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GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW.

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JANUARY, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of January, 1912, is based on observations taken daily at 8 hrs. at 235 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 16 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review.

The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

In the remaining monthly reviews of the present year the brief statements of the methods of recording and tabulating the data for each of the elements of observation, given in the present number at the commencement of each section, will not be repeated.

Summary of the chief features of the weather in India during the month.

2. The dry weather conditions which had held in northern India since the 22nd of November gave way on the 4th January, on which day a disturbance from Persia crossed into north-west India, and, in conjunction with a locally-formed depression in Sind, caused the first burst of true winter rainfall. This disturbance was followed by five others in very rapid succession, and of these the most important from the standpoint of precipitation were those which entered India on the 7th and 21st. Weather was throughout unusually dry in the Peninsula, but was conspicuously wet in Burma and the Andamans during the first fortnight.

The total precipitation of the month was below the normal in the Peninsula, north-east and central India, and the east of the United Provinces; the defect amounted to about half an inch in Madras South-east, Bihar and Chota Nagpur, and to three-quarters of an inch in Central India East. On the other hand the month's fall was unusually heavy for the time of year in the Andamans and Lower Burma. There was a decided excess also in Kashmir, Baluchistan, the North-West Frontier Province, the Punjab and the west of the United Provinces and of Rajputana.

Barometric pressure was high by ·03″ on the average of the whole of the plains of India, and over the greater part of northern and central India the gradient between the hills and the plains was of about the normal value.

Humidity, both absolute and relative, was as a rule in excess over Burma and northern and central India, and below the average in the Peninsula.

There was less cloud than usual in Mysore and the maritime tract from Masulipatam to Cochin; in almost all other places the sky was very cloudy, and especially so in the region defined by Toungoo, Thayetmyo, Moulmein and Rangoon, where the excess was equal to two-fifths of the total sky expanse.

No well-marked hot or cool waves were experienced, and except in Gujarat and the neighbouring districts, where the weather was slightly warmer than usual, the monthly values of mean temperatures were in general not very different from those normal to the period.

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Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—Solar observations were made on all the days during the month except the 15th when the weather was unfavourable.

Sunspots.—There was not a single spot seen during the whole of January. This is the first time since the last sunspot minimum in the year 1901 that a spotless month has occurred.

Prominences.—On the other hand there was quite a marked increase in the number of large prominences seen during the month. About 84 of these were observed as against 40 in December and 49 in November. One metallic and 4 eruptive prominences were also observed.

Magnetic disturbances.—The magnetic disturbances recorded during the month were all of a very feeble character. There was a sudden movement of the needle on the 17th, and on this date a small facula appeared near the western limb which appeared like the initiation of a spot disturbance. This disappeared round the western limb on the 20th without having developed into a visible spot.

Seismological records.

TABLE 1.

No.	Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End.	Maximum amplitude.	Duration.	REMARKS.
	1912.	H. M.	H. M.	H. M.	H. M.	mm.	H. M.	
1	Jan. 4	4 07·4	4 12·3	4 15·1	4 30·0	0·8=0·3	0 23	
2	" 4	16 09·9	16 40·7	16 44·0	18 29·5	1·1=0·4	2 19·6	
3	" 20	4 22·3	...	...	4 48·0?	...	0 26	Widening of line; instrument examined at 4-48.
4	" 26	14 52·4	14 57·7	14 59·2	15 25·9	0·7=0·3	0 33·5	
5	" 31	13 33·9	...	...	13 43·0	...	0 11·1	Widening of line.
6	" 31	20 44·0	21 8·5 / 14·4	21 21·1	21 47·9	1·0=0·4	1 4·9	

J. EVERSHED,
Director,
Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of January, 1912, the traces showed 13 calm days, and 18 days of small disturbance.

The days of the month selected as "quiet" for the purposes of the magnetic survey of India are the 4th, 7th, 16th, 21st and 27th.

The following table represents the magnetic character of each day during the month :—

TABLE 2.

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

C = calm ; S = small ; M = moderate ; G = great ; V. G. = very great.

The mean observed absolute values of the several magnetical elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follow :—

Easterly declination	0° 52′ 52″
Horizontal force	0·36873 C.G.S. unit.
* Vertical force	0·16314 " "
Inclination	23° 52′·0
Inclination (observed)	23° 51′·9
Horizontal force range	0·00025 C.G.S. unit.
Horizontal force summed range	0·00146 " "
Declination range	2′·2
Declination summed range	8′·6

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

* The vertical force which up to now has been derived from the results of dip circle, will from this year and hereafter be derived from the inclination results of the inductor. To maintain the continuity between the past

record and the present, a correction of about 25γ (equal to 2′ of dip) is indicated, the inductor results giving hig her values of γ.

Seismic disturbances.

TABLE 3.

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	H. M.	H. M.	H. M.	mm.	H. M.
Jan. 4	16 10·9	16 40·7	17 13·2	0·9	1 2·3
„ 26	14 50·7	14 59·2	15 8·8	0·4	0 18·1
„ 31	Mixed up in tremors.	21 15·5	Mixed up in tremors.	0·5	...

All times given above denote G. M. T.
Sensibility to tilt : 1 mm.=0″·40.

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

CALCUTTA OBSERVATORY.

5. *List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maximum. G. M. T.	End. G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	H. M.	H. M.	H. M.	H. M.	H. M.	mm.	
Jan. 4	15 57·8	16 30·9	16 31·9	17 54·8	1 57·0	1·25	
„ 14	10 50·2	...	...	10 59·9	0 9·7	...	Thickening of line.
„ 15	20 31·2	...	...	20 39·8	0 8·6	...	Do.
„ 26	14 47·3	...	14 50·2	15 11·6	0 24·4	5·00**	**Measured from base line.
„ 31	20 34·8	20 57·7	21 7·8	21 51·1	1 16·3	2·00	

Sensibility 1mm.=0·38″ of tilt.

E. P. HARRISON,
Offg. Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. *List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 5.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of maximum amplitude.	End approximately.	Duration.	Maximum displacement of style.	REMARKS.
		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	mm.	
1st	A	4 48·4	?	?	4 48·5	4 48·9	0 0·5	0·5	Local.
4th	A	15 58·1	16 7·6	16 29·8	16 30·1	17 6	1 8	0·7	
„	B	15 58·0	16 7·6	16 23·6	16 30·2	?	?	1·3	End obscured by other disturbances.
26th	A	14 43·6	14 47·0	14 49·8	14 51·1	15 27	0 43	1·9	
„	B	?	14 47·2	14 49·7	14 49·9	15 6	?	2·2	
31st	A	20 33·8	?	20 55·4	20 58·8	22 35	2 1	0·7	Phases in record of instrument B hidden by disturbances due to draughts.

All times are given in G. M. T.
A=E—W component.
B=N—S component.
Magnification of each instrument was 15.

The following table contains a list of earthquakes that have been reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity Rossi-Forel scale.	No. of shocks.	REMARKS.
		H. M.	Sec.			
Jodhpur . .	10th	4 0	10	5	1	
Turbat-i-Haidari .	13th	19 34	...	3	1	Time approximate only.
Mymensingh . .	14th	17 30	1	5	...	Do.
Shillong . .	14th	18 30	2	7	1	
„ . . .	15th	23 55	3	7	1	
Chitral . . .	21st	8 45	5	5	1	
Drosh . . .	24th	9 35	2	5	1	
Moulmein . .	25th	5 0	1	?	1	Slight.
Chitral . . .	26th	22 50	10	8	1	
„ . . .	26th	23 25	3	5	1	
Drosh . . .	26th	23 40	25	5	4	

Solar Observations.—No observations were made owing to cloudy weather.

W. A. HARWOOD,
Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

No information has been received.

Weather in the Indian monsoon region.

8. In the subequatorial region pressure was decidedly high, and the weather very wet. The air movement was normal in character at Zanzibar, but was weaker than usual at Seychelles.

TABLE 7.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.		+·036	+·042
Actual mean wind direction .		N 22° E	N 47° W
Normal mean wind direction .		N 28° E	N 39° W
Actual mean wind velocity (miles per diem).		192	119
Normal mean wind velocity (miles per diem).		192	147
Rainfall departure from normal .		+0·99	+8·66

Depressions and cyclonic storms.

9. During the first twenty-three days six disturbances appeared in quick succession in the Persian region, but four of them followed an abnormal course and affected only the extreme northwest of India. The remaining two passed into northwest India, one on the 8th and the other on the 21st, and gave rise to moderately heavy precipitation as far east as the United Provinces.

In connection with the abnormal course followed by the disturbances, it is noteworthy that on most days the winter anticyclone, which usually lies over Mongolia, was situated in Siberia.

Pressure.

10. In most of the observing stations in India mercurial barometers on Fortin's principle of fiducial point adjustment, with tubes of 0·4″ bore throughout, are in use. These are on the whole preferable to the pattern of barometer on the Kew principle, still in use at some Indian stations, which has its scale divided to compensate for the change of level of the mercury in the cistern as the pressure alters.

The following list contains the names of all stations equipped with instruments of the latter class:—

Aden.	Cuddapah.	Negapatam.
Akyab.	Delhi.	Noakhali.
Arrah.	Dinajpur.	Nowgong.
Barisal.	Faridpur.	Rangoon.
Bhamo.	Gorakhpur.	Rangpur.
Bogra.	Jalpaiguri.	Ratnagiri.
Bushire.	Midnapur.	Tavoy.
Chapra.	Minbu.	Toungoo.
Cochin.	Monywa.	Yamethin.
Comilla.	Mymensingh.	Zanzibar.

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

Colombo.	Kurnool.	Trincomalee.
Goa.	Patiala.	Trivandrum.
Katmandu.	Pusa.	

At Calcutta and Bombay the standards are Newman instruments on the Fortin principle, with adjustable scales and fiducial points, and tubes of large bore. Some portable Wild-Fuess standards for purposes of comparison during inspections are in use; the principle of these instruments allows of the determination at any time of changes that occur in their corrections caused by the access during transport of small quantities of air to the vacuum spaces above the mercury.

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

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

Those heights above mean sea-level of the barometers of all stations given in Table B or Table A which have been obtained accurately by actual measurement are given in Roman figures. In the great majority of cases they have been referred to datum levels determined by the Great Trigonometrical Survey of India; of the remaining stations those heights which have been determined barometrically are printed in italics, and those which are only approximate are indicated by notes of interrogation.

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

In Table B (2), columns 4 to 11, under the general heading "Pressure, 8 hrs., in inches," are given for each station, the 8 hrs. barometric data of the month, including—

(1) The mean 8 hrs. pressure reduced to 32°F., and its departure from the normal mean pressure (reduced to 32°F.) of the month.

(2) The mean 8 hrs. pressure corrected to sea-level and to constant gravity or to constant gravity only in cases of stations the elevations of which are above 3,200 feet.

(3) The highest and lowest pressures recorded during the month with their respective dates of occurrence.

(4) The total range of 8 hrs. pressure during the month.

In Table A, columns 4 to 9, under the general heading "Pressure," are given for all stations recording observations at 10 hrs. and 16 hrs.—

(1) The monthly means of the two hours of observation, at 10 hrs. and 16 hrs. reduced to 32° F.

(2) The mean daily range.

(3) The mean of daily mean pressures reduced to 32°F., and its departure from the normal.

(4) The mean of daily mean pressures reduced to 32°F., and corrected to constant gravity and to sea-level, or to constant gravity only in cases of stations the elevations of which are above 3,200 feet.

The means of daily pressures have been obtained by taking the means of the 10 hrs. and 16 hrs. observations and applying corrections for each month, derived from the observations of the same or neighbouring stations, to give true daily means.

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

The greater part of the normal 8 hrs. daily and monthly means of pressure utilized in the pressure section of the review have been deduced from the barometric observations of the whole of the twenty-two years' period 1878-99, and in all except 22 cases the periods employed equalled or exceeded ten years.

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

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

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

Atmospheric pressure was, on the mean of the month, above the normal at all the observing stations with the exception of Leh and Srinagar. In Kashmir and the Nilgiris the excess was appreciably less than in the plains below, but in Baluchistan, the Himalayas, the Aravalis and the Satpuras, the pressure ruled quite as much above the normal value as at the low level stations.

As temperature was nearly normal throughout the Indian region, it is evident that the high density of the air was not a mere temperature effect.

TABLE 8.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
	"
Burma	+·022
Eastern Bengal and Assam	+·021
Bengal	+·029
United Provinces	+·028
Punjab	+·039
North-West Frontier Province	+·022
Sind	+·022
Rajputana	+·020
Bombay	+·028
Central India	+·031
Central Provinces	+·032
Hyderabad	+·041
Mysore	+·041
Madras	+·040

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B—A.
	"		"	"
Quetta	+·032	Jacobabad	+·026	—·006
Leh	—·003	Lahore	+·029	+·038
Murree	+·029	Peshawar	+·024	—·005
Simla	+·046	Ludhiana	+·050	+·004
Chakrata	+·055	Roorkee	+·053	—·002
Darjiling	+·013	Dhubri	+·021	+·008
Mount Abu	+·037	Deesa	+·016	—·021
Pachmarhi	+·042	Khandwa	+·038	—·004
Kodaikanal	+·019	Madura	+·055	+·036

Temperature.

11. The mean temperature data are given in Tables A and B under the heading "Temperature of Air." In Table B they are based upon observations of the dry bulb thermometers recorded at 8 hrs., and of the maximum and minimum thermometers. In the preparation of the normal means of maximum and minimum temperature the same periods have been employed as for the normals of pressure, regarding which information has been given in the pressure section, pages 4, 5 of this review. Departures of the mean maximum and minimum temperatures from the

corresponding normal means for the month are given in Table B. The monthly mean of the mean between maximum and minimum, as given in this table, differs from the true mean of the day by a small amount which varies from month to month.

It should be noted that for the purposes af Table B the mean temperature of the day really denotes the mean temperature of the 24 hours preceding 8 hrs. of the day in question, and that therefore the month for which the means are given in this table terminates at 8 hrs. of the last day of the month. In the case of Table A, however, the day or 24 hours period terminates at midnight (and not at 8 hrs. as in Table B) and the monthly means apply therefore to monthly periods ending at midnight of the last day of the month in question.

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

The departures from normal of the mean daily mean temperature of the month given in Table A have been obtained by a comparison of the actual means with normal means calculated in the same manner. The normal means derived from all the available trustworthy temperature data for each station are given in the "Indian Meteorological Memoirs," Volume XVII, pages 16 to 20.

The methods of exposing thermometers will be found fully described in the Hand-book of Instructions to observers in India, or briefly in the Annual Report on the Meteorology of India for the year 1887, page 37. All thermometers in use have been verified by comparison with Kew standard thermometers at Calcutta and are re-standardised from time to time: all thermometer readings are corrected to their true values, and hence are strictly comparable.

The mean distribution of temperature in India in each month is exhibited by the help of three charts, which show the departures of the mean maximum, mean minimum and mean daily temperature from their normal values for the month. These charts are Nos. 1 and 2 of Plates III and No. 1 of Plate IV. In them equal departures of temperature are indicated by lines, the lines being drawn for differences of 2 degrees of departure. A continuous line indicates that the temperature was in excess by the amount shown by the number given near the line, and a broken line that it was in defect by the amount indicated by the number similarly placed. The line of no departure, separating areas of excessive from areas of deficient temperature, consists of a continuous and of a broken line placed parallel and near to each other, the broken line being on the side of deficient temperature, and the continuous line on that of excessive temperature. The departures of the temperature of the month from the normal at the hill-stations are given in figures with a positive or negative sign to indicate excess or defect; they are not taken into account when the lines are drawn.

Tables of normal mean maximum, mean minimum and mean of daily mean temperatures for each month and for the whole year are given in pages 1 to 10 and pages 16 to 20 of the "Indian Meteorological Memoirs," Volume XVII, and are based on the data for the twenty-two years, 1878 to 1899.

Maximum temperature was between 3° and 5° above the average in Gujarat, about 3° in defect in the east of Burma and the southern parts of the North-West Frontier Province and of the Punjab, and nearly normal elsewhere. Minimum or night temperature agreed closely with the normal in the Peninsula and north-east and central India, but was from 2½° to 5° higher than usual in the plains of north west India and in Tenasserim and Lower Burma. The monthly values of mean temperature coincided with the average within 2° in all the larger provinces, although in a small area comprising Gujarat and the southern half of Rajputana there occurred an excess of about 3°.

TABLE 10.

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	83·2	74·5	78·9	8·7	16·1	—2·6	—1·4	—1·2
2. Lower Burma	84·4	67·0	75·7	17·4	28·4	—1·9	+2·7	—4·6
3. Upper Burma	82·7	55·4	69·0	27·3	39·7	0	+2·3	—2·3
4. Assam	73·8	51·7	62·7	22·1	32·8	+0·2	+0·6	—0·4
5. Eastern Bengal	77·1	53·9	65·5	23·2	32·5	+1·1	+0·9	+0·2
6. Bengal	78·8	55·6	67·2	23·2	37·1	+0·6	+1·0	—0·4
7. Orissa	81·6	58·8	70·2	22·9	38·7	—0·2	+1·2	—1·4
8. Chota Nagpur	76·6	51·4	64·0	25·2	40·8	—0·3	+0·7	—1·0

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
9. Bihar	73·6	50·7	62·1	22·9	35·0	—0·4	0	—0·4
10. United Provinces, East	72·9	49·1	61·0	23·8	40·6	—0·7	+1·4	—2·1
11. Do. do., West	71·3	49·6	60·4	21·7	41·2	—1·5	+2·9	—4·4
12. Punjab, East and North	66·2	46·3	56·3	19·9	36·0	—1·6	+3·1	—4·7
13. Do., South-west	66·9	46·0	56·5	20·9	36·2	—1·8	+3·8	—5·6
14. Kashmir	39·8	19·3	29·7	20·5	41·0	+2·1	+1·5	+0·6
15. North-West Frontier Province	63·7	41·9	52·7	21·7	37·1	—2·7	+1·9	—4·6
16. Baluchistan	60·9	41·7	51·3	19·1	45·7	—0·9	+2·0	—2·9
17. Sind	75·5	54·7	65·1	20·7	35·1	+0·1	+4·1	—4·0
18. Rajputana, West	75·3	52·0	63·7	23·3	40·1	+1·3	+2·5	—1·2
19. Do., East	76·5	51·7	64·1	24·8	45·6	+1·2	+3·7	—2·5
20. Gujarat	85·7	58·7	72·2	27·0	41·3	+3·6	+3·5	+0·1
21. Central India, West	80·7	51·5	66·1	29·3	46·7	+2·3	+2·2	+0·1
22. Do., East	74·8	49·3	62·1	25·5	44·0	—0·3	+2·1	—2·4
23. Berar	85·8	58·0	71·9	27·8	39·6	+2·3	+1·5	+0·8
24. Central Provinces, West	81·1	53·1	67·1	28·1	44·6	+0·9	+1·3	—0·4
25. Do., East	81·5	53·7	67·6	27·7	43·5	+0·3	+1·5	—1·2
26. Konkan	85·6	67·3	76·5	18·3	28·5	—0·3	0	—0·3
27. Bombay Deccan	87·5	56·5	72·0	31·0	42·3	+2·1	+1·4	+0·7
28. Hyderabad, North	86·7	58·4	72·6	28·3	40·6	+2·9	+0·2	+2·7
29. Do., South	87·6	60·9	74·2	26·8	39·1	+1·7	+0·1	+1·6
30. Mysore	83·8	57·4	70·6	26·4	35·7	+1·5	—0·4	+1·9
31. Malabar	86·8	69·6	78·2	17·2	25·3	—0·6	—0·6	0
32. Madras, South-east	85·2	66·0	75·6	19·2	27·8	—0·2	—1·8	+1·6
33. Do., Deccan	90·2	60·9	75·6	29·2	43·0	+1·9	—0·3	+2·2
34. Do. Coast, North	82·1	64·4	73·3	17·7	30·6	—0·4	—0·3	—0·1

TABLE II.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	—1·2	+2·6	+0·7
Eastern Bengal and Assam	+0·8	+0·8	+0·8
Bengal	—0·1	+0·7	+0·3
United Provinces	—1·1	+2·0	+0·5
Punjab	—1·7	+3·3	+0·8
North-West Frontier Province	—2·7	+1·9	—0·3
Sind	+0·1	+4·1	+2·1

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Rajputana	+1·3	+3·2	+2·2
Bombay	+2·1	+1·9	+2·0
Central India	+1·0	+2·1	+1·5
Central Provinces	+1·1	+1·3	+1·2
Hyderabad	+1·9	+0·1	+1·0
Mysore	+1·5	—0·4	+0·5
Madras	0	—1·0	—0·5

Winds.

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

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

The mean wind directions of the month for stations recording at 10 hrs. and 16 hrs. are indicated in the small chart No. 2 of Plate IV by means of arrows flying with the wind. The lengths of the arrows are so proportioned as to indicate the comparative wind prevalence in the mean direction on a scale such that five-eighths of an inch would represent a wind blowing continuously throughout the month from the mean direction.

The figures of normal values for wind used in Tables A and B are computed from all available data previous to 1899, or in some cases 1902, and have been published in Volume XVII of the "Indian Meteorological Memoirs."

All anemometers used in India are compared before issue with the standard Beckley anemograph at Calcutta Observatory, and then have corrections assigned which are taken into account in the wind tables and Plate I of the review.

