the divisions of the normal rainfall; the numbers above these give the departure from normal [illegible] actual rainfall over the divisions.

1. Bay Islands
2. Lower Burma
3. Upper Burma
4. Assam
5. Bengal
6. Orissa
7. Chota Nagpur
8. Bihar
9. United Provinces, East
10. [illegible] West
11. [illegible] North
12. [illegible]
13. [illegible]
14. North-West Frontier Province
15. [illegible]
16. Sind
17. [illegible] West
18. [illegible]
19. Gujarat
20. Central India West
21. [illegible] East
22. Berar
23. Central Provinces, West
24. Do. East
25. Konkan
26. Bombay, Deccan
27. Hyderabad, North
28. Hyderabad, South
29. Mysore
30. Malabar
31. Madras, Southeast
32. Madras, Deccan
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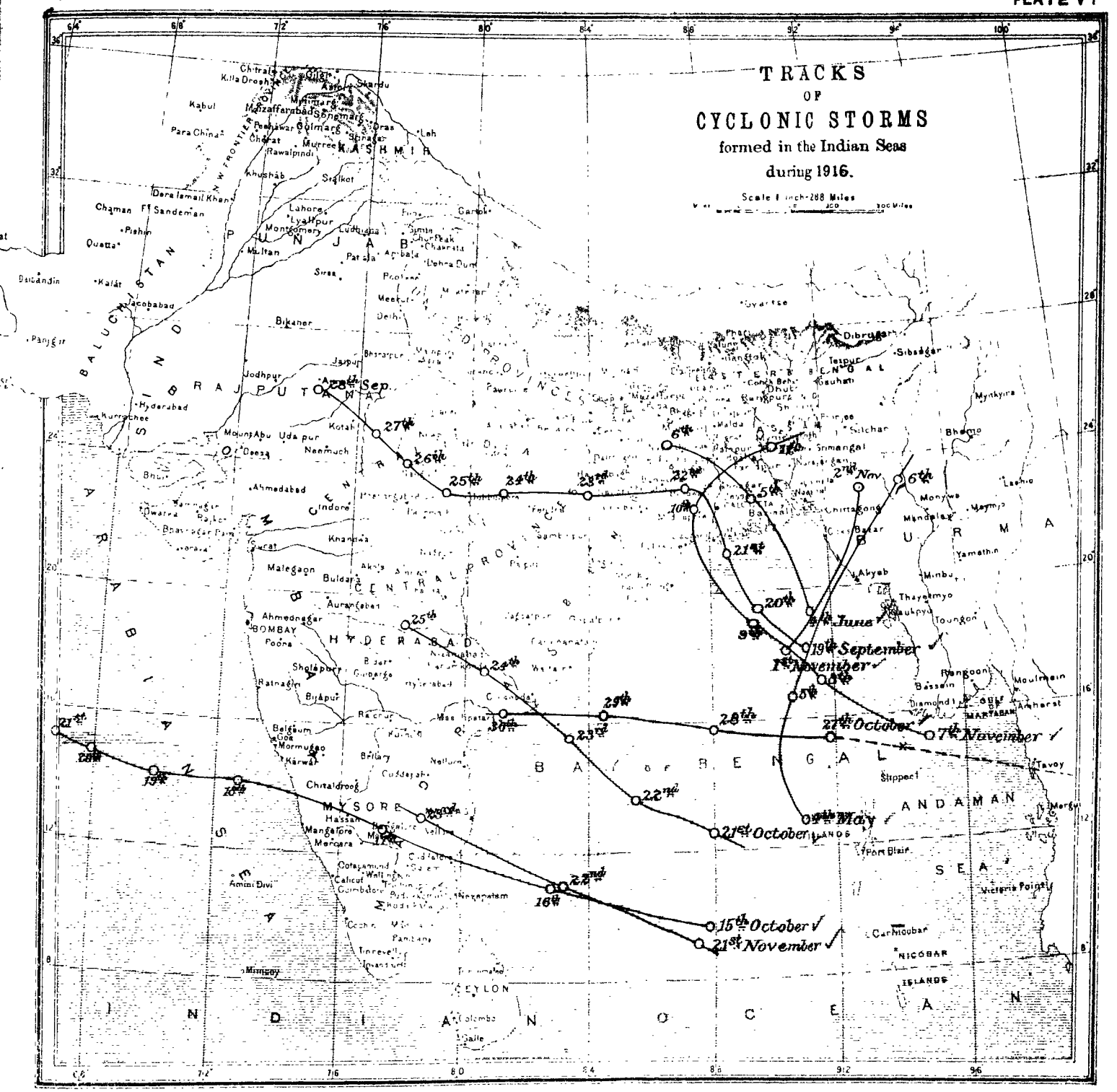

Tracks of storms in the Arabian Sea which lie outside the boundaries of the map are defined by the following positions :-

Storm of May 25th to 28th

	Lat. N.	Long. E.
25th May	12°	62°
26th ,,	13°	61°
27th ,,	16½°	57°

Storm of October 15th to 24th

	Lat. N.	Long. E.
22nd October	16½°	63½°
23rd ,,	17°	61°
24th ,,	17½°	59½°

(This list of publications is intended for permanent reference, and should be bound up with the Annual Summary.)