Hitherto the factor to represent the ratio of air movement to travel of Beckley cups has in India been taken as 3·0, but for this January review and onwards the factor is changed to 2·2, a value now known to be more nearly correct for Robinson instruments of the size of a Beckley anemograph than the previous figure 3·0. This change in interpretation of the readings taken from the standard affects the readings of all anemometers in India, since the corrections employed are determined by actual comparison; and the values of wind velocity given in the tables and Plate I of the Monthly Weather Review for the present month and onwards are accordingly based upon the factor 2·2. Thus a wind velocity hitherto reported as 30 miles per hour now becomes 22 miles per hour.

(*a*) The movement of the air was weaker than usual in Hyderabad, Central India and Eastern Bengal and Assam, and of about the average strength elsewhere.

(*b*) As might be expected from the absence of cold weather storms during the month, the steadiness was considerably greater than usual over the greater part of the plains or north-west India; and the same was the case in Hyderabad. In Eastern Bengal, the United Provinces and Bombay, on the other hand, the steadiness was appreciably low.

(*c*) The modifications of the direction of the air motion were in general of no significance.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	+0·2	−2
Eastern Bengal and Assam	−0·5	−9
Bengal	+0·1	+1
United Provinces	−0·1	−6
Punjab	+0·1	+3
North-West Frontier Province	−0·3	+11
Sind	−0·4	+6
Rajputana	+0·5	+4
Bombay	−0·4	−11
Central India	−0·7	−2
Central Provinces	+0·2	−1
Hyderabad	−1·4	+11
Mysore	+0·7	+6
Madras	0	+3

Humidity and cloud.

13. The hygrometric data of the month registered at certain stations are given in Table A. In that table appear columns giving the means of the wet bulb readings at 10 hrs. and at 16 hrs., of the minimum wet bulb readings, of the vapour tension and humidity at the same hours, and also the mean of daily means of these elements and of its departure from the normal mean. The hygrometric data are taken from the tables accompanying "*The Indian Meteorologist's Vade Mecum*," which were computed by means of Regnault's modification of August's formula. The means of daily means are obtained by taking the means of the minimum, 10 hrs. and 16 hrs. observations, and

reducing them to true means, by applying, in case of vapour tension, the corrections given on pages XXXVIII to XLII, and in case of humidity the corrections given on pages XLIV to XLVIII of Volume XVII of the "Indian Meteorological Memoirs." These corrections were determined from the hourly observation data given in Volumes V, IX and X of the "Indian Meteorological Memoirs." The normal values, which have been used for obtaining the departures, are the means calculated in the same way.

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

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

The departure from normal of the mean distribution of cloud amount at 8 hrs. in each month in India is shown in chart No. 1 of Plate VI, and the discussion of this and of the hygrometric features is based on the data given in Table B.

Normal values are deduced chiefly from ten or more years records previous to 1899, but in some cases from observations extending from 1877 to 1902.

Over the Peninsula, with the exception of Ganjam and the Konkan, humidity, both absolute and relative, was below the average, the dryness being on the whole most marked in the Deccan. In Burma and northern and central India, on the other hand, the air was almost everywhere damper than usual in both respects.

The sky was generally more cloudy than is usual in January; the only areas which formed exceptions to the general excess were the Coromandel coast, south Malabar, Mysore, the greater part of Assam and a few places elsewhere: at Moulmein, Rangoon and Jhansi the estimated proportion of cloud amounted to about 6·0 as compared with 1·5, the normal for the month.

TABLE 13.

Division.	Hygrometry, 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	84	+ 1	·547	+ ·037	3·4	+ 1·8
Eastern Bengal and Assam	89	— 1	·430	+ ·005	2·3	+ 0·5
Bengal	83	+ 3	·407	+ ·019	2·2	+ 0·6
United Provinces	85	+ 6	·356	+ ·043	3·3	+ 1·1
Punjab	86	+ 8	·307	+ ·052	5·0	+ 1·3
North-West Frontier Province.	79	+ 8	·241	+ ·037	4·6	+ 0·6
Sind	69	+ 6	·344	+ ·076	3·2	+ 0·2
Rajputana	66	+ 7	·292	+ ·040	3·8	+ 1·3
Bombay	59	— 1	·391	+ ·007	2·0	+ 1·0
Central India	69	+ 3	·319	+ ·024	3·4	+ 1·7
Central Provinces	63	0	·334	+ ·007	1·8	+ 0·6
Hyderabad	54	— 9	·362	—·063	2·5	—0·1
Mysore	63	— 8	·403	—·043	2·1	—0·3
Madras	77	— 1	·593	—·027	2·6	+ 0·2

Rainfall.

14. Rainfall observations are made at about 2,000 stations in India. The time of observation is 8 hrs. The rainfall data for each province are tabulated in the office of the Meteorologist, Director of Land Records, or other officer in the province, and are published in the provincial gazettes.

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

Plate VII is based on all the rainfall data available at the time of publication and shows the normal average rainfall and the departure of the rainfall from the normal of the month in the 34 meteorological or rainfall divisions.

The distribution of the total number of rainy days in each month is exhibited in chart No. 2 of Plate VI, and is based entirely on the data furnished by the meteorological observatories. A "rainy day" is one on which 0·10 inch or more of rain is received within 24 hours.

The normal figures of rainfall, and of the number of "rainy days," in Table B are based on observations which extend in most cases over a period of 40 or 50 years ending in 1910.

The total precipitation of the month was well above the normal in Kashmir, Baluchistan, the North-West Frontier Province, the Punjab, the United Provinces West, Sind and Rajputana West, but in the rest of India proper the weather was drier even than usual. Over the greater part of the Peninsula and in Gujarat the month was absolutely rainless, whereas under normal conditions amounts ranging from ten cents to an inch are recorded.

On the other hand the month was phenomenally wet in the Bay Islands which recorded a total of 19", in place of the normal half an inch. Lower Burma also participated in this heavy rainfall. It may be noted that excessive rainfall in this region during the winter months is unfavourable to the occurrence of winter precipitation in northern India.

TABLE 14.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	10·0	1·5	19·25	0·65	+18·60	+2860
2. Lower Burma	2·2	0·1	1·22	0·05	+1·17	+2300
3. Upper Burma	0·4	0·3	0·12	0·10	+0·02	+ 20
4. Assam	1·1	1·9	0·40	0·75	—0·35	— 47
5. Eastern Bengal	0·1	0·9	0·03	0·41	—0·38	— 93
6. Bengal	0·4	0·8	0·08	0·36	—0·28	— 78
7. Orissa	0·1	0·5	0·04	0·26	—0·22	— 85
8. Chota Nagpur	0·4	1·1	0·11	0·51	—0·40	— 78
9. Bihar	0·6	1·3	0·19	0·69	—0·50	— 72
10. United Provinces, East	1·0	1·6	0·57	0·75	—0·18	— 24
11. Do., West	2·3	2·0	1·44	0·98	+0·46	+ 47
12. Punjab, East and North	3·2	2·4	2·09	1·28	+0·81	+ 63
13. Do., South-west	3·8	1·3	1·68	0·56	+1·12	+200
14. Kashmir	6·3	5·0	4·13	3·29	+0·84	+ 26
15. North-West Frontier Province	4·6	2·4	2·53	1·35	+1·18	+ 87
16. Baluchistan	7·5	2·9	3·50	1·28	+2·22	+173
17. Sind	1·0	0·8	0·35	0·28	+0·07	+ 25
18. Rajputana, West	1·0	0·5	0·35	0·16	+0·19	+119
19. Do., East	1·2	1·0	0·45	0·39	+0·06	+ 15
20. Gujarat	0	0·1	0	0·04	—0·04	—100
21. Central India, West	0·2	0·6	0·16	0·25	—0·09	— 36
22. Do., East	0·6	1·8	0·10	0·86	—0·76	— 88
23. Berar	0	0·5	0	0·29	—0·29	—100
24. Central Provinces, West	0·6	1·0	0·21	0·55	—0·34	— 62
25. Do., East	0·5	0·8	0·16	0·40	—0·24	— 60
26. Konkan	0	0·2	0	0·13	—0·13	—100
27. Bombay Deccan	0	0·2	0	0·10	—0·10	—100
28. Hyderabad, North	0	0·2	0	0·08	—0·08	—100
29. Do., South	0	0·2	0	0·08	—0·08	—100
30. Mysore	0·1	0·1	0·03	0·06	—0·03	— 50
31. Malabar	0·2	0·2	0·07	0·22	—0·15	— 68
32. Madras, South-east	0·7	1·0	0·29	0·69	—0·40	— 58
33. Do. Deccan	0	0	0	0·09	—0·09	—100
34. Do. Coast, North	0·1	0·2	0·05	0·23	—0·18	— 78

TABLE 15.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	0·62	0·08	+0·54	+ 675
Eastern Bengal and Assam	0·21	0·57	—0·36	— 63
Bengal	0·12	0·50	—0·38	— 76
United Provinces	0·98	0·86	+0·12	+ 14
Punjab	2·00	1·13	+0·87	+ 77
North-West Frontier Province	2·53	1·35	+1·18	+ 87
Sind	0·35	0·28	+0·07	+ 25
Rajputana	0·42	0·33	+0·09	+ 27
Bombay	0	0·09	—0·09	— 100
Central India	0·15	0·46	—0·31	— 67
Central Provinces	0·12	0·41	—0·29	— 71
Hyderabad	0	0·08	—0·08	— 100
Mysore	0·03	0·06	—0·03	— 50
Madras	0·16	0·44	—0·28	— 64
Mean of India	0·47	0·44	+0·03	+ 7

Snowfall.

I.—AFGHANISTAN.

15. Snowfall occurred on the heights surrounding Kabul on the 4th, 16th, 19th to the 21st and 27th. The statement below shows the total fall recorded during the month as well as the depth of the unmelted residue on the 31st.

TABLE 16.

Locality.	Total snowfall during the month.		Reported depth of unmelted snow at the end of the month.	
	Ft.	In.	Ft.	In.
Koh Kabul	3	4	2	6
" Paghman	5	2	...	
" Kohistan	3	7	2	6
" Killa Kazi	4	5	4	0
" Shakar Dara	5	0	3	0
" Hazarajat	7	8	6	0
" Baba	11	0	7	0

II.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Wano.*—Snow fell on the 5th, 13th, 16th, 17th, 18th, 20th and 21st. The last four falls were heavy and extended to the level of the Wano plain. At the end of the month about three feet of snow still remained unmelted on the higher passes.

(*b*) *Tochi* (*North Waziristan*).—Heavy snow fell on almost all the hills from the 16th to the 21st. The lowest level reached was 4,000 feet.

(*c*) *Dera Ismail Khan.*—Ubashta had no less than 19 feet of snow during the period from the 23rd to the 26th, and the Takht-i-Suleman 9 feet from the 23rd to the 25th The statement below shows the depth of the unmelted accumulations on the 31st on the various peaks.

TABLE 17.

Name of peak.	Reported depth of unmelted residue on the 31st.
Takht-i-Suleman	7½ feet.
Kharghara	2 "
Ubashta	8 "
Chasanghar	1 foot.
Marmand	5½ feet.
Zmaraighar	2 "
Naveteza	2 "

(*d*) *Kurram.*—There were altogether eleven falls on the Sufed Koh and most of these extended to Parachinar. At the close of the month the unmelted residue on the Paiwar Kotal was estimated at 2½ feet.

(*e*) *Kohat.*—On the Samana range snow fell on the 17th, 19th and 20th, in the Saddar Lines on the 17th and in the

Hangu Ilaqa on the 22nd. The statement below shows the total fall recorded in the various situations :—

TABLE 18.

Locality.	Total amount during the month.	
	Ft.	In.
Ublin Hill	3	0
Mulaghar	2	0
Samana	3	6
Alikhel Hill	3	0
Rajkaghar	3	0
Charagho Kando	3	0
Dabrighar	3	9
Manuzai Hill	3	9
Adam Khel	3	9
Changasghar	3	9
Tanboghar	3	9
Mishti Hill	3	9
Spaga Hill	3	9
Sheikhan Hill	3	9

(*f*) *Chitral.*—During the first fifteen days there was only one fall, on the 8th, but during the period from the 16th to the 27th snow storms were of almost daily occurrence. The falls of the 20th and 21st were heavy, amounting to about 2¾ feet in the grounds of the observatory and 5½ feet on the surrounding hills. The total quantity received during the month was estimated at 3¼ feet in Chitral itself, and at 11½ feet on the neighbouring hills.

On the last day of the month there was about 1 foot of snow on the grounds, and all the passes were inaccessible.

(*g*) *Drosh.*—Snow to a total depth of about 22 inches fell during the month in Drosh itself, nearly half of this quantity having been received on the 21st on which date the severest and the most extensive storm of the month is said to have occurred. On the 31st there was still an accumulation of about 5 feet on the tops of the Lowarai pass.

III.—KASHMIR.

The statement below shows the character of snowfall in this area :—

TABLE 19.

Locality.	Number of days on which snow fell.	Aggregate amount of snowfall.		Approximate depth of unmelted residue on the surrounding hills at the end of month.
		Ft.	In.	
Kargil	14	2	6	About 20 feet.
Srinagar	8	0	6	Not reported.
Skardu	14	2	0	,,
Dras	22	2	10	,,

IV.—PUNJAB.

(*a*) *Murree.*—Snow fell on six occasions in Murree, and on one day on the hills adjacent to Kahuta : the total fall amounted to 9½ inches in the former locality and one foot in the latter.

(*b*) *Kilba* (*Simla Hills*).—There were altogether nine falls, and of these five descended to a level of about 5,750 feet and one as low as 5,000 feet.

V.—UNITED PROVINCES.

Garhwal.—Snow storms occurred on the 5th, 6th, 9th 10th, 21st, 22nd and 31st. The last three falls were heavy and descended as low as 5,000 feet. Weather was cold.

Almora.—The total fall was estimated at 26 feet in Malla Johar, 20 feet in Malla Darma and Byans, 12 feet in Malla Danpur and nearly 6 feet in Chaudas. The snow line descended to a distance of about a mile from the perpetual snows.

TABLE 20.

Name of pass.	DEPTH OF ACCUMULATION AT THE END OF THE MONTH.	
	Reported.	Normal.
	Feet.	Feet.
Nuwe pass	60	31
Binkaru pass	17⅔	27½
Lipulekh ,,	25⅓	17⅓
Lampia ,,	31	7½
Untadhura pass	11	18⅓
Ralamdhura ,,	8	12

SUMMARY.

16. According to available information the snowfall of the month was irregularly distributed, being on the whole in excess in the hills of the North-West Frontier Province, and normal or in defect in the western Himalayas.

HEM RAJ.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 16 stations in India, etc., in January, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Hitherto the erroneous factor 3·0 has always been in use in India : *vide* the section on wind, p. 8 of this issue of the Review.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs. at

Number of subdivision.	Station.	Elevation of barometer cistern above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
6	Calcutta	21	30·103	29·981	·122	30·032	+·014	29·999	79·7	57·1	22·6	86·9	52·0	34·9	70·9	78·4	67·4	+ 2·2	55·5	62·4	64·1	60·7
	IV.—United Provinces of Agra and Oudh.																					
10	Allahabad	309	29·827	·720	·107	29·760	+·034	30·036	74·4	49·2	25·2	85·7	40·5	45·2	64·2	73·3	60·1	+ 0·6	48·2	56·7	59·8	54·9
	V.—Punjab.																					
12	Lahore	702	·418	·330	·088	·365	+·039	·077	66·3	47·2	19·6	74·1	40·3	33·8	56·4	65·0	55·2	+ 2·2	45·8	52·4	56·7	51·6
	VIII.—Rajputana.																					
19	Jaipur	1,431	28.671	28·572	·099	28·612	+·028	·036	75·7	50·8	24·9	88·2	41·6	46·6	65·6	73·4	61·8	+ 1·9	47·4	55·2	58·3	53·6
	IX.—Bombay.																					
26	Bombay	37	30·053	29·945	·108	29·992	+·037	29·969	85·2	69·6	15·6	92·1	64·5	27·6	76·1	81·1	76·5	+ 2·0	64·1	68·2	71·3	67·9
	XIII.—Mysore.																					
30	Bangalore	3,021	27·083	26·971	·112	27·025	+·039	·081	82·6	55·6	27·0	86·4	48·8	37·6	73·4	80·6	68·1	+ 0·6	53·7	60·3	60·8	58·[illegible]
	XIV.—Madras.																					
32	Pudukkottai	318	29·777	29·648	·129	29·713		·966	85·0	66·6	18·4	89·6	61·1	28·5	77·4	83·3	75·8		65·9	70·3	71·7	69·3
	Madras	22	30·088	·984	·104	30·033	+·037	·985	83·5	65·7	17·8	87·1	60·5	26·6	79·3	80·8	73·8	− 1·5	65·4	72·1	72·4	70·0
	Kashmir.																					
14	Srinagar	5,204				Observations not received.																
	Hill Stations excluding Kashmir and Baluchistan.																					
	Simla	7,232	23·183	23·130	·053	23·147	+·049	23·109	46·5	37·0	9·5	60·0	30·1	29·9	42·8	43·6	41·0	+ 2·2	32·1	35·9	37·9	35·[illegible]
	Sarain		·218	·160	·058	·177		·139	43·7	28·9	14·8	55·3	21·0	34·3	36·8	36·9	35·6			34·5	34·7	
	Kalabagh					Observations not received.																
	Mukteswar	7,592	22·916	22·859	·057	22·877		22·836	50·1	34·9	15·2	65·5	27·1	38·4	43·5	46·3	41·8		29·6	37·0	39·2	35·[illegible]
	Katmandu	4,388	25·817	25·716	·101	25·761	+·074‡	25·715	62·9	37·3	25·6	68·8	32·2	36·6	48·8	59·7	49·4	−0·2‡	35·7	45·8	50·7	44·[illegible]
	Ootacamund	*7,327*	23·135	23·071	·064	23·097		23·033	67·4	42·1	25·3	71·4	34·7	36·7	63·0	61·6	54·0		35·9	45·9	49·6	43·[illegible]
	Kodaikanal	7,688	22·906	22·844	·062	22·875		22·810	65·6	46·2	19·4	72·7	40·7	32·0	60·5	60·3	55·9		36·6	46·9	51·3	44·[illegible]
	Dodabetta	8,539	·143	·082	·061	·107		·043	58·7	45·2	13·4	64·0	38·8	25·2	56·1	55·0	51·3		35·7	42·6	45·7	41·[illegible]
	Extra India.																					
	Diego Garcia					Observations not received.																
	Seychelles	15	29·996	29·916	·080	29·967	+·042‡	29·905	83·3	76·9	6·4	85·9	74·0	11·9	80·7	81·3	78·9	+0·4‡	72·1	76·9	76·6	75·[illegible]
	Mauritius	181				Observations not received.																

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.

16 stations in India, etc., in January, 1912.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind direction.											Wind steadiness.		Wind velocity.		Rainfall.		Station.	Number of subdivision.
														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.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·423	·452	·410	·445	+·014	90	60	42	66	− 4	1·3	2·6	1·9	+0·4	2	5	6	3		1	15	7	23	N 62° W	N 30° W	48	44	62*	45	0	0	Calcutta.	6
																															IV.—United Provinces of Agra and Oudh.	
·328	·364	·339	·352	+·018	93	61	42	70	+ 2	3·9	3·5	3·7	+1·3	14	1	3	2	3	2	2	22	13	N 76° W	N 42° W	45	26	40	67	0·06	0·03	Allahabad.	10
																															V.—Punjab.	
·292	·342	·353	·333	+·064	89	75	58	77	+ 7	4·6	5·1	4·9	+1·2	13	10	2	3	5	5		12	12	N 48° W	N 30° W	27	21	33	30	2·24	1·17	Lahore.	12
																															VIII.—Rajputana.	
·291	·313	·304	·308	+·040	78	51	38	60	+ 4	4·3	4·1	4·2	+0·9	6	6	10	12	5	4	3	7	9	N 36° E	N	19	18	72*	58	0·19	0·12	Jaipur.	19
																															IX.—Bombay.	
·527	·584	·634	·600	+·009	73	65	60	70	− 2	2·4	2·8	2·6	+1·5		2	13	14	2			8	23	N 1° E	N 6° E	42	58	134*	174	0	0	Bombay.	29
																															XIII.—Mysore.	
·364	·373	·302	·360	−·048	89	46	29	57	− 5	1·3	1·0	1·1			2	17	33	9	1				N 83° E	N 88° E	87	78	140	93	0	0	Bangalore.	30
																															XIV.—Madras.	
632	·651	·626	636		96	69	55	73		3·6	3·1	3·3		1	18	34	7	1				1	N 36° E		84		151		0·83	0·48	Pudukkottai.	32
·625	·691	·683	·684	−·001	98	69	65	80	+ 1	2·7	2·2	2·5	−1·6		15	26	21						N 54° E	N 51° E	83	76	76*	100	2·83	1·76	Madras.	
									Observations not received.																						Kashmir.	
																															Srinagar . .	11
																															Hill Stations excluding Kashmir and Baluchistan.	
·135	·140	·170	·156	+·005	64	54	63	64	+ 3	6·8	7·5	7·1	+1·5																3·82	1·57	Simla.	
	·175	·179				81	82			8·0	8·5	8·3		38			1		12	10	1		S 20° W		34		19		7·11	2·83	Sarain.	
									Observations not received.																						Kalabagh.	
·114	·153	·173	·155		61	59	59	64		6·1	6·8	6·5		27	1	2	7	1		2	21	1	N 86° W	*	23		130		2·20	0·82	Mukteswar.	
·192	·278	·272	·255	+·002	86	81	53	77	0	4·1	4·5	4·3	+0·9	56			1				5		W	N 78° W	6	46	18*	15	1·39	0·94	Katmandu.	
·152	·135	·229	·181		56	24	42	42		2·0	2·6	2·3		4	5	13	19	11	5	1		4	N 84° E		53		60		0·27	0·23	Ootacamund.	
·127	·197	·291	·205		40	37	56	44		1·7	3·1	2·4			8	12	16	11	2		2	11	N 57° E		43		224*		0·70	0·36	Kodaikanal.	
·114	·136	·214	·155		37	31	50	39		2·2	2·7	2·5			13	15	17	12	1			4	N 63° E		63		236		0·44	0·28	Dodabetta.	
																															Extra India.	
									Observations not received.																						Diego Garcia.	
·726	·877	·854	·837	+·004	78	84	80	84	0	7·2	7·5	7·3	+0·3 ‡	14	4	2	1	1	1		8	31	N 47° W	N 39° W	69	61	87*	107	25·75	3·23	Seychelles.	
									Observations not received.																						Mauritius.	

* Uncorrected for scale error.

‡ Departure from old normal.

Table B.—Abstract of observations taken at 8 hrs. at 235 stations in India, etc., in January 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are basad on factor 2·2 for the standard type of Beckley-Robinson anemograph. Hitherto the erroneous factor 3·0 has always been in use in India : *vide* the section on wind, p. 8 of this issue of the Review.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfal depends on the complete data of about 2,000 stations.

		Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
	Pressure departure from normal.	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.	Absolute range during month	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·022	83·7	−1·2	62·2	+2·6	73·0	+0·7	21·5	33·1	+0·2	−2	84	+1	·547	+·037	3·4	+1·8	0·62	0·08	+0·54
Eastern Bengal and Assam	+·021	76·2	+0·8	53·3	+0·8	64·7	+0·8	22·9	32·5	−0·5	−9	89	−1	·430	+·005	2·3	+0·5	0·21	0·57	−0·36
Bengal	+·029	76·8	−0·1	53·5	+0·7	65·2	+0·3	23·3	37·1	+0·1	+1	83	+3	·407	+·019	2·2	+0·6	0·12	0·50	−0·38
United Provinces of Agra and Oudh.	+·028	72·2	−1·1	49·3	+2·0	60·7	+0·5	22·8	40·9	−0·1	−6	85	+6	·356	+·043	3·3	+1·1	0·98	0·86	+0·12
Punjab	+·039	66·4	−1·7	46·3	+3·3	56·3	+0·8	20·1	36·1	+0·1	+3	86	+8	·307	+·052	5·0	+1·3	2·00	1·13	+0·87
North-West Frontier Province	+·022	63·7	−2·7	41·9	+1·9	52·7	−0·3	21·7	37·1	−0·3	+11	79	+8	·241	+·037	4·6	+0·6	2·53	1·35	+1·18
Sind	+·022	75·5	+0·1	54·7	+4·1	65·1	+2·1	20·7	35·1	−0·4	+6	69	+6	·344	+·076	3·2	+0·2	0·35	0·28	+0·07
Rajputana	+·020	76·0	+1·3	51·8	+3·2	63·9	+2·2	24·2	43·4	+0·5	+4	66	+7	·292	+·040	3·8	+1·3	0·42	0·33	+0·09
Bombay	+·028	86·2	+2·1	60·2	+1·9	73·2	+2·0	26·0	38·4	−0·4	−11	59	−1	·391	+·007	2·0	+1·0	0	0·09	−0·09
Central India	+·031	77·8	+1·0	50·4	+2·1	64·1	+1·5	27·4	45·3	−0·7	−2	69	+3	·319	+·024	3·4	+1·7	0·15	0·46	−0·31
Central Provinces	+·032	82·3	+1·1	54·4	+1·3	68·4	+1·2	27·9	43·1	+0·2	−1	63	0	·334	+·007	1·8	+0·6	0·12	0·41	−0·29
Hyderabad	+·041	87·2	+1·9	59·8	+0·1	73·5	+1·0	27·4	39·8	−1·4	+11	54	−9	·362	−·063	2·5	−0·1	0	0·08	−0·08
Mysore	+·041	83·8	+1·5	57·4	−0·4	70·6	+0·5	26·4	35·7	+0·7	+6	63	−8	·403	−·043	2·1	−0·3	0·03	0·06	−0·03
Madras	+·040	85·3	0	65·6	−1·0	75·4	−0·5	19·7	30·0	0	+3	77	−1	·593	−·027	2·6	+0·2	0·16	0·44	−0·28

Table

(2) Abstract of observations taken at 8 hrs. at 235

Number of subdivision.	Station.	Elevation of barometer cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	150	29·874		29·954	29·957	20th	29·770	8th	·187	78·2	88·1		74·0		81·1		14·1	92·2	28th	65·2	27th	27·0
	Mergui	65	29·952	+·005	29·948	30·044	31st	29·807	7th	·237	76·0	88·5	+0·4	69·8	+2·9	79·2	+1·7	18·7	91·9	14th, 15th & 28th.	64·7	24th	27·2
	Tavoy	19	30·017	+·015	29·969	30·105	29th	29·876	7th	·229	72·3	88·3	−1·2	68·6	+4·4	78·5	+1·6	19·7	92·0	14th	59·8	21th	32·2
	Moulmein	94	29·961	+·028	29·995	30·039	27th	29·882	7th	·157	69·7	85·4	−3·0	67·7	+2·5	76·6	−0·3	17·7	91·5	2nd	61·8	21st	29·7
	Rangoon	18	30·034	+·017	29·990	30·108	27th	29·946	7th	·162	70·3	84·5	−4·6	68·2	+4·0	76·4	−0·3	16·3	90·1	1st & 2nd	61·9	20th & 24th.	28·2
	Bassein	27?	30·026	+·024	29·990	30·106	16th	29·923	7th	·183	69·6	84·2	−1·5	66·7	+5·0	75·5	+1·7	17·5	88·7	30th	61·4	21st	27·3
	Diamond Island	41	30·013	+·026	29·990	30·102	29th	29·905	7th	·197	75·8	82·4	−1·6	69·7	−1·3	76·1	−1·5	12·7	87·4	17th	65·2	4th	22·2
	Toungoo	164	29·902	+·037	30·014	29·973	29th	29·803	7th	·170	65·4	81·9	−3·4	62·0	+4·4	71·9	+0·5	19·9	87·5	29th & 31st.	54·4	25th	33·1
	Kyaukpyu	18	30·039		29·997	30·133	29th	29·926	7th	·207	69·1	80·0		64·3		72·2		15·7	85·0	3rd	56·4	23th	29·6
	Akyab	20	30·058	+·024	30·019	30·152	16th	29·948	7th	·204	62·9	80·8	−0·6	59·3	0	70·0	−0·3	21·5	83·4	26th	54·5	18th	28·9
3	Thayetmyo	121	29·945	+·025	30·012	30·024	16th	29·845	7th	·179	66·0	85·8	−0·1	57·7	+4·2	71·7	+2·1	28·1	93·9	30th & 31st.	49·4	23rd	44·5
	Minbu	*165*	29·907	+·020	30·022	29·974	20th	29·819	7th	·155	64·8	84·9	−0·8	59·0	+2·9	72·0	+1·1	25·9	93·8	31st	53·0	23rd	40·8
	Yamethin	657	29·369	+·007?	30·004?	29·441	17th	29·280	7th	·161	62·9	85·1	−2·1	58·1	+3·5	71·6	+0·7	27·0	90·8	29th	51·5	21st	39·3
	Mandalay	250	29·814	+·031	30·024	29·893	20th	29·720	7th	·173	71·7	86·4	+2·3	56·5	+0·5	71·4	+1·4	29·9	95·0	31st	52·1	4 days	42·9
	Monywa	280	29·806		30·048	29·889	17th	29·716	7th	·173	61·5	83·7		57·2		70·5		26·5	87·8	30th & 31st.	53·1	21st	34·7
	Lashio	*2,820*	27·249	+·028	30·107?	27·302	27th	27·168	7th	·134	51·9	71·6†	−3·3†	43·9‡	+4·0‡	61·2†	+0·3	22·7	77·3	28th	43·0	21st	34·3
	Bhamo	*381*	29·710	+·050?	30·070	29·785	17th & 20th, 16th	29·629	7th	·156	54·0	77·7	+0·5	49·8	+0·3	63·3	+0·4	28·9	83·9	31st	43·1	18th	40·8
	Myitkyina	458	29·617		30·062	29·707		29·538	7th	·169	54·7	75·1		50·4		62·8		24·7	80·7	31st	45·0	9th & 19th.	34·7
	II.—Eastern Bengal and Assam.																						
4	Dibrugarh	353	29·750		30·089	29·863	20th	29·655	23rd	·208	53·1	70·8		50·4		60·6		20·4	76·9	30th	45·6	4th	31·3
	Sibsagar	333	29·791	+·022	30·105	29·909	16th	29·698	23rd	·211	54·7	68·8	−1·3	49·8	+0·3	59·3	−0·5	19·0	75·6	30th	44·0	4th & 8th	31·6
	Tezpur	252	29·862		30·089	30·000	16th	29·766	23rd	·234	55·5	74·2		52·2		63·2		22·0	80·1	28th	47·8	21st	32·3
	Gauhati	195	29·923		30·085	30·051	16th	29·832	23rd	·219	56·5	75·3		51·1		63·2		24·2	79·8	4days	47·1	4 days	32·7
	Dhubri	115	29·985	+·021	30·062	30·132	16th	29·891	23rd	·241	57·6	74·0	0	53·8	+0·7	63·9	+0·3	20·2	79·0	30th	48·1	16th, 17th & 18th.	30·9
	Silchar	104	30·001	+·021	30·064	30·130	16th	29·910	7th	·220	57·8	79·6	+1·8	53·0	+0·7	66·3	+1·3	26·6	84·3	6th	46·3	18th	38·0
5	Cox's Bazar	36	30·043		30·026	30·158	16th	29·944	7th	·214	61·8	80·3		56·2		68·3		24·1	84·2	14th	53·2	19th	31·0
	Chittagong	87	30·004	+·028	30·041	30·130	16th	29·923	10th	·207	60·3	79·7	+1·4	54·9	−0·4	67·3	+0·5	24·8	83·0	25th	50·5	17th & 18th.	32·5
	Noakhali	43	30·054		30·046	30·180	16th	29·957	7th	·223	60·5	78·1		54·5		66·3		23·6	81·3	25th	49·9	17th & 18th.	31·4
	Barisal	12	30·085	+·028	30·045	30·220	16th	29·989	7th	·231	63·4	78·9	+1·3	55·1	+0·7	67·0	+1·0	23·8	82·8	24th	51·6	21st	31·2
	Comilla	36	30·059		30·044	30·193	16th	29·959	7th	·234	61·2	80·8§		55·1		68·0§		25·7	83·3	4th, 7th & 24th.	50·3	16th, 17th & 18th.	33·0
	Narayanganj	26	30·057	+·015	30·033	30·189	16th	29·950	7th	·239	60·5	78·4	+0·5	56·5	+1·3	67·4	+0·9	21·9	81·5	24th & 31st.	52·3	17th	29·2
	Faridpur	46	30·052		30·050	30·193	16th	29·965	7th	·228	59·7	77·5		53·9		65·7		23·6	82·3	31st	49·0	18th, 22nd & 27th.	32·4
	Sirajganj	49	30·048		30·049	30·184	16th	29·952	7th	·232	57·9	75·7		54·8		65·3		20·9	80·4	24th	49·8	17th	30·6
	Mymensingh	63	30·036	+·022	30·054	30·163	16th	29·938	7th	·225	57·2	77·3	+2·3	54·6	+2·1?	66·0	+2·2	22·7	80·1	5 days	49·6	17th	30·5
	Bogra	75	30·018	+·025	30·048	30·160	16th	29·926	7th	·234	57·0	76·2	+0·1	53·4	+1·5	64·8	+0·8	22·8	81·7	31st	48·7	18th	33·0
	Rampur Boalia	70	30·048		30·071	30·199	16th	29·959	23rd	·240	59·0	76·4		54·3‖		65·3‖		22·1	82·1	24th	50·1	16th, 17th & 27th.	32·9
	Malda	72	30·041		30·069	30·199	16th	29·927	23rd	·272	59·4	72·8		51·8		62·8		22·0	80·3	24th	45·5	16th	34·8
	Dinajpur	123	29·963	+·017	30·049	30·110	16th	29·866	23rd	·244	54·4	75·1	−0·6	50·0	+0·6	62·6	0	25·1	80·3	24th	43·0	17th & 18th.	37·3
	Rangpur	127	29·980		30·057	30·137	16th	29·895	23rd	·232	56·8	71·9		51·6		63·3		23·3	79·1	30th	44·0	7th	35·1

† Mean of 26 days. ‡ Mean of 12 days. § Mean of 30 days. ‖ Mean of 29 days.

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

B.

stations in India, etc., in January, 1912.

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs., in inches of mercury. (43)	Departure from normal, in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec., 1911 to 31st Jan., 1912. (53)	Normal rainfall for period, 1st Dec. to 31st Jan. (54)	Departure from normal of period 1st Dec., 1911 to 31st Jan., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																I.—Burma.
	7	13	8	2				1	N 49° E		4·5*			76		79		·758		5·7		1			0·59			2·03			0·46	Victoria Point.
	30	1							N 45° E	S 4° W	1·8	1·5	+0·3	3	− 8	85	+ 4	·746	+·036	3·0	0	1	1·40	−0·40	0·51	1·02	− 0·48	1·44	1·39	+ 0·05	0·50	Mergui.
	30	1							N 45° E	N 9° W	1·2*	0·9	+0·3	3	− 4	85	− 2	·679	+·031	3·7	+1·7	1	0·20	+0·80	0·38	0·15	+ 0·23	0·38	0·36	+ 0·02	0·25	Tavoy.
	5	2	12	9	1	1		1	N 63° E	N 48° E	3·2	1·8	+1·4	62	+ 1	90	+ 5	·657	+·055	5·4	+4·1	5	0·40	+4·60	2·13	0·25	+ 1·88	2·13	0·32	+ 1·81	0·80	Moulmein.
	9	7	13	1				1	N 29° E	N 29° E	1·5	2·8	−1·3	59	+27	84	+ 1	·628	+·060	5·7	+4·2	8	0·20	+7·80	5·55	0·09	+ 5·46	5·55	0·24	+ 5·31	2·91	Rangoon
	21	1	4	4				1	N 56° E	N 2° W	3·6	2·6	+1·0	27	− 5	87	0	·632	+·055	3·9	+2·1	2	0·10	+1·90	1·40	0·10	+ 1·30	1·40	0·39	+ 1·01	1·05	Bassein.
		7	15	7				2	N 40° E	N 14° E	8·9	5·8	+3·1	79	− 2	79	+ 6	·704	+·051	4·0	+1·7	5	0·44	+4·56	1·57	0·18	+ 1·39	1·57	0·93	+ 0·64	0·52	Diamond Island.
	9	8	6	1	2	1		4	N 17° E	N 9° W	1·2	1·2	0	46	−19	90	+ 2	·563	+·062	4·1	+3·0	2	0·20	+1·80	3·59	0·13	+ 3·46	3·59	0·37	+ 3·22	2·73	Toungoo.
	6	3	16	3	1	1		1	N 47° E		3·4*			62		79		·563		1·5		1			0·16			0·16			0·14	Kyaukpyu.
	3	16	8	2				2	N 15° E	N 21° E	2·8	2·0	+0·8	79	− 8	86	− 1	·491	−·003	1·2	+0·5	1	0·10	+0·90	0·39	0·07	+ 0·32	0·56	0·80	− 0·24	0·39	Akyab.
	27	1			2			1	N 67° E	N 11° E	1·6*	2·0	−0·4	2	−34	73	− 1	·474	+·057	3·8	+3·2	0	0·10	−0·10	0·02	0·03	− 0·01	0·02	0·23	− 0·21	0·02	Thayetmyo
	2	1			1			27	N 43° W	N 52° W	3·1	4·2	−1·1	86	+38	67	− 7	·409	−·016	2·6	+1·9	1	0·10	+0·90	0·37	0·03	+ 0·34	0·37	0·49	− 0·12	0·28	Minbu.
	21	4			1		1	4	N 28° W	N 11° W	1·7	1·8	−0·1	20	− 6	84	+ 7	·481	+·052	2·8	+2·3	1	0·20	+0·80	0·32	0·09	+ 0·23	0·32	0·44	− 0·12	0·32	Yamethin.
	44	1	1	2	3	1	3	6	N 41° W	N 13° E	1·7	1·5	+0·2	13	0	80	− 3	·439	−·020?	1·4	+0·3	1	0·10	+0·90	0·27	0·04	+ 0·23	0·27	0·37	− 0·10	0·23	Mandalay.
	8	19						4	N 7° W		1·8			72		87		·476		2·0		0	0	0	0	0	0	0	0·37	− 0·37	0	Monywa.
	28		1	1			1		N 15° E		1·7*			3		91	+ 1	·348	+·010	3·7	−0·8	4			2·16	0·24	+ 1·92	2·16	1·00	+ 1·16	1·20	Lashio.
	31								(a)	N 18° W	0·7	1·9	−1·2			97	+ 4	·407	+·024	4·2	+1·1	0	1·20	−1·20	0	0·61	− 0·61	0	1·17	− 1·17	0	Bhamo.
	26		1	3				1	N 66° E		0·7			10		90		·386		2·9		0			0	0·48	− 0·48	0	0·99	− 0·99	0	Myitkyina.
																																II.—Eastern Bengal and Assam.
	31								(a)		0·4					99		·400		2·4		4	4·00	0	1·22	1·76	− 0·54	1·51	2·12	− 0·61	0·40	Dibrugarh.
	24	2	3	1			1		N 36° E	N 82° E	0·7	1·3	−0·6	13	−10	96	− 3	·410	+·006	6·2	+0·8	5	3·70	+1·30	1·39	1·33	+ 0·06	1·82	1·82	0	0·46	Sibsagar.
	10	1	11	5	1	1	1	1	N 57° E		2·3‖			46		90		·398		3·0		0	1·80	−1·80	0·03	0·49	− 0·46	0·11	0·74	− 0·63	0·03	Tezpur.
	29				1		1		S		1·1			45		92		·423		6·4		0	1·70	−1·70	0	0·38	− 0·38	0	0·47	− 0·47	0	Gauhati.
	4	1	10	12		1	3		N 74° E	N 55° E	3·9	2·8	+1·1	56	+17	87	− 4	·416	+·007	0·8	−1·1	0	0·90	−0·90	0·04	0·36	− 0·32	0·04	0·41	− 0·37	0·04	Dhubri.
	21		4	4	1	1			N 82° E	S 72° E	0·9	1·2	−0·3	23	+17	89	− 2	·429	−·002	0·6	−2·9	1	1·90	−0·90	0·14	0·83	− 0·69	0·14	1·26	− 1·12	0·14	Silchar.
			13	13	5				N 77° E		2·6*			89		86		·474		1·3		0			0			0·01			0	Cox's Bazar.
	10	1	20						N 42° E	N 28° E	1·2	2·3	−1·1	69	+14	85	− 3	·447	−·013	1·0	−0·1	0	0·68	−0·68	0	0·34	− 0·34	0·08	1·13	− 1·05	0	Chittagong.
	9	14	5	1			1	1	N 10° E		1·6			55		89		·473		1·2		0	0·97	−0·97	0	0·35	− 0·35	0	0·66	− 0·66	0	Noakhali.
	30			1					E	N 4° E	0·1	1·2	−1·1	3	− 8	83	− 4	·486	+·017	1·7	+0·9	0	1·00	−1·00	0	0·55	− 0·55	0	1·02	− 1·02	0	Barisal.
	31								(a)		0·6					86		·473		0·6		0	1·29	−1·29	0	0·32	− 0·32	0	0·54	− 0·54	0	Comilla.
	17	3		1	1	2	1	1	5	N 48° W	N 10° W	0·95	1·7	−0·8	13	−26	87	0	·458	+·009	2·5	+1·2	0	1·00	−1·00	0	0·34	− 0·34	0	0·51	− 0·51	0	Narayanganj.
	10	7				2	3		9	N 45° W		1·2			42		86		·451		1·4		0	0·97	−0·97	0·05	0·55	− 0·50	0·05	0·63	− 0·58	0·05	Faridpur.
	6	4		2		1	1	6	11	N 52° W		1·3			55		91		·433		2·8		0	1·07	−1·07	0	0·41	− 0·41	0	0·50	− 0·50	0	Sirajganj.
	29				1			1		(a)	N 54° E	0·5	0·9	−0·4			90	− 1	·426	+·006	3·6	+2·1	0	1·00	−1·00	0	0·42	− 0·42	0	0·49	− 0·49	0	Mymensingh.
	7	2					1			N 30° W	N 18° W	0·5	1·2	−0·7	3	−31	89	+ 4	·421	+·025	3·5	+3·3	0	1·06	−1·06	0	0·47	− 0·47	0	0·50	− 0·50	0	Bogra.
	20	4	4			2	1			N 5° E		1·5			16		83		·417		2·1		0	0·85	−0·85	0·05	0·40	− 0·35	0·05	0·43	− 0·38	0·05	Rampur Boalia.
	9	5	2	1	1		1	3	9	N 33° W		2·3*			42		87		·439		0·4		0	0·97	−0·97	0·11	0·70	− 0·59	0·11	0·72	− 0·61	0·07	Malda.
	7	2	4	2	1	1	2	6	5	N 40° W	N 61° W	1·2	1·7	−0·5	23	−13	90	+ 3	·383	+·006	2·5	+1·4	0	0·84	−0·84	0·07	0·39	− 0·32	0·07	0·42	− 0·35	0·07	Dinajpur.
	3		9	3		2	1	1	2	N 50° E		1·4			26		89		·410		2·3		0	0·90	−0·90	0·04	0·44	− 0·40	0·04	0·48	− 0·44	0·04	Rangpur.

ations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

(a) Indeterminate.