Publications of the India Meteorological Department.

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

PUBLICATIONS OF THE INDIA METEOROLOGICAL DEPARTMENT.

The following is a list of the more important publications of the India Meteorological Department :—

The Indian Meteorologist's *Vade Mecum*, Part I, 2nd Edition. (1883) . . . . . Price Rs. 3*	Henry F. Blanford.
The Indian Meteorologist's *Vade Mecum*, Part II. (1877) Price Rs. 5*	Ditto.
Instructions to Observers of the India Meteorological Department, 2nd Edition. (1902) . . . . Price Rs. 3	Sir John Eliot.
Tables for the reduction of Meteorological Observations in India. 2nd Edition. (1889) . . . . . Price Rs. 2*	Henry F. Blanford.
Handbook of Cyclonic storms in the Bay of Bengal for the use of sailors, 2nd Edition, Vol. I.—Text. (1900) . Price Rs. 4	Sir John Eliot.
Handbook of Cyclonic storms in the Bay of Bengal for the use of sailors, 2nd Edition, Vol. II.—Plates. (1901) . Price Rs. 1-8	Ditto.
Cyclone Memoirs, Part I—Bay of Bengal Cyclone of May 20th to 28th, 1887. (1888) . . . . . Price Re. 1*	Ditto.
Cyclone Memoirs, Part II—Bay of Bengal Cyclone of August 21st to 28th, 1888. (1890) . . . . . Price Rs. 3	Ditto.
Cyclone Memoirs, Part III—Bay of Bengal Cyclones of September 13th to 20th, and October 27th to 31st, 1888, and Arabian Sea Cyclone of November 6th to 9th, 1888. (1890) Price Rs. 5	Ditto.
Cyclone Memoirs, Part IV—An enquiry into the nature and course of storms in the Arabian Sea and a catalogue and brief history of all recorded storms in the Arabian Sea from 1848—1889. (1891) . . . . . Price Rs. 3.	W. L. Dallas.
Cyclone Memoirs, Part V—Account of three Cyclones in the Bay of Bengal and Arabian Sea during November, 1891. (1893) . . . . . Price Rs. 3*	Sir John Eliot.
Report of the Midnapore and Burdwan Cyclone of the 15th and 16th of October, 1874. (1875) . . . Price Rs. 3*	W. G. Wilson.
Report of the Vizagapatam and Backergunge Cyclones of October, 1876. (1877) . . . . . Price Rs. 3*	Sir John Eliot.
Report on the Madras Cyclone of May 1877. (1879) Price Rs. 3*	Ditto.
Monthly weather charts of the Bay of Bengal and adjacent sea north of the equator, showing mean pressure, winds and currents. (1886) . . . . . Price Rs. 5*	Henry F. Blanford.
Monthly weather charts of the Arabian Sea and the adjacent portion of the North Indian Ocean, showing mean pressure, winds and currents. (1888) . . . Price Rs. 5	Sir John Eliot.
Charts of the Bay of Bengal and adjacent sea north of the equator, showing the specific gravity, temperature and currents of the sea surface. (1887) . . Price Rs. 1-8	W. L. Dallas.
Climatological Atlas of India (1906). Price Rs. 27 or 36 shillings	Sir John Eliot.
Meteorological Atlas of the Indian seas and the north Indian Ocean. (1908) . Price Rs. 13 or 17 shillings 6 pence	W. L. Dallas.
Daily weather reports and charts of the Indian monsoon area for the years 1893 to 1899 . . Price, each month, Re. 1*	Departmental.
Normal weather or pilot charts of the Indian monsoon area for 8 A.M. for each month, November, 1900 to August, 1908 † Price, each month, Annas 4	Ditto.
Reports on the Meteorology of India for the years 1875—1890 (16 volumes)‡ . . . . . Price each Rs. 10	Ditto.
Indian Meteorological Memoirs, Vol. I, containing :—	
Part I. On the winds of Calcutta—An analysis of 10 years' hourly observations of the wind vane and four years' anemograms.	Henry F. Blanford.
The meteorology and climate of Yarkhand and Kashgar, being chiefly a discussion of registers kept by Dr. J. Scully in 1874-75.	Henry F. Blanford.
The diurnal variation of the barometer at Simla. Price Rs. 3*	Henry F. Blanford.
Part II. Storms in Bengal during the year 1876, accompanied with increased atmospheric pressure and the apparent reversal of the normal diurnal oscillation of the barometer.	Sir John Eliot.
On the rainfall of Benares considered in relation to the prevailing winds.	S. A. Hill.
On the diurnal variation of the barometer at Indian stations, Part I ; Calcutta and Hazaribagh . . . Price Rs. 3*	Henry F. Blanford.
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The diurnal variation of the barometer at Indian stations, Part II, Goalpara, Patna and Leh . . Price Rs. 3*	Henry F. Blanford.
Part VI. The Meteorology of the North-West Himalaya. Price Re. 1	S. A. Hill.
Indian Meteorological Memoirs, Vol. II, containing :—	
Part I. Account of the south-west monsoon storm of the 18th to the 24th of September, 1878, in the north of the Bay of Bengal.	Sir John Eliot.
List of cyclones on the West Coast of India and in the Arabian Sea up to the end of year 1881 . . . Price Rs. 2	Fred. Chambers.
Part II. Note on the foregoing list of cyclones and on the Gujarat land cyclone of July 11th to 13th, 1881 . .	Henry F. Blanford.
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Part III. Account of the south-west monsoon storms of the 8th to the 19th October, 1882, in the Bay of Bengal . Price Rs. 2	Sir John Eliot.
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Part V. Observations of temperature and humidity at a height of 40 feet above the ground at Alipore Observatory, Calcutta. Price Re. 1	S. A. Hill.
Indian Meteorological Memoirs, Vol. III., containing a full discussion of the rainfall of India and cognate subjects, complete in 4 parts. Price, each part, Rs. 2*	Henry F. Blanford.
Indian Meteorological Memoirs, Vol. IV, containing :—	
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On the diurnal variation of the rainfall at Calcutta . .	Henry F. Blanford.
The meteorological features of the southern part of the Bay of Bengal . . . . . Price Rs. 3*	W. L. Dallas.
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Part V. The cyclonic storms of November and December, 1886, in the Bay of Bengal.	Ditto.
The cyclone of the 25th May to the 2nd June, 1881, in the Arabian Sea . . . . . Price Rs. 3*	Fred. Chambers.
Part VI. On temperature and humidity observations made at Allahabad at various heights above the ground. Price Rs. 1-8*	S. A. Hill.
Part VII. The Arabian Sea cyclone of the 4th to the 13th June, 1887	Fred. Chambers.
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* Copies of publications to the price of which an asterisk is appended are out of print.
† Copies for May and July 1902 are out of print.
‡ Copies for the years 1876, 1878 to 1881, 1884, 1887 and 1890 are out of print.