Table

(2) *Abstract of observations taken at 8 hrs. at 235*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	II.—Eastern Bengal and Assam—*concld.*																						
5	Jalpaiguri	283	29·801	+·011	30·060	29·948	16th	29·698	23rd	·250	55·3	75·8	+3·8	52·5	+1·7	64·1	+2·7	23·3	79·9	29th & 30th.	45·9	17th	34·0
	Cooch Behar	156	29·942		30·065	30·078	16th	29·838	23rd	·240	54·8	74·3		52·4		63·3		21·9	77·8	29th & 30th.	46·6	17th & 18th.	31·2
	III.—Bengal.																						
6	Saugor Island	25	30·075	+·020	30·046	30·133	16th	29·998	23rd	·195	64·0	77·2	+0·6	60·3	+1·1	68·7	+0·9	16·9	83·2	25th	53·7	1st & 2nd.	29·5
	Midnapore	149	29·938†		30·043†	30·085	16th	29·863	10th	·222	62·5	82·3		56·7		69·5		25·6	92·8	24th	49·2	1st	43·6
	Calcutta	21	30·086	+·021	30·054	30·217	16th	29·993	23rd	·224	60·1	79·4	+2·3	56·5	+1·2	68·0	+1·7	22·9	86·9	24th	52·0	1st	34·9
	Jessore	33	30·074	+·029	30·056	30·211	16th	29·997	23rd	·217	59·6	77·5	-0·4	53·2	+0·2	65·4	—0·1	24·3	83·0	29th	45·2	1st	37·8
	Krishnagar	47	30·059‡		30·058‡	30·211	16th	29·966	23rd	·245	57·5	79·2		53·3		63·3		25·9	94·4	24th	50·0	27th & 28th.	44·4
	Burdwan	99	30·006	+·019	30·058	30·153	16th	29·918	23rd	·235	59·6	80·0	+1·2	55·6	+0·7	67·8	+0·9	24·4	88·4	24th	52·3	1st & 28th.	36·1
	Bankura	313	29·791‡		30·072‡	29·938	16th	29·701	23rd	·237	61·9	79·3		55·4		67·3		23·9	89·1	24th	50·2	1st	38·9
	Raniganj	334	29·766		30·077	29·908	16th	29·671	23rd	·237	57·1	78·0		54·3		66·1		23·7	87·5	24th	50·0	2nd	37·5
	Berhampore	67	30·038	+·020	30·058	30·181	16th	29·937	23rd	·244	57·2	75·9	—0·9	55·0	+1·6	65·5	+0·3	20·9	83·1	24th	51·7	17th	31·4
7	Balasore	50	30·062	+·026	30·059	30·174	16th	29·975	23rd	·199	62·7	82·6	+1·3	57·7	+2·0	70·1	+1·7	24·9	92·4	24th	49·1	3rd	43·3
	False Point	21	30·088	+·027	30·052	30·197	17th	30·014	10th	·183	65·1	79·3	+0·2	57·7	—0·6	68·5	—0·2	21·6	85·2	25th	47·6	1st	37·6
	Cuttack	80	30·036	+·034	30·061	30·146	16th & 17th.	29·963	10th	·183	64·2	82·9	—1·6	61·0	+1·2	71·9	—0·2	21·9	90·4	24th & 25th.	52·7	1st & 4th.	37·7
	Puri	24	30·080		30·043	30·189	17th	30·002	11th	·187	66·6	80·6		63·5		72·1		17·1	84·6	25th & 28th.	55·6	4th	29·0
	Angul	455	29·650‡		30·090‡	29·747	17th	29·576	9th	·171	62·7	82·8		55·8		69·3		27·0	90·1	24th & 25th.	47·0	3rd	43·1
	Sambalpur	486	29·627	+·039	30·088	29·720	17th	29·522	10th	·198	62·1	81·5	—0·7	56·9	+2·1	69·2	+0·7	24·6	89·1	25th	47·6	1st & 3rd.	41·5
8	Chaibasa	*733*	29·343	+·024	30·074	29·453	17th	29·251	10th	·202	55·8	80·3	—0·2	52·5	+0·7	66·4	+0·3	27·8	88·1	24th	43·8	1st	44·3
	Ranchi	2,128	27·922	+·039	30·078	28·033	16th	27·815	10th	·218	53·2	73·9	—0·5	52·0	+1·1	63·0	+0·3	21·9	82·7	23rd	45·9	1st	36·8
	Purulia	*816*	29·271§		30·083§	29·396	17th	29·182	10th	·214	58·6	79·8		53·4		66·4		25·9	89·5	25th	49·1	1st, 2nd & 3rd.	40·4
	Hazaribagh	2,007	28·065	+·056	30·103	28·173	16th	27·931	10th	·244	57·1	72·9	—0·2	50·7	+0·2	61·8	0	22·2	81·6	31st	45·0	3rd	36·6
	Daltonganj	*730*	29·380‡		30·124‡	29·502	16th	29·229	10th	·273	51·7	76·5		48·2		62·3		28·3	87·1	31st	41·0	1st	46·1
9	Purnea	134	29·980	+·035	30·078	30·122	16th	29·852	23rd	·270	53·5	74·0	—0·7	49·1	+0·3	61·5	+0·1	24·9	79·6	24th	42·2	14th	37·4
	Bhagalpur	160	29·951‡		30·073‡	30·070	16th	29·834	23rd	·236	57·7	75·0		51·3		63·1		23·7	81·2	24th	45·8	16th	35·4
	Monghyr	155	29·967		30·085	30·095	16th	29·845	23rd	·250	58·6	73·3		53·0		63·2		20·3	79·2	24th & 31st.	49·9	2nd, 16th & 21st.	29·3
	Darbhanga	165	29·940	+·026	30·070	30·079	16th	29·819	23rd	·260	56·5	74·0	+1·3	50·0	—2·1	62·0	—0·4	24·0	79·1	24th	45·2	16th	33·1
	Pusa	188	29·901		30·057	30·034	16th	29·783	23rd	·251	54·2	74·0		49·2		61·6		24·8	79·2	24th	44·1	16th	35·7
	Muzaffarpur	177	29·939		30·086	30·083	16th	29·812	23rd	·271	55·3	72·8		50·3		61·6		22·5	78·7	24th	45·0	16th	33·4
	Motihari	221	29·877		30·075	30·005	16th	29·750	23rd	·255	52·3	72·5		49·4		60·9		23·1	77·6	24th, 30th & 31st.	45·3	2nd	32·[illegible]
	Chapra	181	29·929‡		30·078‡	30·051	16th	29·834	10th	·217	54·1	72·5		50·5		61·5		22·0	80·8	31st	43·3	13th	37·[illegible]
	Patna	183	29·927	+·014	30·077	30·050	16th	29·821	23rd	·229	56·9	71·1	—1·9	51·2	+1·0	61·1	—0·5	19·9	80·0	31st	42·7	16th	37·[illegible]
	Arrah	190	29·908		30·068	30·039	16th	29·804	10th	·235	52·4‖	71·3‖		48·8‖		60·0‖		22·5	75·1	4 days	44·8	16th	30·[illegible]
	Buxar	239	29·862		30·076	29·989	16th	29·772	23rd	·217	53·7	74·1		50·4		62·3		23·7	84·0	31st	45·6	16th	38·[illegible]
	Dehri	351	29·745		30·076	29·878	16th	29·622	10th	·256	57·6	74·9		53·5		64·1		21·4	85·3	31st	48·0	16th	36·[illegible]
	Gaya	372	29·738	+·028	30·086	29·863	16th	29·614	10th	·249	55·2	74·8	—1·1	51·7	+0·1	63·3	—0·5	23·1	83·9	31st	47·2	5 days	36·[illegible]
	Naya Dumka	489	29·607	+·036	30·078	29·739	16th	29·507	23rd	·232	59·0	76·0	+0·3	51·5	+0·3	63·3	+0·3	24·5	83·9	24th	47·5	2nd	36·[illegible]
	IV.—United Provinces of Agra and Oudh.																						
10	Gorakhpur	257	29·831	+·022	30·063	29·958	16th	29·727	23rd	·231	54·1	71·8	—1·1	48·9	—0·3	60·4	—0·7	22·9	78·6	31st	44·8	3rd, 15th & 17th.	3[illegible]
	Benares	267	29·845	+·031	30·085	29·974	16th	29·701	10th	·273	55·4	74·5	+0·2	48·6	+0·4	61·6	+0·3	25·9	85·6	31st	43·1	2nd & 15th.	[illegible]
	Allahabad	309	29·801	+·028	30·088	29·942	16th	29·622	10th	·320	54·8	74·0	—0·4	48·9	+1·0	61·5	+0·3	25·1	85·6	23rd & 31st.	40·5	15th	[illegible]

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

† Mean of 24 days.

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or pl

‡ Mean of 30 days.

§ Mean of 29 days.

B—*continued.*

stations in India, etc., in January, 1912—continued.

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs., in inches of mercury. (43)	Departure from normal, in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec. 1911 to 31st January, 1912. (53)	Normal rainfall for period, 1st Dec. to 31st January. (54)	Departure from normal of period, 1st Dec. 1911 to 31st Jan., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																II.—Eastern Bengal and Assam—*contd.*
30		1							N 45° E	N 18° E	0·7			3	—40	87	— 4	·388	—·008	0·5	— 0·6	0	0·97	— 0·97	0·06	0·34	— 0·28	0·06	0·42	— 0·36	0·06	Jalpaiguri.
28			2	1					S 72° E		0·7			10		92		·398		2·3		0	0·90	— 0·90	0·05	0·16	— 0·11	0·05	0·23	— 0·18	0·05	Cooch Behar.
																																III.—Bengal.
	13	11	1		1	2	1	2	N 14° E	N 13° E	5·5	5·3	+0·2	69	+ 5	95	+ 5	·569	+·043	1·1	—0·4	0	0·74	— 0·74	0	0·34	— 0·34	0	0·67	— 0·67	0	Saugor Island.
6	6	2	3			2	2	10	N 25° W		1·7			45		71		·394		1·9		0	0·94	— 0·94	0	0·57	— 0·57	0	0·82	— 0·82	0	Midnapore.
6	6	4				5	1	9	N 35° W	N 6° W	2·0*	1·9	+0·7	49	+17	86	+ 2	·418	+·010	2·2	+1·1	0	0·78	— 0·78	0	0·41	— 0·41	0	0·62	— 0·62	0	Calcutta.
14	6	2			1	1	2	5	N 28° W	N 14° W	1·4	1·2	+0·2	33	+19	83	— 4	·425	—·010	1·3	+0·1	1	0·90	+ 0·10	0·12	0·43	— 0·31	0·12	0·62	— 0·50	0·12	Jessore.
24						1		6	N 59° W		0·7			19		87		·416		2·2		2	0·81	+ 1·19	0·35	0·57	— 0·22	0·35	0·63	— 0·28	0·23	Krishnagar.
14	3	2					1	11	N 31° W	N 23° W	0·9	1·2	—0·3	46	+20	80	+ 8	·410	+·041	2·4	+0·9	0	0·81	— 0·81	0·04	0·41	— 0·37	0·04	0·57	— 0·53	0·04	Burdwan.
29							2		S		1·3			6		63		·346		0·8		0	1·06	— 1·06	0·02	0·50	— 0·48	0·02	0·59	— 0·57	0·02	Bankura.
28							1	2	N 63° W		1·1			6		82		·384		1·9		1	0·97	+ 0·03	0·11	0·56	— 0·45	0·11	0·65	— 0·54	0·11	Raniganj.
24	4				1			2	N 18° W	N 67° W	0·6	1·2	—0·6	13	—13	87	— 1	·403	—·012	2·1	+0·7	0	1·06	— 1·06	0·04	0·42	— 0·38	0·04	0·53	— 0·49	0·04	Berhampore.
3	10					3	1	14	N 36° W	N 27° W	1·4	2·0	—0·6	72	+22	72	— 9	·411	—·031	1·7	+0·2	0	0·61	— 0·61	0	0·60	— 0·60	0	0·86	— 0·86	0	Balasore.
4	8					1	4	14	N 40° W	N 28° W	3·9	4·3	—0·4	72	+ 4	90	+ 2	·562	+·023	4·9	+3·4	0	0·71	— 0·71	0	0·55	— 0·55	0	1·32	— 1·32	0	False Point.
24		1	1			2	3		S 75° W	N 8° W	0·9*	1·0	—0·1	10	0	83	+ 5	·507	+·052	2·2	+0·7	0	0·55	— 0·55	0	0·25	— 0·25	0	0·60	— 0·60	0	Cuttack.
	17	4				1	3	6	N 12° W		5·1			78		88		·578		4·6		0	0·43	— 0·43	0	0·37	— 0·37	0	0·80	— 0·80	0	Puri.
2		1		3	3		1	21	N 52° W		3·9			55		76		·437		3·1		0			0·02	0·71	— 0·69	0·17	1·24	— 1·07	0·02	Angul.
	3	6	2	4	9	5	1	1	S 28° E	N 32° E	2·8	1·9	+0·9	30	—44	76	+ 3	·428	+·023	2·4	+1·1	0	1·00	— 1·00	0·14	0·38	— 0·24	0·14	0·66	— 0·52	0·08	Sambalpur.
20	1				2	7	1		S 45° W	S 68° W	1·5	0·9	+0·6	27	—13	85	+ 9	·387	+·009	2·0	+0·6	0	1·23	— 1·23	0·05	0·81	— 0·76	0·05	1·05	— 1·00	0·05	Chaibassa.
9	1		1		1		7	12	N 60° W	N 73° W	4·6	3·8	+0·8	53	+17	69	+ 6	·315	+·015	2·3	+0·7	1	1·35	— 0·35	0·17	0·78	— 0·61	0·17	1·00	— 0·83	0·14	Ranchi.
12							11	8	N 71° W		2·4			58		76		·372		1·1		0	1·35	— 1·35	0·08	1·05	— 0·97	0·08	1·22	— 1·14	0·08	Purulia.
9	1				2	1	12	6	N 81° W	S 86° W	4·5	4·2	+0·3	56	+12	66	+ 2	·303	+·003	1·9	0	1	1·45	— 0·45	0·37	0·77	— 0·40	0·37	0·99	— 0·62	0·34	Hazaribagh.
24	1		1	3	1	1			S 34° E		1·2			13		94		·365		2·3		1	1·63	— 0·63	0·20	0·97	— 0·77	0·20	1·21	— 1·01	0·20	Daltonganj.
20						1	6	4	N 78° W	S 74° W	1·0	1·5	—0·5	30	+ 1	95	+ 4	·389	+·039	1·1	—0·1	0	0·90	— 0·90	0·07	0·45	— 0·38	0·07	0·55	— 0·48	0·07	Purnea.
29						2			S 45° W		1·3			3		83		·392		1·2		1	1·32	— 0·32	0·13	0·60	— 0·47	0·13	0·64	— 0·51	0·13	Bhagalpur.
8			1	1		5	14	2	S 80° W		2·9			55		87		·430		1·6		1			0·22			0·22			0·22	Monghyr.
26						3	2		S 62° W	S 84° W	1·0	1·9	—0·9	13	—18	95	+ 9	·437	+·057	2·1	+0·8	1	1·30	— 0·30	0·15	0·55	— 0·40	0·15	0·61	— 0·46	0·12	Darbhanga.
12	1		1	5	2	4	3	3	S 31° W		2·2			19		93‡		·392‡		2·2		1			0·13			0·13			0·13	Pusa.
23					1	3	3	1	S 72° W		4·4*			23		93		·401		1·4		1	1·33	— 0·33	0·34	0·65	— 0·31	0·34	0·70	— 0·36	0·34	Muzaffarpur.
22	1	1	1	1			3	2	N 45° W		0·8			10		97		·383		3·6		1	1·32	— 0·32	0·72	0·57	+ 0·15	0·72	0·73	— 0·01	0·70	Motihari.
P	P	P	P	P	P	P	P	P	P		P			P		92		·384		2·6		1	1·43	— 0·48	0·16	0·68	— 0·52	0·16	0·81	— 0·65	0·16	Chapra.
6	1	1	1		2	10	8		S 61° W	S 70° W	2·9	1·8	+1·1	46	— 2	83	+ 6	·385	+·029	1·1	—0·6	1	1·32	— 0·32	0·12	0·61	— 0·49	0·12	0·70	— 0·58	0·12	Patna.
10		1			5	9	6		S 48° W		2·2			52		93‖		·365‖		5·8		1	1·58	— 0·58	0·13	0·74	— 0·61	0·13	0·91	— 0·78	0·13	Arrah.
5	1	1		1	4	11	8		S 52° W		3·4			55		86		·351		3·1		0	1·65	— 1·65	0	0·72	— 0·72	0	0·93	— 0·93	0	Buxar.
3			1		7	15	4	1	S 39° W		2·0			68		77		·364		1·4		0	1·35	— 1·35	0	0·63	— 0·63	0	0·86	— 0·86	0	Dehri.
22				1	1	2	5		S 61° W	S 16° W	2·3	2·2	+0·1	23	— 9	78	+ 5	·354	+·009	2·3	+0·6	0	1·32	— 1·32	0·08	0·72	— 0·64	0·08	0·86	— 0·78	0·08	Gaya.
29								2	N 45° W		0·9			3		70	— 3	·349		1·2		0	1·17	— 1·17	0·01	0·61	— 0·60	0·01	0·77	— 0·76	0·01	Naya Dumka.
																																IV.—United Provinces of Agra and Oudh.
24		2					3	2	N 47° W	N 84° W	1·5	1·2	+0·3	13	—23	92	+10	·388	+·038	1·5	—0·3	2	1·50	+0·50	0·95	0·76	+ 0·19	0·95	0·91	+ 0·04	0·10	Gorakhpur.
19	1	2				4	4	1	N 87° W	S 49° W	1·2	2·1	—0·9	20	—16	87	+ 3	·380	+·039	2·8	+0·9	0	1·40	—1·40	0	0·72	— 0·72	0	0·97	— 0·97	0	Benares.
17			1			3	8	2	S 86° W	N 74° W	2·0	2·8	—0·8	37	+11	80	+ 1	·341	+·008	3·7	+1·8	0	1·60	—1·60	0·06	0·82	— 0·76	0·06	1·09	— 1·03	0·03	Allahabad.

ations, the elevations of which exceed 3,000 feet.

* Uncorrected for scale error.