Continued on page 2 of this list.

Indian Meteorological Memoirs, Vol. V, containing :—	
The discussion of the hourly observations made at Sibsagar, Goalpara, Patna, Hazaribagh, Dhubri, Roorkee, Allahabad, Lucknow, Agra, Leh, Deesa, Kurrachee and Lahore and at Simla. Complete in 10 parts . . Price, each part, Re. 1*	Parts I—VII, Henry F. Blanford. Parts VIII—X, Sir John Eliot.
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Part II. Hourly comparative meteorological observations taken at Trivandrum, Vannatheertham (eastern station), Kalliad (western station) and Agustia for the periods 23rd March to 20th April 1857, 20th January to 19th February 1859, 9th September to 8th October 1864 and 2nd to 28th January 1865, also at Cape Comorin from 23rd September to 13th November 1868 and at Charatha and Kamala from 20th January to 19th February 1859 . . Price Re. 1	Ditto.
Indian Meteorological Memoirs, Vol. IX, containing :—	
The diurnal variation of atmospheric conditions at Chittagong, Cuttack, Jubbulpore, Pachmarhi, Nagpur, Poona, Belgaum, Bellary, Trichinopoly, Rangoon, Aden, Alipore and Jaipur. Complete in 9 parts . . . Price, each part, Rs. 1-8*	Part I, Henry F. Blanford. Parts II—VII, Sir John Eliot. Part VIII, Douglas Archibald. Part IX, Sir John Eliot.
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Daily normals of maximum temperature, minimum temperature, 8 A. M. air pressure reduced to 32° F. and rainfall and five-day means of normal cloud amount, relative humidity and aqueous vapour pressure at 8 A. M. . . Price Rs. 5*	Sir John Eliot.
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Part II. A preliminary investigation of the more important features of the Meteorology of Southern Asia, the Indian Ocean and neighbouring countries during the period 1892—1902, with Appendices . . . . . Price Rs. 3	Ditto.
Indian Meteorological Memoirs, Vol. XVII, containing :—	
Normal monthly and annual means of temperature, pressure, wind, humidity, cloud, rainfall and number of rainy days of stations in India, etc. . . . . Price Rs. 3	Ditto.
Memoirs of the Indian Meteorological Department, Vol. XVIII, containing :—	
Part I. A discussion of the anemographic observations recorded at Rangoon from June 1878 to October 1901 and at Chittagong from June 1879 to December 1896. Price Rs. 2	Ditto.
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* Copies of publications to the price of which an asterisk is appended are out of print.

Continued on page d of this list.

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GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW

ANNUAL SUMMARY, 1916

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