‖ Mean of 21 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 235*

Number of sub-division.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	IV.—United Provinces of Agra and Oudh—*concld.*																						
10	Cawnpore	416	29·676	+·028	30·078	29·810	16th	29·512	10th	·298	53·4	73·6	−0·3	49·4	+2·3	61·5	+1·0	24·2	86·2	31st	43·4	2nd	42·8
	Lucknow	368	29·728	+·029	30·080	29·871	16th	29·554	10th	·317	54·6	72·8	−1·2	49·5	+2·8	61·1	+0·8	23·3	84·5	31st	42·6	15th	41·9
	Bahraich	401	29·662	+·010	30·052	29·777	16th	29·513	10th	·264	53·3	70·8	−1·6	49·3	+2·2	60·0	+0·3	21·5	81·1	31st	43·5	1st	37·6
11	Jhansi	824	29·280	+·031	30·113	29·387	19th	29·109	10th	·278	55·9	77·0	+0·6	50·9	−0·2?	64·0	+0·2	26·1	90·5	31st	44·5	15th	46·0
	Agra	556	29·546	+·027	30·100	29·676	16th	29·370	10th	·306	54·6	71·8	−1·7	51·2	+2·6	61·5	+0·5	20·6	84·0	31st	47·0	15th	37·0
	Mainpuri	516	29·570	+·027	30·083	29·708	16th	29·394	10th	·314	52·2	71·0	−0·7	49·1	+2·9	60·0	+1·1	21·9	85·3	31st	43·1	2nd	42·2
	Bareilly	568	29·502	+·025	30·072	29·638	16th	29·332	10th	·306	53·4	70·2	−0·4	49·2	+3·1	59·7	+1·3	21·0	84·8	31st	42·0	15th	42·8
	Roorkee	899	29·181	+·053	30·114	29·302	16th	29·041	10th	·261	51·0	66·3	−3·3	47·6	+3·2	56·9	−0·1	18·7	79·0	31st	40·9	1st	38·1
	V.—Punjab.																						
12	Delhi	718	29·367	+·031	30·100	29·482	16th	29·194	10th	·288	53·1	67·6	−3·1	50·1	+2·2	58·8	−0·5	17·5	80·0	31st	43·8	15th	36·2
	Sirsa	662	29·428	+·034	30·115	29·554	25th	29·194	9th	·360	50·0	67·7	−3·3	46·5	+3·4	57·1	+0·1	21·2	77·3	29th	40·0	13th	37·3
	Patiala	*818*	29·234		30·081?	29·379	17th	29·042	10th	·337	50·0	66·1		49·1		57·6		17·0	79·0	31st	40·6	2nd	38·4
	Ambala	892	29·171	+·044	30·099	29·300	16th	29·025	10th	·275	50·5	68·0	+0·2	46·9	+3·6	57·5	+1·9	21·1	79·5	30th & 31st.	38·9	2nd	40·6
	Ludhiana	812	29·276	+·050	30·120	29·401	16th	29·096	10th	·305	49·5	66·4	−0·8	46·9	+2·6	56·7	+0·9	19·5	74·0	30th & 31st.	41·0	1st, 2nd & 15th.	33·0
	Lahore	702	29·378	+·029	30·110	29·507	16th	29·176	9th	·331	48·5	67·0	−2·0	48·2	+5·5	56·6	+1·7	20·8	73·9	2nd & 3rd	40·2	1st	33·7
	Sialkot	830	29·258	+·055	30·126	29·385	16th	29·069	9th	·316	49·9	65·9	−0·3	45·1	+2·3	55·5	+1·0	20·8	73·0	4th & 30th.	38·5	1st	34·5
	Rawalpindi	1,674	28·386	+·040	30·162	28·499	17th	28·210	10th	·289	43·9	60·9	−2·2	40·0	+2·1	50·4	−0·1	20·9	68·4	1st	33·9	13th	34·5
13	Khushab	612	29·496	+·041	30·131	29·620	17th	29·292	9th	·328	49·1	67·5	−0·1	45·1	+3·8	56·3	+1·9	22·4	76·9	2nd	37·4	12th	39·5
	Montgomery	558	29·543	+·035	30·117	29·687	17th	29·306	9th	·381	48·6	66·5	−2·0	45·2	+3·0	55·8	+0·5	21·3	75·4	3rd	39·0	24th	36·4
	Multan	420	29·705	+·031	30·125	29·836	19th	29·463	9th	·373	51·4	66·8	−3·4	47·8	+4·5	57·3	+0·5	19·0	74·3	29th & 30th.	41·5	23rd	32·8
	VI.—North-West Frontier Province.																						
15	Peshawar	1,113	28·998	+·024	30·186	29·134	17th	28·806	10th	·328	42·9	61·9	−1·6	40·1	+0·5	51·0	−0·5	21·8	71·2	2nd	32·9	14th	38·3
	D. I. Khan	590	29·527	+·020	30·140	29·652	26th	29·331	9th	·321	47·4	65·4	−3·7	42·7	+3·3	54·5	−0·2	21·7	73·9	2nd	38·1	22nd	35·9
	VII.—Sind.																						
17	Jacobabad	186	29·944	+·026	30·104	30·102	19th	29·722	9th	·380	52·9	72·6	−1·0	48·3	+5·0	60·5	+2·0	24·3	80·1	3rd	39·8	23rd	40·3
	Hyderabad	96	30·034	+·021	30·087	30·154	19th	29·852	9th	·302	58·5	76·5	−0·3	54·8	+3·7	65·7	+1·7	21·7	86·5	3rd	47·5	10th	39·0
	Karachi	13	30·116	+·018	30·080	30·233	25th	29·933	21st	·300	63·9	77·2	+1·6	61·1	+3·7	69·2	+2·7	16·2	83·0	2nd	57·0	10th & 23rd.	26·0
	VIII.—Rajputana.																						
18	Bikaner	*771*	29·307	+·019	30·093	29·441	19th	29·089	9th	·352	52·4	71·5	−0·3	50·4	+1·0	61·0	+0·3	21·1	81·5	4th	44·0	13th	37·5
	Jodhpur	780	29·298	+·016	30·084	29·417	19th	29·086	9th	·331	57·1	79·2	+2·9	53·6	+4·0	66·4	+3·5	25·6	89·0	28th	46·3	13th	42·7
19	Jaipur	1,431	28·642	+·027	30·113	28·773	19th	28·430	9th	·343	54·9	76·0	+1·4	50·2	+2·2	63·1	+1·8	25·8	88·2	30th	41·6	13th	46·6
	Ajmer	1,611	28·466	+·024	30·124	28·590	19th	28·274	9th	·316	53·3	74·0	−0·1	50·9	+5·4	62·5	+2·7	23·1	88·4	29th	44·2	11th, 12th & 14th.	44·3
	Kotah	819?	29·250	+·012?	30·072?	29·371	19th	29·057	9th	·314	58·9	79·4	+2·4	54·0	+3·4	66·7	+2·9	25·4	92·6	30th	46·6	14th	45·7

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

NOTE.—The barometric readings are not reduced to sea-level, in the case

B—*continued.*

stations in India, etc., in January, 1912—continued.

Wind direction. Number of winds from Calm (25)	N. (26)	N.E. (27)	E (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs., in inches of mercury. (43)	Departure from normal, in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec., 1911 to 31st Jan., 1912. (53)	Normal rainfall for period, 1st Dec. to 31st Jan. (54)	Departure from normal of period, 1st Dec., 1911 to 31st Jan., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																IV.—United Provinces of Agra and Oudh—*concld.*
18			1	2	1	3	5	1	S 54° W	N 79° W	1·8	2·2	−0·4	23	− 9	85	+ 6	·350	+·030	1·5	−0·4	1	1·60	−0·60	0·49	0·59	−0·10	0·49	0·83	− 0·34	0·49	Cawnpore.
24		1				1	5		W	N 84° W	1·6	1·6	0	18	−13	85	+ 3	·367	+·047	2·5	0	1	1·90	−0·90	0·65	0·84	− 0·19	0·65	1·19	− 0·54	0·65	Lucknow.
5	1	4	4	1	1	4	7	4	N 67° W	N 45° W	1·9	1·6	+0·3	17	− 6	89	+ 2	·360	+·023	2·1	+0·7	2	1·90	+0·10	2·38	0·89	+1·49	2·38	1·21	+ 1·17	1·87	Bahraich.
9	1	1	1	1	1	13	2	2	S 52° W	N 68° W	2·4	1·5	+0·9	43	+25	77	+15	·341	+·047	6·5	+4·7	0	1·20	−1·20	0·07	0·68	− 0·61	0·07	0·95	− 0·88	0·07	Jhansi.
14	4	1	2	2	1	1	3	3	N 26° W	N 56° W	2·0	2·6	−0·6	17	−15	80	+ 8	·343	+·062	4·8	+2·2	1	1·20	−0·20	1·28	0·54	+0·74	1·53	0·87	+ 0·66	1·21	Agra.
7	4		2	3		3	6	6	N 64° W	N 59° W	1·3	1·2	+0·1	30	+ 2	86	+10	·339	+·054	1·9	−0·7	2	1·50	+0·50	1·16	0·66	+0·50	1·27	1·12	+ 0·15	0·95	Mainpuri.
26			1			2	1	1	S 72° W	N 45° W	0·9	1·6	−0·7	7	−18	87	+ 4	·357	+·060	4·6	+1·9	1	2·36	−1·36	0·46	1·05	−0·59	0·46	1·43	− 0·97	0·46	Bareilly.
21		2	1	2				5	N 5° E	N 53° W	1·8	1·5	+0·3	11	− 5	92	+ 7	·345	+·068	4·8	+1·8	4	2·80	+1·20	2·63	1·59	+1·04	2·63	2·22	+ 0·41	1·60	Roorkee.
																																V.—Punjab.
9	3	1	1	3		2	8	4	N 70° W	S 87° W	2·3	2·1	+0·2	27	− 8	88	+20	·355	+·096	5·1	+1·5	3	2·40	+0·60	1·78	1·07	+0·71	1·78	1·55	+ 0·23	0·65	Delhi.
16	2	2	1	2		3	4	1	N 79° W	N 36° W	2·3	2·5	−0·2	40	− 1	82	+ 6	·297	+·046	4·1	−0·1	6	1·50	+4·50	2·11	0·67	+1·44	2·11	0·98	− 1·13	0·62	Sirsa.
7	3		4	3	2		4	7	N 81° W		3·9			17		92		·331		3·6		4			1·47	1·31	+0·16	1·47	1·71	− 0·24	0·70	Patiala.
8	8		4	1	1		1	8	N 10° W	N 48° W	2·6	1·4	+1·2	40	+22	90	+ 3	·329	+·045	5·7	+2·3	5	2·80	+2·20	1·81	1·57	+0·24	1·81	2·26	−0·45	0·90	Ambala.
24	1			2	1		1	2	W	N 59° W	0·4	1·2	−0·8	3	−16	87	+ 5	·312	+·039	5·9	+1·4	2	2·60	−0·60	1·63	1·72	−0·09	1·66	2·47	− 0·81	1·04	Ludhiana.
21	4	1	2				1	2	N 3° E	N 88° W	1·3	1·2	+0·1	20	+17	87	+ 5	·302	+·047	5·9	+1·9	3	1·90	+1·10	2·24	1·06	+1·18	2·24	1·46	+ 0·78	1·17	Lahore.
22	1	1	4				1	2	N 37° E	N 49° E	0·4	0·9	−0·5	13	+ 5	93	+11	·331	+·062	4·9	+1·5	4	3·40	+0·60	3·13	2·29	+0·84	3·17	2·98	+ 0·19	2·19	Sialkot.
15	5	1	2	1	2	1	3	1	N 18° W	N 40° W	1·8	1·5	+0·3	10	− 4	87	+ 3	·251	+·021	5·1	+0·4	5	4·20	+0·80	2·49	2·67	−0·18	3·34	3·64	− 0·30	1·35	Rawalpindi.
13		2	6		2	4	3	1	S 19° E	N 18° E	2·3	2·1	+0·2	10	− 1	76	+ 6	·265	+·052	6·1	+2·9	2	1·50	+0·50	1·24	0·79	+0·45	1·33	1·22	+ 0·11	0·60	Khushab.
14	6	3	2	2			2	2	N 15° E	N 18° E	2·8	2·5	+0·3	27	+13	82	+ 7	·282	+·036	4·0	+0·2	5	1·30	+3·70	1·56	0·57	+0·99	1·56	0·95	+ 0·61	0·87	Montgomery.
22	9								N	N 35° E	0·7	0·9	−0·2	29	+ 6	85	+14	·318	+·074	4·4	+1·2	6	1·10	+4·90	2·38	0·39	+1·99	2·38	0·61	+ 1·74	1·15	Multan.
																																VI.—North-West Frontier Province.
14				2	8	4	3		S 20° W	S 18° W	1·4	1·8	−0·4	43	+ 4	78	+ 5	·220	+·016	5·0	+0·3	4	2·90	+1·10	1·74	1·64	+0·10	2·40	2·13	+0·27	0·80	Peshawar.
18	2	2						9	N 27° W	N 37° W	0·9	1·0	−0·1	37	+19	80	+11	·262	+·057	4·2	+0·9	2	1·40	+0·60	1·30	0·52	+0·78	1·33	0·73	+0·60	0·75	D. I. Khan.
																																VII.—Sind.
25	1	4						1	N 26° E	N 22° E	1·9	1·6	+0·3	20	+ 2	74	+12	·294	+·076	2·7	−0·8	1	1·00	0	0·20	0·31	−0·11	0·20	0·42	−0·22	0·16	Jacobabad.
5	19	3			1			3	N	N 7° E	3·9	5·1	−1·2	72	+21	69	+11	·339	+·081	3·8	+0·6	1	0·70	+0·30	0·66	0·23	+0·43	0·66	0·29	+0·37	0·66	Hyderabad.
4	5	16	4			2			N 43° E	N 50° E	6·3	6·7	−0·4	69	− 5	65	− 4	·399	+·070	3·2	+0·7	0	1·10	−1·10	0	0·62	−0·62	0	0·75	−0·75	0	Karachi.
																																VIII.—Rajputana.
3	3	8	4	6	3		2	2	N 75° E	N 22° W	3·8	2·7	+1·1	33	+11	68	+11	·277	+·048	5·2	+1·9	3	1·10	+1·90	1·46	0·32	+1·14	1·46	0·51	+ 0·95	1·00	Bikaner.
8	4	17	1			1			N 39° E		2·8			62		57	+13	·271		3·6		0	0·90	−0·90	0	0·17	−0·17	0	0·31	− 0·31	0	Jodhpur.
10	3	7	7	1			1	2	N 50° E	N 6° E	3·0*	2·4	+0·6	46	+17	70	+ 4	·302	+·037	4·0	+0·9	1	1·50	−0·50	0·19	0·49	−0·30	0·19	0·71	− 0·52	0·12	Jaipur.
28	1		1			1			N 45° E	N 9° W	1·5	1·6	−0·1	1	−17	73	0	·300	+·036	3·5	+1·0	1	1·30	−0·30	0·21	0·39	−0·18	0·21	0·67	− 0·46	0·11	Ajmer.
29	2	5	1					1	N 22° E		1·3			23		64	+ 9	·311		2·8		0	0·70	−0·70	0·05	0·23	−0·18	0·09	0·52	− 0·43	0·05	Kotah.

hill or plateau stations, the elevations of which exceed 3,500 feet.

* Uncorrected for scale error.

† Mean of 30 days.

Tabl

(2) *Abstract of observations taken at 8 hrs. at 23*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches: 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air: Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	IX.—Bombay.																						
20	Deesa	466	29·612	+·016	30·054	29·706	25th	29·494	9th	·212	62·6	87·7	+4·6	56·1	+4·6	71·9	+4·6	31·6	94·3	31st	48·9	11th & 13th.	45·4
	Bhuj	395	29·694	+·017	30·059	29·784	19th	29·564	9th	·220	62·7	83·6	+3·2	58·0	+3·6	70·8	+3·4	25·6	90·0	28th	52·0	25th	38·0
	Jamnagar	61	30·056		30·064	30·128	19th	30·006	30th	·122	68·1	83·4		56·0		69·7		27·4	92·4	29th	48·9	11th	43·5
	Dwarka	37?	30·075	+·021	30·058	30·158	25th	29·955	9th	·203	67·3	80·5	+3·3	63·0	+3·7	71·8	+3·5	17·5	87·8	27th	53·7	1st	31·1
	Rajkot	429	29·655	+·025	30·054	29·718	19th	29·554	9th	·164	62·6	86·5	+2·5	55·3	+4·2	70·9	+3·3	31·2	95·1	28th	48·0	24th	47·1
	Veraval	*18*	30·068	+·027	30·029	30·134	19th	29·978	9th	·156	68·7	83·3	+1·8	63·1	+4·3	73·2	+3·1	20·2	92·6	26th	53·5	16th	38·1
	Bhavnagar Para	55	30·046	+·005?	30·048	30·113	20th	29·947	9th	·166	64·0	87·4	+4·8	58·1	+2·2	72·7	+3·5	29·3	93·5	30th	48·5	13th	45·0
	Surat	39	30·052	+·029	30·035	30·131	20th	29·970	9th	·161	65·9	90·7	+3·8	60·1	+3·6	75·4	+3·7	30·6	95·9	28th & 30th.	53·1	11th	42·8
	Ahmadabad	163	29·919	+·011	30·038	30·004	19th	29·811	9th	·193	66·5	88·6	+4·6	58·9	+1·9	73·7	+3·3	29·7	95·6	31st	52·7	13th & 24th.	42·9
26	Bombay	37	30·039	+·028	30·017	30·114	20th	29·976	9th	·138	72·0	85·2	+2·6	69·3	+1·4	77·2	+2·0	15·9	92·0	27th	64·5	12th	27·5
	Ratnagiri	110	29·936	+·027	29·987	29·997	19th	29·882	9th	·115	72·3	87·3	+0·2	66·1	−0·1	77·0	+0·1	21·8	97·8	27th	60·9	7th & 15th.	36·9
	Goa	199	?	?	?	?	?	?	?	?	70·5	84·9	−2·0	68·7	+0·9	76·8	−0·5	16·2	88·1	20th & 21th.	65·1	7th, 8th & 9th.	23·0
	Marmagao	*60*	29·997	+·038	29·993	30·052	19th	29·938	14th	·124	71·2	84·2	−1·6	68·7	−0·2	76·5	−0·9	15·5	88·0	20th	65·7	7th & 9th	22·3
	Karwar	44	30·017	+·038	29·996	30·090	19th	29·951	14th	·139	66·3	86·0	−0·9	63·7	−1·8	74·9	−1·3	22·3	91·2	21st	58·5	7th	32·7
27	Malegaon	1,430	28·646	+·031	30·082	28·720	20th	28·554	9th	·166	61·7	88·7	+3·1	53·4	+1·5	71·1	+2·3	35·3	93·4	22nd, 23rd & 24th.	47·1	14th	46·3
	Ahmadnagar	2,154	27·920	+·041	30·057	27·998	20th	27·829	10th	·169	63·8	86·3	+2·3	53·9	+3·2	70·1	+2·7	32·4	90·1	22nd & 26th.	47·5	7th	42·6
	Poona	1,846	28·223	+·033	30·082	28·302	19th	28·129	10th	·173	59·1	87·5	+1·6	54·3	0	70·9	+0·8	33·2	92·0	22nd & 26th.	48·3	15th	43·7
	Sholapur	1,590	28·480	+·034	30·045	28·559	19th	28·389	10th & 11th.	·170	67·9	88·4	+0·7	60·2	+2·0	74·3	+1·3	28·2	92·3	29th	52·1	6th	40·2
	Bijapur	*1,948*	28·101	+·025	30·014	28·184	19th	28·023	11th	·161	68·7	89·0	+3·8	60·0	+2·0	74·5	+2·9	29·0	93·2	26th	50·8	3rd & 7th	42·4
	Belgaum	2,539	27·513	+·038	29·994	27·592	19th	27·441	11th	·151	68·2	84·8	+1·3	57·0	−0·5	70·9	+0·4	27·8	88·3	26th	49·5	8th & 12th.	38·8
	X.—Central India.																						
21	Neemuch	1,624	28·443	+·027	30·091	28·557	19th	28·291	9th	·266	57·5	80·1	+2·5	51·3	+2·6	65·7	+2·5	28·8	89·9	31st	41·0	13th	48·9
	Indore	1,823	28·240	+·034	30·081	28·339	26th	28·109	9th	·230	59·9	81·4	+2·0	51·6	+1·8	66·5	+1·9	29·8	88·1	31st	43·6	13th	44·5
22	Nowgong	754	29·349	+·030	30·107	29·454	19th	29·174	10th	·280	55·0	74·1	−1·0	49·4	+2·4	61·7	+0·7	24·7	86·5	31st	43·0	15th	43·5
	Sutna	1,041	29·043	+·032	30·103	29·141	16th	28·837	10th	·304	55·1	75·5	+0·4	49·3	+1·7	62·4	+1·1	26·2	86·3	31st	41·8	13th & 15th.	44·5
	XI.—Central Provinces.																						
23	Buldana	2,132	27·819		29·912?	27·890	19th	27·724	10th	·166	67·8	83·0		60·0		71·5		23·0	87·4	22nd & 26th.	54·3	14th	33·1
	Akola	930	29·152	+·033	30·072	29·225	20th	29·048	10th	·177	62·8	83·5	+3·3	53·9	+0·5	71·2	+1·9	31·6	94·2	22nd	46·1	2nd, 3rd & 14th.	48·1
	Amraoti	1,215	28·853	+·031	30·029?	28·915	27th	28·724	10th	·191	65·6	85·9	+1·3	60·2	+2·4	73·0	+1·9	25·7	91·8	25th	54·3	6th	37·5
24	Khandwa	1,044	29·039	+·038	30·083	29·128	26th	28·912	10th	·216	61·7	86·7	+2·8	53·2	+1·4	70·0	+2·1	33·5	93·2	30th & 31st.	43·6	14th	49·6
	Hoshangabad	1,006	29·085	+·034	30·100	29·180	26th	28·927	10th	·253	57·4	81·5	+1·2	53·0	+0·7	67·2	+0·9	28·5	90·1	31st	44·9	2nd	45·2
	Saugor	1,807	28·249	+·019	30·076	28·345	19th	28·087	10th	·258	59·1	78·1	+1·2	53·9	+2·1	66·0	+1·7	24·2	89·3	31st	44·6	12th	41·7
	Jubbulpore	1,327	28·731	+·014	30·085	28·821	27th	28·550	10th	·271	54·6	77·6	0	50·3	+2·3	64·0	+1·1	27·3	85·8	31st	43·3	4 days	42·5
	Seoni	2,033	28·046	+·044	30·103	28·125	20th	27·901	10th	·224	59·0	78·5	−0·7	52·2	+0·9	65·3	+0·1	26·3	85·1	25th	42·5	1st	42·6
	Nagpur	1,017	29·068	+·039	30·080	29·152	27th	28·933	10th	·219	62·7	84·3	+0·7	55·7	+0·1	70·0	+0·4	28·6	91·6	24th & 25th.	48·8	1st, 2nd & 3rd.	42·8
25	Pendra	2,123?	28·033		30·088	28·127	16th	27·875	10th	·252	57·9	76·3		51·4		63·9		24·9	84·8	25th	44·7	4th	40·1
	Raipur	970	29·119	+·039	30·083	29·216	20th	28·986	10th	·230	61·0	81·8	+0·2	56·9	+1·5	69·3	+0·9	24·9	89·7	25th	48·6	1st	41·1
	Chanda	*634*	29·451	+·029	30·060	29·528	27th	29·335	10th	·193	63·9	85·9	+0·5	55·5	+1·4	70·7	+0·9	30·4	92.5	25th	44·0	2nd	49·6
	Jagdalpur	1,813	28·261		30·087	28·345	20th	28·161	11th	·184	58·8	81·9		51·1		66·5		30·8	87·2	24th, 25th & 28th.	43·1	6th	44·1

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

B—*continued.*

***stations in India, etc., in January, 1912*—continued.**

Wind direction. Number of winds from: Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs., in inches of mercury. (43)	Departure from normal, in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec., 1911, to 31st Jan., 1912. (53)	Normal rainfall for period, 1st Dec. to 31st Jan. (54)	Departure from normal of period, 1st Dec., 1911, to 31st Jan., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																IX.—Bombay.
																47	+ 1	·267	+ ·040	2·9	+1·3	0	0·36	−0·36	0	0·13	−0·13	0	0·19	− 0·19	0	Deesa.
8	3	2		4		4	5	5	N 72° W	N 45° W	4·3	4·7	−0·4	23	+ 5	73	+18	·419	+ ·104	3·6	+2·3	0	0·10	−0·10	0	0·07	−0·07	0	0·12	− 0·12	0	Bhuj.
2	1	18	6		1	2		1	N 54° E		4·6			63		56		·381		1·3		0			0	0·03	−0·03	0	0·10	− 0·10	0	Jamnagar.
4	11	10	2				2	2	N 16° E		7·1			66		69	0	·467		3·2		0			0·02	0·05	−0·03	0·02	0·11	− 0·09	0·02	Dwarka.
11	2	2	5	4	1	3	1	2	S 77° E	N 55° E	4·5	3·8	+0·7	17	−25	50	− 3	·264	−·006	3·7	+2·7	0	0·20	−0·20	0	0·04	−0·04	0	0·09	− 0·09	0	Rajkot.
22	5	3						1	N 10° E	N 20° E	3·4	4·3	−0·9	27	−48	56	+ 4	·389	+·067	3·1	+1·8	0	0	0	0	0·01	−0·01	0	0·13	− 0·13	0	Veraval.
20			1			1	4	5	N 24° W	N 85° W	0·7	5·0	−4·3	10	−55	48	−19	·294	−·063?	2·6	+1·5	0	0·10	−0·10	0	0·03	−0·03	0·02	0·13	− 0·11	0	Bhavnagar Para.
3	3	7	8	5			1	4	N 60° E	N 5° E	2·7	3·6	−0·9	46	+ 4	63	− 1	·407	+·031	1·5	+0·8	0	0·20	−0·20	0	0·07	−0·07	0	0·12	− 0·12	0	Surat.
8	1	15	2	1			3	1	N 40° E	N 48° E	2·8	3·1	−0·3	46	−25	56	+ 9	·369	+·099	2·2	+0·5	0	0·10	−0·10	0	0·02	−0·02	0	0·06	− 0·06	0	Ahmadabad.
	3	15	11	2					N 62° E	N 56° E	5·5*	7·2	−1·7	82	+ 1	72	0	·568	+·019	2·6	+1·7	0	0·13	−0·10	0	0·09	−0·09	0	0·16	− 0·16	0	Bombay.
2	2	5	5	1					N 62° E	S 88° E	5·6	5·6	0	67	+12	81	+ 1	·479	0	0·7	−0·1	0	0·20	−0·20	0	0·12	−0·12	0	0·21	− 0·21	0	Ratnagiri.
		2	29						N 87° E	N 75° E	4·5	4·1	+0·4	99	+12	75	+ 8	·556	−·011	2·2	+1·8	0			0	0·18	−0·18	0	0·32	− 0·32	0	Goa.
3	1	8	19						N 75° E	S 84° E	5·0*	6·0	−1·0	86	+ 9	81	0	·614	−·019	2·1	+1·7	0			0	0·03	−0·03	0	0·21	− 0·21	0	Marmagao.
15		16							N 45° E	N 62° E	1·5	2·6	−1·1	49	−38	84	+ 5	·545	+·012	1·3	+0·9	0	0·10	−0·10	0	0·07	−0·07	0·15	0·25	− 0·10	0	Karwar.
3	1				1	6	16	4	S 87° W	N 68° W	4·2	3·7	+0·5	76	+11	43	−15	·242	−·065	0·5	−0·8	0	0·10	−0·10	0	0·14	−0·14	0·47	0·36	+ 0·11	0	Malegaon.
2	5	1		2	5	2		14	N 49° W	N 5° W	3·4	4·3	−0·9	40	+33	40	−21	·237	−·106?	1·4	+0·5	0	0·20	−0·20	0	0·13	−0·13	0·04	0·58	− 0·54	0	Ahmadnagar.
24			5				2		E	S 70° W	7·4	4·5	+2·9	10	−58	59	+ 2	·297	−·011	0	−0·8	0	0·20	−0·20	0	0·06	−0·06	0·08	0·25	− 0·17	0	Poona.
1	1	6	7	7	2	2		5	N 88° E	S 66° E	7·1	5·7	+1·4	36	−19	43	− 5	·298	−·027	1·6	+0·6	0	0·20	−0·20	0	0·13	−0·13	1·85	0·59	+ 1·26	0	Sholapur.
8	4	3	2	6	5	1		2	S 69° E	S 59° E	2·8	3·1	−0·3	23	−21	53	−15	·375	−·080	1·4	+0·2	0	0·20	−0·20	0	0·01	−0·01	0	0·31	− 0·31	0	Bijapur.
10		2	11	7				1	S 80° E	S 81° E	6·6	7·3	−0·7	56	+13	47	− 9	·322	−·034	2·0	+1·1	0	0·20	−0·20	0	0·10	−0·10	0·64	0·44	+0·20	0	Belgaum.
																																X.—Central India.
4	2	8	9	4	1	2	1		N 81° E	N 48° E	4·2	4·7	−0·5	49	− 1	65	+ 8	·302	+·038	2·7	+1·1	1	0·40	+0·60	0·12	0·19	−0·07	0·17	0·40	− 0·23	0·12	Neemuch.
21		2	2	3	1	1	1		S 57° E	N 36° E	1·3	1·8	−0·5	13	+ 2	58	− 4	·300	+·002	2·5	+1·1	0	0·40	−0·40	0	0·14	−0·14	0	0·39	− 0·39	0	Indore.
11		4		2	8	2	3	1	S 7° W	N 56° W	1·1	1·0	+0·1	23	− 3	80	+ 4	·348	+·040?	3·7	+1·4	1	1·70	−0·70	0·11	0·67	−0·56	0·11	1·17	− 1·06	0·11	Nowgong.
12			2	3		7	5	2	S 52° W	N 20° W	1·0	3·0	−2·0	30	− 6	75	+ 5	·324	+·032	4·6	+3·4	0	1·80	−1·80	0	0·95	−0·95	0	1·38	− 1·38	0	Satna.
																																XI.—Central Provinces.
		3	5	11	4		5	3	S 49° E		3·7†	4·2	−0·5	32		39		·269		1·3		0			0	0·23	−0·23	0	0·32	− 0·32	0	Buldana.
6		10	1	1	2	4	2	5	N 5° E	S 84° E	2·4	2·7	−0·3	16	−19	46	− 9	·267	−·031	3·0	+1·8	0	0·70	−0·70	0	0·31	−0·31	0	1·02	− 1·02	0	Akola.
5		7	15	2	1		1		N 83° E	N 87° E	4·9	3·1	+1·8	66	+ 5	48	− 4	·304	−·023	1·7	+0·5	0	0·90	−0·90	0	0·35	−0·35	0	0·92	− 0·92	0	Amraoti.
8	2	5	5	4	1	2	3	1	N 81° E	N 39° E	2·8	2·4	+0·4	20	− 3	53	− 3	·295	+·020	1·9	+0·9	0	0·50	−0·50	0	0·24	−0·24	0	0·55	− 0·55	0	Khandwa.
18		4	9						N 77° E	N 63° E	2·3	2·0	+0·3	40	−17	71	+ 4	·336	+·023?	2·3	+0·9	0	0·80	−0·80	0	0·27	−0·27	0	0·78	− 0·78	0	Hoshangabad.
10	1	4	1	7	4	2	2		S 39° E	S 84° E	3·7	2·6	+1·1	30	+ 1	66	+ 7	·312	+·032	2·5	+1·2	0	1·50	−1·50	0·02	0·60	−0·58	0·02	1·13	− 1·11	0·02	Saugor.
12	1	1		7	9	1			S 22° E	S 63° E	0·9	1·5	−0·6	46	+10	78	+ 3	·336	+·015	2·3	+0·6	0	1·40	−1·40	0·08	0·75	−0·67	0·08	1·06	− 0·98	0·08	Jubbulpore.
9	5	7	1	1	2	4	1	1	N 23° E	N 39° E	3·0	1·9	+1·1	20	−12	65	− 2	·331	−·008	1·7	+0·1	3	1·20	+1·80	1·15	0·50	+0·65	1·15	1·05	+ 0·10	0·62	Seoni.
5	8	10	6	1				1	N 41° E	N 13° E	2·3	2·6	−0·3	66	+34	61	0	·358	+·010	1·8	+0·5	0	1·00	−1·00	0	0·34	−0·34		0·90	− 0·90	0	Nagpur.
12	7	1		2	2	2		5	N 24° W		3·1			23		63		·326		1·7		1			0·85	0·85	0	0·8	1·23	−0·38	0·82	Pendra.
19	2	2	1		2	1	1	3	N 27° W	N 13° E	1·6	2·0	−0·4	10	0	70	+ 8	·377	+·030	0·6	−0·8	0	0·80	−0·80	0	0·21	−0·21	0	0·47	− 0·47	0	Raipur.
20	1	1	3	1			2		N 87° E	N 63° E	1·2	1·5	−0·3	16	−12	68	− 3	·414	+·017	1·4	+0·3	0	0·60	−0·60	0	0·23	−0·23	0	0·51	− 0·51	0	Chanda.
11	5	1	1	5	2	1	3	2	N 6° E					3		85		·423		1·1					0			0·02			0	Jagdalpur.

stations, the elevations of which exceed 3,000 feet.

* Uncorrected for scale error.

† Mean of 26 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 235*

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XII.—Hyderabad.																						
28	Aurangabad	1,905	28·177	+·018?	30·066	28·248	20th	28·082	10th	·160	66·2	85·5	+0·3?	57·1	+2·2	71·3	+1·3	28·4	89·2	22nd	50·2	3rd, 5th & 7th.	39·0
	Nizamabad	1,248	28·815		30·050	28·889	19th	28·724	11th	·165	64·7	88·2	+2·9	56·6	+0·2	72·4	+1·5	31·6	93·4	25th	44·7	2nd & 3rd	48·7
	Bidar	*2,165*									70·3	86·4		61·6		74·0		24·8	90·5	26th	56·4	3rd	34·1
29	Gulbarga	1,503	28·570	+·039	30·055	28·653	19th	28·477	11th	·176	65·9	88·7	+2·0	59·2	+0·7	73·9	+1·3	29·5	93·0	27th	50·8	4th	42·2
	Raichur	*1,311*	28·765	+·052?	30·046	28·837	19th	28·674	11th	·163	70·4	88·3	+1·6	62·9	−0·5	75·6	+0·5	25·4	92·0	27th	56·1	5th & 7th	35·9
	Hyderabad (Deccan)	1,690	28·377	+·031	30·054	28·452	19th	28·287	11th	·165	64·0	86·7	+2·2	59·5	+1·4	73·1	+1·8	27·2	91·8	26th	52·2	3rd, 4th & 5th.	39·6
	Hanamkonda	877	29·210	+·042	0·058	29·284	19th	29·106	11th	·178	68·8	86·8	+1·0	61·8	−1·1	74·3	−0·1	25·0	92·0	25th & 26th.	53·2	3rd	38·8
	XIII.—Mysore.																						
30	Chitaldrug	2,405	27·656	+·037	29·996	27·722	20th	27·570	11th	·152	70·2	85·5	+1·7	62·1	+1·0	73·8	+1·3	23·4	88·6	20th & 25th.	55·8	5th	32·8
	Hassan	3,149	26·949	+·052?	30·019	27·023	19th	26·879	11th	·144	65·2	82·9	+1·4	54·4	+0·3	68·6	+0·9	28·5	86·2	25th	48·9	5th	37·3
	Bangalore	3,021	27·073	+·035	30·032	27·142	19th	26·993	11th	·155	63·4	82·6	+2·4	55·6	−1·2	69·1	+0·6	27·0	86·3	25th	48·8	7th	37·5
	Mysore	2,518	27·560	+·038	30·022	27·640	19th	27·498	11th	·142	66·9	84·3	+0·3	57·6	−1·7	70·9	−0·7	26·7	88·0	28th	53·0	7th & 8th.	35·0
	XIV.—Madras.																						
31	Mangalore	65	29·981	+·027	29·978	30·058	19th	29·929	9th	·129	74·7	89·2	−0·4	68·7	+0·3	78·9	−0·1	20·5	94·3	19th, 21st & 28th.	63·9	7th	30·4
	Calicut	27	30·015	+·031	29·971	30·081	19th	29·957	1st	·124	72·8	85·9	−1·7	69·5	−0·1	77·7	−0·9	16·4	88·3	18th & 19th.	65·1	8th & 9th	23·2
	Cochin	9	30·031	+·039	29·967	30·107	19th	29·982	1st	·125	73·6	88·7	−0·4	70·3	−1·2	79·5	−0·8	18·4	91·7	4 days	66·2	8th	25·5
	Trivandrum	198	29·834	+·062	29·966	29·899	20th	29·779	14th	·120	73·1	83·4	0	69·8	−1·4	76·6	−0·7	13·6	87·5	20th	65·5	5th & 7th	22·0
32	Tinnevelly	168	29·925	+·054	30·026	30·004	20th	29·839	4th	·165	74·8	87·3	−0·4	69·4	−2·2	78·3	−1·3	17·9	90·2	4 days	65·4	5th	24·8
	Pamban	37	30·024	+·037	29·988	30·097	20th	29·951	14th	·146	76·6	83·0	+1·1	71·4	−3·4	77·2	−1·1	11·6	84·7	4 days	69·0	8th	15·7
	Madura	447	29·639	+·055	30·029	29·706	19th	29·583	11th	·123	73·2	86·4	−1·1	67·1	−1·5	76·8	−1·3	19·3	89·5	31st	63·1	5th, 7th & 13th.	26·4
	Pudukkottai	318	29·770		30·028	29·856	19th	29·701	11th	·155	72·0	84·9		66·6		75·8		18·3	89·6	31st	61·4	7th	28·5
	Negapatam	31	30·040	+·038	29·999	30·116	20th	29·972	11th	·144	74·2	83·0	+1·2	69·8	−1·0	76·4	+0·1	13·2	86·5	27th	62·0	4th	24·5
	Trichinopóly	255	29·842	+·054	30·035	29·925	19th	29·776	11th	·149	73·4	86·9	−0·5	66·1	−1·1	76·5	−0·8	20·8	90·6	31st	61·3	4 days	29·3
	Coimbatore	1,341	28·734	+·044	30·036	28·820	19th	28·679	10th & 11th.	·141	69·5	86·3	−0·5	60·7	−3·2	73·5	−1·9	25·6	90·0	31st	53·3	7th & 8th	36·7
	Salem	940	29·174	+·048	30·073	29·262	19th	29·109	11th	·153	70·9	89·5	+1·2	62·4	−1·3	75·9	−0·1	27·1	92·5	14th & 25th.	54·8	7th	37·7
	Cuddalore	37	30·058	+·026	30·026	30·142	19th	29·996	11th	·146	71·5	82·1	−1·2	66·7	−0·6	74·4	−0·9	15·4	84·3	14th	61·7	6th	22·6
	Vellore	707	29·387		30·052	29·473	19th	29·301	11th	·172	66·5	84·2		60·3		72·3		23·9	87·7	31st	54·5	7th	33·2
	Madras	22	30·079	+·038	30·032	30·160	19th	30·003	11th	·157	72·0	83·4	−1·3	65·8	−1·6	74·6	−1·5	17·6	87·0	14th	60·5	4th	26·5
33	Cuddapah	433	29·649	+·031	30·023	29·731	19th	29·552	11th	·179	69·9	89·7	+1·3	62·9	−1·5	76·3	−0·1	26·8	94·2	25th & 26th.	52·6	7th	41·6
	Bellary	1,475	28·581	+·026	30·030	28·648	19th	28·481	11th	·167	68·0	90·4	+2·8	61·4	+0·9	75·9	+1·9	29·0	94·0	26th & 27th.	52·8	6th	41·2
	Karnool	922	29·141	+·023	30·039	29·221	19th	29·047	11th	·174	64·7	90·4	+1·7	58·5	−0·2	74·5	+0·7	31·9	95·2	26th	49·1	7th	46·1
34	Nellore	66	30·032	+·041	30·035	30·113	19th	29·938	11th	·175	70·6	83·8	−2·2	65·4	−0·9	74·6	−1·5	18·4	88·6	26th	61·1	5th & 7th	27·5
	Masulipatam	15	30·100	+·043	30·049	30·176	19th	30·005	11th	·171	70·2	83·5	0	64·2	−1·1	73·9	−0·5	19·3	91·8	27th	58·7	5th	33·1
	Cocanada	26	30·089	+·040	30·052	30·171	19th	29·995	11th	·176	69·7	81·3	+0·3	65·0	−0·3	73·1	0	16·3	90·7	26th & 27th.	59·6	5 days	31·1
	Waltair (Vizagapatam).	*226*	29·888	+·037	30·061	29·964	17th	29·806	11th	·178	62·5	80·8		67·2		74·0		13·6	87·6	27th	62·4	3rd	25·2
	Calingapatam	19	30·098		30·056	30·199	17th	30·009	11th	·190	66·2	82·8		62·3		72·6		20·5	90·8	25th	55·4	5th & 7th	35·4
	Gopalpur	33	30·078	+·043	30·053	30·184	17th	29·996	11th	·188	65·3	80·5	+0·2	62·2	+1·0	71·4	+0·6	18·3	85·7	25th	54·5	1st	31·2

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.

B—*continued.*

stations in India, etc., in January, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 31st Jan., 1912.	Normal rainfall for period, 1st Dec. to 31st Jan.	Departure from normal of period, 1st Dec., 1911 to 31st Jan., 1912.	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	56	57
																																XII.—Hyderabad.
3	1	9	10	6	1			1	N 82° E		5·0			66		43	− 5	·275		2·9		0	0·20	−0·20	0	0·27	−0·27	0	0·58	−0·58	0	Aurangabad.
26	2				3				S		1·7			3		60	− 5	·370		1·6		0	0·20	−0·20	0	0·10	−0·10	0	0·21	−0·21	0	Nizamabad.
19			1	5	1	5			S 7° E		1·5			26		48		·359		6·9		0	1·10	−0·10	0	0·21	−0·21	0	0·51	−0·51	0	Bidar.
13		9	5	1	2	1			N 76° E	S 86° E	3·4	5·2	−1·8	37	+ 5	46	−11	·296	−·080	0·3	−0·8	0	0·20	−0·20	0	0·12	−0·12	0·30	0·34	−0·04	0	Gulbarga.
	1		3	19	4	2	1	1	S 37° E	S 55° E	4·7	5·9	−1·2	69	+16	53	−10	·397	−·052	2·0	+0·5	0	0·10	−0·10	0	0·08	−0·08	0·04	0·23	−0·19	0	Raichur.
31									(a)	S 51° E	1·5	2·6	−1·1			65	−10	·398	−·056	1·5	+0·1	0			0	0·23	−0·23	0	0·40	−0·40	0	Hyderabad (Deccan).
7	3			16	4			1	S 43° E		4·0			49		62	−11	·437		2·6		0	0·20	−0·20	0	0·45	−0·45	1·08	0·67	+0·41	0	Hanamkonda.
																																XIII.—Mysore.
2		1	15	11	1	1			S 69° E	S 69° E	4·7	4·9	−0·2	79	+24	46	−12	·339	−·083?	2·3	+0·8	0	0·30	−0·30	0	0·15	−0·15	0	0·57	−0·57	0	Chitaldrug.
9		3	9	10					S 74° E	S 80° E	3·3	2·1	+1·2	58	−11	61	−11	·386	−·074	2·0	−0·7	0	0·10	−0·10	0	0·03	−0·03	0·43	0·88	−0·45	0	Hassan.
		3	24	4					S 89° E	N 87° E	5·8	3·9	+1·9	96	+14	73	− 5	·427	−·031	1·9	−1·1	0	0·10	−0·10	0	0·27	−0·27	0·62	0·76	−0·14	0	Bangalore.
2	3	11	9	5		1			N 71° E	N 72° E	6·3	6·4	−0·1	66	− 4	69	− 4	·457	−·027	2·2	−0·3	0	0·10	−0·10	0	0·16	−0·16	0·56	0·59	−0·03	0	Mysore.
																																XIV.—Madras.
		2	28	1					N 89° E	S 85° E	3·5	2·3	+1·2	99	+21	65	− 6	·564	−·037	1·8	+0·2	0	0·10	−0·10	0	0·08	−0·08	1·03	0·56	+0·47	0	Mangalore.
7		7	12	5					N 86° E	N 80° E	3·1	6·1	−3·0	66	−17	79	+ 2	·636	−·025	1·4	0	1	0·30	+0·70	0·12	0·42	−0·30	0·73	1·52	−0·79	0·12	Calicut.
	1	28	2						N 47° E	N 42° E	*† 3·1	3·7	−0·6	99	+18	66	− 6	·547	−·064	0·2	−1·2	0	1·00	−1·00	0·01	0·64	−0·63	4·14	2·25	+1·89	0·01	Cochin.
13	5	8	4			1			N 42° E	N 44° E	3·1*	2·9	+0·2	46	− 4	76	− 1	·622	−·055	1·9	−1·0	0	1·30	−1·30	0·08	0·66	−0·58	6·51	2·86	+3·65	0·08	Trivandrum.
	19	4					1	7	N 6° W	N 19° W	3·2	3·7	−0·5	89	+ 6	74	− 4	·640	−·058	3·4	+0·9	1	1·50	−0·50	0·35	1·35	−1·00	5·69	4·68	+1·01	0·28	Tinnevelly.
	12	16	3						N 31° E	N 15° E	9·8	8·3	+1·5	89	+45	82	− 3	·742		3·6		0	2·20	−2·20	0·10	1·97	−1·87	11·53	9·52	+2·01	0·06	Pamban.
2	13	9	3					4	N 16° E	N 3° E	5·5	3·7	+1·8	76	− 3	79	+ 5	·639	+·007	4·1	+1·3	0	0·80	−0·80	0·10	0·51	−0·41	4·50	2·29	+2·21	0·06	Madura.
1	19	8						3	N 6° E		6·3			87		81		·638		5·7		3			0·83	1·23	−0·40	7·82	2·28	+5·54	0·48	Pudukkottai.
		9	1					21	N 19° W	N 1° W	6·1	5·7	+0·4	72	+11	78	− 4	·660	−·054	4·9	−0·6	0	1·90	−1·90	0·14	1·76	−1·62	31·70	13·04	+18·66	0·07	Negapatam.
9	15	4					3		N 1° W	N 18° E	3·0*	3·2	−0·2	57	+ 9	76	− 1	·621	−·011	2·4	−0·6	0	0·60	−0·60	0·14	0·59	−0·45	4·34	3·27	+1·07	0·07	Trichinopoly.
10	1	20							N 43° E	N 67° E	2·8	2·1	+0·7	69	− 3	80	− 4	·578	−·040	2·5	0	0	0·50	−0·50	0	0·60	−0·60	2·75	1·75	+1·00	0	Coimbatore.
12	2	4	12	1					N 75° E	N 50° E	3·5	3·5	0	53	+11	81	+ 6	·622	+·037	2·4	0	0	0·30	−0·30	0	0·34	−0·34	0·69	1·44	−0·75	0	Salem.
4	8						1	18	N 34° W	N 21° W	5·3	1·9	+3·4	82	+ 3	85	− 3	·664	−·016	4·1	−0·1	2	1·20	+0·80	1·89	1·23	+0·66	12·95	8·44	+4·52	1·35	Cuddalore.
31									(a)		1·5					84		·551		1·7		0	0·70	−0·70	0·03	1·62	−1·59	5·38	5·14	+0·24	0·03	Vellore.
2	4	2	1			1	7	14	N 46° W	N 16° E	3·3*	4·2	−0·9	69	+11	87	+ 5	·685	−·004	1·9	−1·5	2	2·10	−0·10	2·83	0·91	+1·92	9·20	7·15	+2·05	1·76	Madras.
	1	2	7	14	1	4	1	1	S 52° E	S 65° E				56	+ 2	72	− 3	·534	−·047	2·1	+0·6	0	0·20	−0·20	0	0·36	−0·36	0·38	1·40	−1·02	0	Cuddapah.
12	2		1	6	9	1			S 20° E	S 36° E	2·5	2·6	−0·1	43	+ 1	56	−10	·383	−·072	1·0	−0·6	0	0·10	−0·10	0	0·11	−0·11	0·06	0·23	−0·17	0	Bellary.
18	2		5	2	2	1		1	S 75° E	S 80° E	*† 3·2			17	+13	63	− 5	·388	−·074	0·8	−0·4	0	0·20	−0·20	0	0·11	−0·11	0·23	0·41	−0·18	0	Kurnool.
16	1		1				1	12	N 42° W	N 51° W	2·0*	2·7	−0·7	40	−11	85	− 1	·640	−·035	2·6	−1·1	1	0·50	+0·50	0·10	1·43	−1·33	3·94	4·50	−0·56	0·10	Nellore.
5	15	6	1	1				3	N 10° E	N 14° E	2·6	3·4	−0·8	72	− 3	83	− 3	·618	−·025	1·4	−0·4	0	0·30	−0·30	0	0·17	−0·17	0·87	1·21	−0·34	0	Masulipatam.
23	3	5							N 28° E	N 7° W	2·8	5·7	−2·9	27	−54	79	+ 6	·585	+·043	7·0	+5·3	0	0·40	−0·40	0	0·16	−0·16	1·27	1·24	+0·03	0	Cocanada.
3	5	6					15	2	N 42° W	N 78° W	3·5			53	+ 4	73	+ 7	·581	+·029	2·7	+1·3	0	0·60	−0·60	0	0·71	−0·71	1·26	1·76	−0·50	0	Waltair (Vizagapatam).
1	11						2	17	N 31° W		4·7			87		85		·554		1·5		0			0	0·39	−0·39	1·00	2·17	−2·17	0	Calingapatam.
	15	1						15	N 20° W	N 21° W	6·3	6·1	+0·2	92	+11	85	+ 8	·529	+·030	2·4	+1·0	0	0·40	−0·40	0	0·23	−0·23	0·21	1·20	−0·99	0	Gopalpur.

† Mean of 30 days. * Uncorrected for scale error. (a) Indeterminate.

Table

(2) *Abstract of observations taken at 8 hrs. at 235*

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Bay Islands.																						
1	P. V. Fraser	8	30·120†		30·043†	30·220	19th	30·040	7th	·180	72·8												
	Port Blair	58	29·951	+·011	29·939	30·051	16th	29·772	6th	·279	77·2	83·8	−2·6	74·2	−1·1	79·0	−2·0	9·6	87·2	16th	70·0	21st & 23rd.	17·2
	Sippur Island	90	29·931		29·959	30·032	29th	29·788	7th	·241	77·8	82·6		74·9		78·7		7·7	85·6	1st, 14th & 15th.	70·6	7th	15·0
	Kashmir.																						
14	Muzaffarabad	2,475	27·719		30·323	27·805	26th	27·501	22nd	·304	41·9	62·8		35·9		49·8		27·9	67·1	3rd	32·6	21st	34·5
	Srinagar	5,204	24·993	−·004	24·964	25·106	27th	24·690	22nd	·476	34·1	45·5	+6·5	32·0	+5·6	38·7	+6·1	13·5	51·1	8th	25·6	2nd	25·5
	Dras	*10,059*	20·802	+·023	20·770	20·978	1st	20·396	22nd	·582	0·5	17·8		10·1‖		4·1‖		27·9	31·4	30th	−37·5	13th	68·9
	Leh	11,503	19·653	−·009	19·620	19·831	27th	19·286	22nd	·545	12·1	32·6‡	+2·8‡	8·0	−0·8	20·7‡	+1·0	24·6	41·4	11th	−2·0	25th	43·4
	Skardu	*7,505*	22·974	+·019	22·944	23·159	1st	22·518	22nd	·641	22·2	35·1	−1·7	18·7	+1·8	25·9	+0·1	14·4	40·5	23rd	2·1	23rd	38·4
	Gilgit	4,890	25·240		25·213	25·431	26th	24·837	22nd	·594	34·9	46·2	+1·0	31·2	−0·4	38·7	+0·3	15·0	52·2	1 th & 26th.	16·7	27th	35·5
	Baluchistan.																						
16	Quetta	5,502	24·719	+·032	24·679	24·852	28th	24·443	21st	·339	35·9	49·5	−1·8	31·7	+2·4	40·6	+0·3	17·8	63·6	2nd	21·7	22nd	41·9
	Chaman	4,311	25·795	+·023	25·757	25·951	28th	25·551	21st	·400	41·5	52·6	0	37·5	+1·6	45·1	+0·8	15·1	68·3	1st	21·8	22nd & 23rd.	46·5
	Kalat	6,630	23·879		23·841	23·940	25th	23·689	21st	·251	33·6	48·3		?		?		?	59·5	2nd &3rd	?	?	?
	Dalbandin	2,779	27·277		30·159	27·459	28th	27·002	21st	·457	44·6	63·0		39·6		51·3		23·4	80·8	2nd	28·8	22nd & 25rd.	52·0
	Pasni		30·106		30·066	30·189	28th	29·905	21st	·284	63·2	78·1		60·3		69·2		17·8	85·0	14th	51·0	23rd	34·0
	Panjgur		26·881		26·839	26·998	28th	26·671	21st	·327	45·2	63·9§		42·8		53·4§		21·1	76·3	4th	30·5	22nd	45·6
	Robat		27·006		26·964	27·223	28th	26·833	6th & 19th.	·390	41·5	58·0		38·3		48·2		19·7	80·5	2nd	26·3	22nd	54·2
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*									31·1	45·5		26·9		36·2		18·6	55·1	7th	14·2	24th	40·9
	Para Chinar	6,000	24·512		24·488	24·659	26th	24·318	10th	·341	32·2	47·5		27·7		37·6		19·8	62·2	15th	14·1	23rd	48·1
	Cherat	*4,256*	25·826	+·057	25·794	25·937	19th	25·630	22nd	·307	41·4	48·3	−0·9	37·5	−0·4	42·9	−0·7	10·8	55·2	8th	32·4	4 days	22·8
	Murree	6,333	23·893	+·029	23·861	23·992	27th	23·705	22nd	·287	37·1	44·5§	−2·7§	34·2	−1·0	39·4§	−1·9	10·3	55·1	2nd	28·7	16th, 22nd & 25rd.	26·4
	Simla	7,232	23·151	+·046	23·113	23·280	28th	22·971	10th	·309	39·8	46·5	+2·0	37·1	+2·6	41·8	+2·3	9·4	69·0	28th	30·1	15th	29·9
	Sarain		23·194		23·156	23·301	28th & 30th	23·024	10th	·277	31·0	44·0		28·2		36·1		15·8	55·3	27th	21·0	15th	34·3
	Kalabagh				Observa	tions	not rece	ived.															
	Chakrata	7,022	23·354	+·055	23·314	23·469	28th	23·169	10th	·300	40·6	52·9	+2·3	34·4	−1·8	43·6	+0·3	18·5	66·7	28th	28·7	15th	38·0
	Mukteswar	7,592	22·884	+·035	22·843	22·992	30th	22·700	10th	·293	40·7	50·3	+0·7	35·0	−0·3	42·7	+0·2	15·3	65·5	28th	27·0	15th	38·5
	Darjiling	7,376	23·032	+·013	22·988	23·110	29th	22·944	23rd	·166	40·6	46·7	−0·1	35·7	+0·9	41·2	+0·4	11·0	52·3	6th & 7th	30·2	15th & 20th.	22·1
	Shillong	4,920	25·217		25·169	25·303	16th	25·146	23rd	·157	47·7	60·7		38·3		49·5		22·4	63·9	31st	32·7	17th	31·2
	Cherrapunji	4,309	25·799		25·750	25·874	16th	25·720	7th	·154	52·4	59·6		46·2		52·9		13·4	63·7	4 days	40·1	17th	23·6
	Maymyo	3,545	26·538	+·036	26·483	26·595	27th	26·438	7th	·157	48·5	69·7	−1·6	42·9	+4·6	56·3	+1·5	26·8	75·0	31st	35·6	20th	39·4
	Pachmarhi	3,528	26·599	+·042	26·546	26·677	20th	26·464	10th	·213	57·9	72·0	+0·7	47·8	+0·3	59·9	+0·5	24·2	78·0	25th & 31st.	39·6	13th	38·4
	Mount Abu	3,945	26·175	+·037	26·125	26·274	25th	26·002	10th	·272	59·3	68·2	+1·6	54·3	+3·1	61·3	+2·3	13·9	77·2	28th	45·4	10th	31·8
	Mercara	3,781	26·321	+·028	26·254	26·398	20th	26·260	9th	·138	61·8	77·9	+0·2	56·4	−0·2	67·1	0	21·5	82·0	16th & 31st.	51·0	8th	31·0
	Ootacamund	*7,327*	23·126		23·082	23·204	19th	23·063	7th	·141	53·4	67·1		42·1		54·6		25·0	71·5	31st	34·7	22nd	36·8
	Kodaikanal	7,688	22·892	+·019	22·827	22·958	20th	22·828	7th	·130	54·8	65·4	+2·5	46·1	−0·8	55·8	+0·9	19·3	72·5	11th & 31st.	40·5	7th	32·0

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

† Mean of 27 days.
‡ " " 26 "
§ " " 30 "
‖ " " 29 "

NOTE.—The barometric readings are not reduced to sea-level, in the cases o

B—*continued.*

stations in India, etc., in January, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911, to 31st Jan., 1912.	Normal rainfall for period, 1st Dec. to 31st Jan.	Departure from normal of period, 1st Dec., 1911, to 31st Jan., 1912.	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	56	57
																																Bay Islands.
2	11	4	2	1		4	3	4	N 13° W					42		76		·613		1·9		0			0			0			0	P. V. Fraser.
4	12	3	3	3	1			5	N 14° E	N 23° E	6·9	4·7	+2·2	53	−13	85	+ 4	·799	+·018	5·5	+1·4	13			22·98	1·01	+21·97	32·71	7·82	+24·89	4·37	Port Blair.
2	10	12	4	3					N 41° E		7·3			69		78		·741		5·2		7			15·51	0·28	+15·23	16·05	2·00	+14·05	3·09	Slipper Island.
																																Kashmir.
			2	4	4	12	9		S 41° W		0·4			65		64		·193		4·8		8			6·07			8·07			1·80	Muzaffarabad.
9	3	2		3	4		3	7	N 54° W	S 26° E	1·8	2·3	−0·5	17	− 1	89	− 2	·174	+·025	8·6	+0·7	5	6·40	−1·40	2·90	2·98	−0·08	3·85	4·39	− 0·54	1·57	Srinagar.
30								1	N 45° W		0·7			3		89	+ 1	·048		6·8		10	8·70	+1·30	3·15	2·73	+0·42	4·99	4·44	+ 0·55	0·59	Dras.
24	2	5							N 33° E	S 13° W	1·6	0·7	+0·9	20	−18	67	+14	·054	+·018	7·4	+0·7	2	0·80	+1·20	0·53	0·37	+0·16	0·53	0·54	− 0·01	0·32	Leh.
25			2	2		1	1		S 39° E		0·9			10		77	−18	·093		8·0		5	3·00	+2·00	2·30	0·78	+1·52	2·56	1·10	+ 1·46	0·88	Skardu.
21							10		W		0·9			32		72	+ 5	·145	+·002	6·8	−0·1	2	0·30	+1·70	0·52	0·21	+0·31	0·52	0·32	+0·20	0·21	Gilgit.
																																Baluchistan.
21		1		2	4		1	2	S 5° W	N 13° W	2·0	2·1	−0·1	11	+6	78	− 1	·168	+·020	5·7	+2·0	12	4·80	+7·20	4·66	1·92	+2·74	5·22	2·86	+ 2·36	1·34	Quetta.
7	2		7	9	3	1	1	1	S 56° E	S 58° E	4·0	5·0	−1·0	43	−17	82	+14	·216	+·051	6·1	+1·7	9	3·40	+5·60	3·89	1·38	+2·51	4·59	2·50	+ 2·09	1·54	Chaman.
6	1	1		1	8	11		3	S 34° W	S 30° W	4·5*			49	0	51		·103		3·6		9	3·70	+5·30	2·84	1·17	+1·67	3·33	2·35	+ 0·98	0·50	Kalat.
3	2	7	6	3	4	3	1	2	N 89° E		5·9*			27		81		·243		4·5		4			2·10			2·43			1·07	Dalbandin.
18	5	2	3		1			2	N 24° E		3·4			27		86		·514		3·7		3			1·29			1·29			0·67	Pasni.
6	2	10	11		1	1			N 67° E		6·8*			59		85		·269		2·2		4			1·44			1·68			0·80	Panjgur.
3	1	2	1	1	4	11	8		S 51° W		4·7			56		71		·188		5·5		2			1·02			1·22			0·59	Robat.
																																Hill Stations excluding Kashmir and Baluchistan.
25	1		1		4				S 18° E		0·4			10		79		·138		4·3		5			2·01	1·05	+0·95	2·77	2·07	+ 0·70	0·64	Chitral.
10	11	4	1					5	N 1° E		2·0			56		83		·151		4·7		10	1·00	+9·00	3·96	2·14	+1·82	5·09	3·39	+ 1·70	1·00	Para Chinar.
3	15	1		1	1			10	N 15° W	N 12° W	10·0	9·8	+0·2	72	+ 2	59	0	·152	+·001	5·6	+0·8	6			4·52	2·66	+ 1·86	5·04	4·15	+ 0·89	2·57	Cherat.
12	1			14	3	1			S 36° E	S 62° E	4·7¶	6·6	−1·9	53	+4	70	+ 8	·153	+·017	6·6	+1·3	9	2·80	+6·20	4·08	4·08	0	4·82	5·53	−0·71	1·84	Murree.
																59	+ 6	·149	+·027	6·5	+1·8	6	3·60	+2·40	3·82	2·64	+ 1·18	3·92	3·88	+0·04	1·57	Simla.
20						5	5	1	S 29° W		0·8			16		92		·158		7·2		7			7·11	5·92	+1·19	7·14	8·02	− 0·88	2·83	Sarain.
											Observations not received.																					Kalabagh.
8	12	3	1		5	1		1	N 11° E	N 34° E	3·7	4·2	−0·5	30	−15	61	+ 3	·149	+·018	5·5	+1·4	7	5·00	+2·00	7·42	4·19	+3·23	7·42	5·58	+ 1·84	2·10	Chakrata.
12		2	6	1	2	1	5	2	S 59° E		5·3			3		62	+ 5	·147		5·8		4			2·20	2·38	− 0·18	2·20	3·21	− 1·01	0·82	Mukteswar.
25		2	2	1		1			E	S 57° E	6·4	2·7	−2·3	11	−12	77	− 5	·195	+·005	4·8	+0·6	1	1·71	−0·71	0·16	0·64	−0·48	0·16	0·86	−0·70	0·10	Darjiling.
20			1	2		8			S 24° W		1·8			27		76		·250		1·0		0	1·50	−1·50	0·06	0·26	−0·20	0·06	0·45	− 0·39	0·04	Shillong.
21		5	1			2	2		N 28° E		1·8			7		74		·291		2·3		2	1·70	+0·30	0·30	0·38	−0·08	0·30	0·62	−0·32	0·18	Cherrapunji.
25	1	2	1			1	1		N 24° E		1·2			7		95	+ 7	·336		3·0		3	0·20	+2·80	0·73	0·07	+0·66	0·73	0·53	+0·20	0·50	Maymyo.
19	2		1	3	3	1	1	1	S 21° E	S 3° E	2·3	2·6	−0·3	13	−5	69	+11	·328	+·040	0·8	−1·1	0	1·50	−1·50	0·09	0·62	−0·53	0·09	1·18	−1·09	0·09	Pachmarhi.
11	3	3		1	4	6	1	2	S 57° W	N 2° W	4·0	3·8	+0·2	13	− 5	46	+ 2	·228	+·023	3·1	+1·4	0	0·70	−0·70	0	0·29	−0·29	0	0·45	−0·45	0	Mount Abu.
4	1	12	12	1					N 67° E	N 74° E	3·4	3·6	−0·2	79	+ 5	77	+ 2	·418	0	2·5	−0·3	9	0·20	0·20	0	0·17	−0·17	0·14	1·02	−0·88	0	Mercara.
12		4	9	6					S 85° E		2·5			53		38		·151		2·0		2	0·60	+1·40	0·27	2·07	−1·80	3·64	4·35	−0·71	0·13	Ootacamund.
	4	5	10	5				7	N 53° E		9·8*			49		33	−26	·138		1·2		2	1·40	+0·60	0·70	3·22	−2·52	7·19	7·31	−0·12	0·36	Kodaikanal.

hill or plateau stations, the elevations of which exceed 3,500 feet.

* Uncorrected for scale error.

‖ Mean of 29 days.

¶ „ „ 22 „

Table

(2) *Abstract of observations taken at 8 hrs. at* 235

Number of sub-division	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 hrs. in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India.																						
	Singapore (a)	10	29·985		29·916	30·058	16th	29·892	7th	·166	82·4	89·3		73·3		81·3		16·0	92·0	27th	71·5	28th	20·5
	Penang (a)	20	29·925		29·870	30·013	31st	29·756	3rd	·257	82·0	91·1		71·2		81·1		19·9	94·0	6 days	68·0	30th & 31st	26·0
	Trincomalee	99									75·0	85·0	−0·8	78·1	−1·5	78·0	−0·9	9·9	89·0	15th	67·5	6th & 12th	21·5
	Colombo	24	29·935	+·029	29·946	30·057	18th	29·938	14th	·119	69·6	88·4	+0·9	68·7	−3·4	78·5	−1·3	19·7	93·0	28th	61·5	7th	31·5
	Minicoy	7	30·039			30·110	19th	29·970	23rd	·140													
	Amini Divi	*13*	30·043	+·038	29·984	30·118	19th	29·989	1st	·129	81·7	87·3	+3·1	73·0	−0·9	80·1	+1·1	14·3	91·0	22nd	65·9	8th	25·1
	Gyantse	13,120	17·032		16·993	17·096	29th	16·942	12th	·154	16·5	42·8		4·6		23·7		38·2	52·3	23rd	−1·4	20th	53·7
	Pharijong	14,400									19·3	34·9		−4·1		15·4		39·0	53·1	28th	−13·0	8th	66·1
	Gangtok	5,660									43·9	58·6		40·5		49·6		18·1	62·3	6th	37·2	3th	25·1
	Gartok (c)	14,140				Observations not received.																	
	Kashgar (c)	4,255	25·716			25·990	27th	25·430	22nd	·510	15·0	30·1	−2·3	11·1	−1·4	20·6	−1·9	19·0	38·9	13t	4·5	15th	34·4
	Kabul		24·327		24·295	24·441	19th	24·122	31st	·319	24·8	46·9	+1·9	2·18	+4·0	34·3	+2·9	25·1	55·4	8th	7·8	23rd	47·6
	Meshed	3,104	26·867		30·217	27·054	26th	26·631	5th	·423	25·4	45·2		21·0	−1·2	33·1		24·2	65·9	1st	−7·9	22nd	73·8
	Jask	13	30·104	−·025	30·071	30·267	28th	29·948	21st	·319	63·1	74·9	+1·1	60·9	+0·6	67·9	+0·9	14·0	82·3	8th	53·3	4 days	29·0
	Muscat	20	30·121	0	30·090	30·269	26th	30·006	21st	·263	69·2	77·7	+4·3	67·5	+0·3	72·6	+2·5	10·2	85·3	1st & 2nd	60·1	26th	25·2
	Bahrein	18	30·184		30·156	30·393	28th	29·995	1st	·398	59·8	64·7		56·9		60·8		7·8	73·7	1st	50·5	26th	23·2
	Bushire (d)	14	30·119	−·015	30·095	30·339	28th	29·886	5th	·453	53·6	62·3	−1·7	50·6	−1·1	56·4	−1·4	11·7	76·8	1st	43·5	21st & 29th	33·3
	Busrah	25	30·187		30·123	30·389	28th	29·967	18th	·422	48·9	56·9		44·9		50·9		12·0	69·5	1st	37·5	27th	32·0
	Kerman										36·9	55·8		29·6		42·7		26·2	74·6	12th	15·6	22nd	58·3
	Ispahan (b) (g)	*5,817*	24·247			24·420	29th	23·980	20th	·440	23·6	41·4	−5·1	20·8	−2·4	31·1	−3·7	20·6	59·9	1st & 5th	0·2	28th	59·7
	Tehran (b) (g)	*4,002*	25·820			25·995	28th	25·570	5th	·425	30·5	43·2	+1·0	27·9	+1·7	35·6	+1·3	15·3	56·3	5th	17·4	21st	38·9
	Bagdad	127	30·077	+·051	30·191	30·338	28th	29·770	10th	·568	42·4	56·8	−3·3	39·5†	+1·0†	48·3	−1·1	17·5	67·4	30th	32·0	21st	35·4
	Beirut *	111			30·077						53·5	60·3		49·5		54·9		10·8	72·7	30th	44·1	21st	28·6
	Aden	94	30·013	+·031	30·040	30·090	29th	29·936	3rd	·154	75·4	80·0	−0·6	73·4	+0·6	76·7	0	6·6	81·6	3rd, 21st & 23rd.	67·4	17th	14·2
	Zanzibar	72	29·947	+·036	29·945	29·997	20th	29·839	11th	·108	81·4	86·7	+0·7	79·5	−0·1	83·1	+0·3	7·2	88·4	16th	74·6	15th	13·8

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) 9 hrs. observations. (b) Aneriod uncorrected. (c) Aneriod corrected. (d) Mean of 30 days. (g) 7 hrs. observations.
* 8½ hrs. observations. † Mean of 28 days.

B—*concluded.*

stations in India, etc., in January, 1912—concluded.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 31st Jan., 1912.	Normal rainfall for period, 1st Dec. to 31st January.	Departure from normal of period, 1st Dec. 1911 to 31st Jan., 1912.	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	56	57
																																Extra India.
7	6	16						2	N 27° E		3·7‡			72						4·4		8			5·37	10·96	− 5·59	16·32	21·65	− 5·33	1·88	Singapore.
	12	13	1					5	N 13° E		8·1‡			86								3			0·92	4·22	− 3·30	3·62	11·37	− 7·75	0·44	Penang.
2	2	21		1			2	3	N 31° E	N 30° E	5·5‡	5·6	−0·1	72	+ 7	80	+ 1	·691	−·036	5·2	+1·2	3			0·56	5·48	− 4·92	25·35	19·73	+ 5·62	0·17	Trincomalee.
8	10	13							N 25° E	N 37° E	4·2‡	6·3	−2·1	69	−12	92	+18	·659	−·110	6·3	+2·7	2			1·10	3·52	− 2·42	8·43	8·94	− 0·51	0·69	Colombo.
	12	14	4		1				N 34° E	N 42° E	2·8	4·7	−1·9	81						2·4		1			0·45	1·90	− 1·45	7·14	4·96	+ 2·18	0·43	Minicoy.
2	18	8		1				2	N 12° E		2·7			81		63	− 5	·733	−·035	2·2	−1·3	0			0	0·60	− 0·60	1·36	1·44	− 0·08	0	Amini Divi.
21		7		2				1	N 56° E		3·1			26		76		·074		0·1		1			0·10			0·10			0·10	Gyantse.
15	2	4	1	4	1	3	1		S 72° E		8·7			10		73		·083		0·5		1			0·23			0·23			0·18	Pharijong.
28		1	1	1					E		1·0			7		88		·253		2·5		2			0·41	1·00	− 0·59	0·69	1·89	− 1·20	0·20	Gangtok.
											Observations not received.																					Gartok.
31								•	A	N 56° W	0	0·4	−0·4			82	?	·074	?	6·9	+0·7	2			0·28	0·20	+ 0·08	0·45	0·29	+ 0·16	0·15	Kashgar.
	1	2	2	7	13		6		S 8° E	N 82° W				48	+43	73		·102	not rec	ord	ed.	0			0	1·36	− 1·36				0	Kabul.
27				1	2	1			S		1·2			10		87		·130		5·0	−0·3	3			0·95	0·76	+ 0·19	1·42	1·54	− 0·12	0·58	Meshed.
	8	10	5				2	6	N 17° E	N 18° E	7·1	8·8	−1·7	66	− 5	71	− 2	·419	−·027	3·5	+1·0	2			1·72	0·79	+ 0·93	2·03	2·06	+ 0·03	1·08	Jask.
10				1		1	11	8	N 76° W	S 59° W	5·1	3·5	+1·6	53	+20	69	+ 1	·494	+·008	4·7	+2·2	3			2·35	1·08	+ 1·27	2·60	1·70	+ 0·90	1·29	Muscat.
	4	1	3	3	1	1	8	10	N 51° W		8·0			42		78		·410		3·1		2			0·63	0·37	+ 0·26	0·94	1·18	− 0·24	0·25	Bahrein.
3	9	5	3	2	1			7	N 11° E	N 58° E	7·9	5·8	+2·1	49	− 5	87	+ 9	·365	+·016	4·3	+1·0	7			3·29	2·68	+ 0·61	5·25	5·93	− 0·68	1·49	Bushire.
7		1		1	1	4	12	5	S 89° W		2·7			54		81		·285		4·4		6			1·22	1·17	+ 0·06	5·24	1·99	+ 3·25	0·34	Busrah.
11	4				5	4	3	4	S 84° W		3·8			29		72§		·175§		3·3		0			0·16			2·25			0·04	Kerman.
23					1	4	3		S 56° W	S 79° W	1·4	2·3	−0·9	26	− 6	84	+ 2	·116	−·023	4·5	+1·0	3			1·51	0·67	+ 0·84	3·23	1·46	+ 1·77	0·65	Ispahan.
13	6	11				1			N 28° E	N 16° E	1·2	2·1	−0·9	48	+ 2	84	+17	·146	+·017	3·1	−0·7	3			0·76	1·69	− 0·93	2·18	2·97	− 0·79	0·34	Tehran.
15	4	1		1	3		1	6	N 39° W	N 8° W	4·4	2·3	+2·1	23	−2	80	0	·218	−·026	3·2	+0·6	4			1·04	1·04	0	2·49	2·21	+ 0·28	0·40	Bagdad.
4	1		2	11	11	2			S 23° E					68		71		·294		6·5		11			10·59			21·03			2·18	Beirut.
7		22	2						N 49° E	N 80° E	10·7	9·9	+0·8	76	+ 2	79	+ 4	·688	+·036	6·2	−0·2	1			0·29	0·41	− 0·12	0·29	0·68	− 0·39	0·29	Aden.
	13	14	1		1	1		1	N 22° E	N 28° E	5·6	5·7	−0·1	78	+ 1	81	+ 1	·861	−·006	5·7	−0·5	6			4·33	3·27	+ 0·99	6·22	8·31	− 2·09	2·59	Zanzibar.

‡ Uncorrected for scale error.
§ Mean of 24 days.

(A) Indeterminate.

Table C.—Abstract of observations taken at 8 hrs. at 43 fourth and fifth class stations in India, etc., in January, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Hitherto the erroneous factor 3·0 has always been in use in India: *vide* the section on wind, p. 8 of this issue of the Review.)

Table

Abstract of observations taken at 8 hrs. at 43 fourth

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Eastern Bengal and Assam.																								
4	Bishnath	57·1	74·5	...	53·8*	...	64·1	...	20·7	81·3	29th	51·9	4th	29·4	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	57·0	75·4	...	46·5	...	60·9	...	28·9	82·6	2nd	39·4	4th & 6th.	43·2	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	51·9	81·4	...	47·1	...	64·3	...	34·3	84·7	25th	39·8	18th	44·9	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	50·7	72·1	...	48·3	...	60·2	...	23·8	78·6	29th	41·4	6th	37·2	...	...	...	...	...	...	...	...	...	...	...
	Dikom	52·5	73·0	...	47·6	...	60·3	...	25·4	80·2	29th	39·6	3rd & 6th.	40·6	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	56·7	57·1	...	49·5	...	53·3	...	7·6	65·1	30th	42·2	11th	22·9	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	...	...	...	...	...	...	...	...	...	Observations not received.				...	...	...	...	...	...	...	...	...	...	...
	Jorehat	54·0	72·4	...	50·1	...	61·3	...	22·3	79·7	29th & 30th.	44·3	6th & 8th.	35·4	...	...	...	...	...	...	...	...	...	...	...
	Messa	62·1	78·5	...	46·4	...	62·5	...	32·1	83·2	29th	39·0	3rd	44·2	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	50·9	76·1	...	43·1	...	59·6	...	33·0	78·8	30th	39·0	5th	39·8	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	54·2	81·9	...	47·7	...	64·8	...	34·2	86·0	7th	40·2	17th	45·8	...	...	...	...	...	...	...	...	...	...	...
5	Brahmanbaria	65·3	80·8	...	53·5	...	67·1	...	27·3	84·5	6th	48·1	17th	36·4	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	54·2	84·0	...	44·8	...	64·4	...	39·2	89·7	23rd	36·2	13th	53·5	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	62·7	79·4	...	51·1	...	65·3	...	28·3	85·0	24th	45·5	17th	39·5	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	60·5	76·1	...	46·6	...	61·3	...	29·5	80·6	6th	38·4	17th	42·2	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	63·9	75·6	...	52·5	...	64·1	...	23·1	79·1	4 days	44·0	16th	35·1	...	...	...	...	...	...	...	...	...	...	...
	Pabna	60·4	79·1	...	52·6	...	65·9	...	26·5	83·0	24th	46·2	3rd	36·8	...	...	...	...	...	...	...	...	...	...	...
	IV.—United Provinces of Agra and Oudh.																								
10	Ballia	54·8	?	...	48·8	...	?	...	?	?	?	44·6	2nd	?	...	...	...	...	...	...	...	...	...	...	...
11	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	VIII.—Rajputana.																								
19	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XI.—Central Provinces.																								
24	Chhindwara	55·7	79·4	...	50·3	...	64·8	...	29·1	85·0	26th & 27th.	42·4	1st	42·6	...	2	4	1	1	...	3	9	11	N 54° W	...
	XIV.—Madras.																								
33	Anantapur	66·9	88·7	...	58·1	...	73·4	...	30·6	92·0	25th & 26th.	51·1	7th	40·9	...	...	...	...	...	...	...	...	...	...	...
34	Guntur	69·9†	88·1	...	62·1	...	75·1	...	26·0	93·9	27th	56·3	4th	37·6	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Mean of 8 days.

C.

and fifth class stations in India, etc., in January, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911 to 31st January, 1912.	Normal rainfall for period, 1st December to 31st January.	Departure from normal of period, 1st December, 1911 to 31st January, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Eastern Bengal and Assam.
...	...	...	...	...	91	...	·428	...	...	...	0	...	...	0·18	1·11	−0·93	0·31	1·36	−1·05	0·05	Bishnath.
...	...	...	...	...	86	...	·402	...	...	...	0	...	...	0·18	0·79	−0·61	0·34	0·85	−0·51	0·08	Borjuli.
...	...	...	...	...	91	...	·354	...	...	...	0	...	...	0	1·32	−1·32	0	1·86	−1·86	0	Chandkhira.
...	...	...	...	...	98	...	·365	...	...	...	2	...	...	1·33	1·68	−0·35	1·33	2·09	−0·76	0·75	Doom Dooma.
...	...	...	...	...	95	...	·381	...	...	...	4	...	...	1·48	1·48	0	1·51	2·03	−0·52	0·55	Dikom.
...	...	...	...	...	87	...	·405	...	...	...	0	...	...	0·04	1·07	−1·03	0·37	1·46	−1·09	0·02	Golaghat.
...	...	...	...	...	...	...	...	...	...	Observations not received					...	...	...	...	...	...	Hailakandi.
...	...	...	...	...	95	...	·401	...	...	...	3	...	...	0·67	0·85	−0·18	1·20	1·27	−0·07	0·27	Jorehat.
...	...	...	...	...	82	...	·460	...	...	...	0	...	...	0	0·56	−0·56	0·48	0·89	−0·41	0	Messa.
...	...	...	...	...	91	...	·344	...	...	...	0	...	...	0·16	0·41	−0·25	0·45	0·67	−0·22	0·06	Panerihat.
...	...	...	...	...	93	...	·396	...	...	...	0	...	...	0	0·65	−0·65	0	1·00	−1·00	0	Srimangal.
...	...	...	...	...	75	...	·470	...	...	...	0	...	...	0	0·37	−0·37	0	0·87	−0·87	0	Brahmanbaria.
...	...	...	...	...	95	...	·404	...	...	...	0	...	...	0·03	0·32	−0·29	0·04	0·51	−0·47	0·03	Dam Dim.
...	...	...	...	...	73	...	·421	...	...	...	0	...	...	0·02	0·43	−0·41	0·02	0·66	−0·64	0·02	Goalundo.
...	...	...	...	...	79	...	·426	...	...	...	0	...	...	0	0·48	−0·48	0	0·81	−0·81	0	Kalchini.
...	...	...	...	...	65	...	·386	...	...	...	0	...	...	0·05	0·74	−0·69	0·05	1·12	−1·07	0·05	Nagrakata.
...	...	...	...	...	85	...	·446	...	...	...	0	...	...	0	0·56	−0·56	0	0·75	−0·75	0	Pabna.
																					IV.—United Provinces of Agra and Oudh.
...	...	...	...	...	89	...	·379	...	...	...	...	No	rain	gauge	...	...	...	...	...	...	Balia.
...	...	...	...	...	...	...	...	...	...	...	3	2·30	+0·70	2·13	1·17	+0·96	2·13	1·66	+0·47	1·35	Meerut.
...	...	...	...	...	...	...	...	...	...	...	5	3·50	+1·50	1·96	2·27	−0·31	1·96	3·14	−1·18	0·75	Dehra Dun.
																					VIII.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	0	0·30	−0·30	0·06	0·06	0	0·07	0·17	−0·10	0·04	Udaipur.
																					XI.—Central Provinces.
2·3	...	...	55	...	79	...	·357	...	1·5	...	2	...	...	1·20	...	...	1·20	...	...	0·92	Chhindwara.
																					XIV.—Madras.
...	...	...	...	...	69	...	·457	...	2·9	...	0	...	...	0	...	...	1·48	...	...	0	Anantapur.
...	...	...	...	...	84†	...	·619†	...	2·5†	...	0	...	...	0	...	...	0	...	...	0	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	6	...	...	8·94	3·80	+5·14	16·69	10·71	+5·98	4·15	Car Nicobar.

† Mean of 30 days.

Table

Abstract of observations taken at 8 hrs. at 43 fourth and

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Kashmir.																								
14	Jammu	53·7	64·4	...	50·3	...	57·3	...	14·1	72·1	29th	46·0	26th	26·1	...	1	26	...	1	3	...	...	...	N 48° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	12·3	25·7	...	5·7	...	15·7	...	20·0	42·9	31st	−1·1	13th	44·0	...	11	18	...	...	...	...	...	2	N 24° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	60·3	74·7	...	54·2	...	64·5	...	20·5	80·9	28th	43·4	16th	37·5	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	48·9	56·1	...	45·7	...	50·9	...	10·4	62·3	6th	40·9	17th & 18th.	21·4	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	41·8	...	26·5	...	34·1	...	15·3	49·3	31st	20·9	15th	28·4	25	1	...	2	...	...	...	1	2	N 12° W	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drosh	33·8	44·9	...	30·2	...	37·6	...	14·7	54·3	4th	24·1	23rd	30·2	23	...	5	...	2	...	1	...	...	N 76° E	...
	Pishin	...	51·0	...	33·1	...	42·0	...	17·9	65·3	1st & 2nd	22·0	22nd & 23rd.	43·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	56·4	...	45·3	...	50·9	...	11·1	66·6	2nd	36·8	27th	29·8	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	23·8	46·5	...	20·4	...	33·5	...	26·1	58·8	30th	14·1	17th	44·7	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	26·8	36·5	...	19·4	...	27·9	...	17·1	55·0	3rd	9·0	28th & 29th.	64·0	...	...	...	...	...	...	...	...		...	...
	Koweit	...	58·8	...	47·6	...	53·2	...	11·2	69·4	1st	40·0	9th	29·4	2	3	...	2	...	...	...	2	22	N 40° W	...
	Maidan	...	58·5	...	44·2	...	51·4	...	14·3	68·7	1st & 3rd	35·2	27th	33·5	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	60·4	...	46·1	...	53·2	...	14·3	72·8	1st	38·2	26th	34·6	...	...	...	...	6	...	1	...	13	N 56° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C—*concluded.*

fifth class stations in India, etc., in January, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911 to 31st January, 1912.	Normal rainfall for period, 1st December to 31st January.	Departure from normal of period, 1st December, 1911 to 31st January, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Kashmir.
...	...	...	74	...	84	...	·347	...	...	...	4	...	...	5·81	...	...	6·26	...	...	3·48	Jammu.
...	...	...	...	...	...	...	...	...	..	...	16	...	...	16·63‡	11·50	+5·18	24·16	17·37	+6·79	4·50	Sonamarg.
...	...	...	90	...	32	...	·026	...	0·7	...	5	...	...	2·97	...	...	3·92	...	...	1·50	Kargil.
...	...	...	...	...	...	...	...	...	...	...	12	...	...	13·21	1·39	+11·82	16·70	2·44	+14·26	4·70	Astor.
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	63	...	·327	...	...	...	0	...	...	0·05	0·35	−0·30	0·07	0·79	−0·72	0·03	Panighatta.
...	...	...	...	...	77	...	·267	...	...	...	0	...	...	0·17	0·49	−0·32	0·17	1·11	−0·94	0·09	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	1	...	...	0·55	...	...	0·55	...	...	0·55	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	1	...	...	0·47	...	...	0·51	...	...	0·47	Lachung.
...	...	...	6	...	...	...	...	...	7·5	...	2	...	...	1·68	1·95	−0·27	1·75	2·78	−1·03	1·01	Poo.
...	...	...	...	...	...	...	...	...	...	...	Rainfall observations not received.						...	...	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	8	...	...	9·45	...	...	9·51	...	...	4·03	Bakloh.
...	...	...	13	...	78*	...	·152*	...	6·8	...	2	...	...	0·44	0·84	−0·40	1·52	1·86	−0·34	0·20	Drosh.
...	...	...	...	...	...	...	...	...	5·8	...	8	...	...	5·29	1·56	+3·73	6·01	2·83	+3·18	1·65	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	4·5	...	5	...	...	1·45	...	...	4·95	...	...	0·45	Ahwaz.
...	...	...	...	...	76	...	·099	...	0·5	...	1	...	...	0·80‡	...	...	0·80	...	...	0·80	Chumbi.
...	...	...	...	...	76	...	·126	...	...	...	5	...	...	4·74§	...	...	10·32	...	...	2·92	Kirmanshah.
...	...	...	78	...	...	...	...	...	3·2	...	4	...	...	1·51	...	...	3·17	...	...	0·54	Koweit.
...	...	...	...	...	...	...	...	...	...	...	8	...	...	5·87	...	...	12·82	...	...	1·60	Maidan.
...	...	...	25	...	...	...	...	...	...	...	7	...	...	1·93	...	...	4·74	...	...	0·38	Muhammerah.¶
...	...	...	...	...	...	...	...	...	...	...	2	...	...	0·56	2·93	−2·37	4·09	10·29	−6·20	0·16	Pemba.
...	...	...	...	...	...	...	...	...	...	...	Rainfall observations not received.						...	...	...	...	Prison Island.

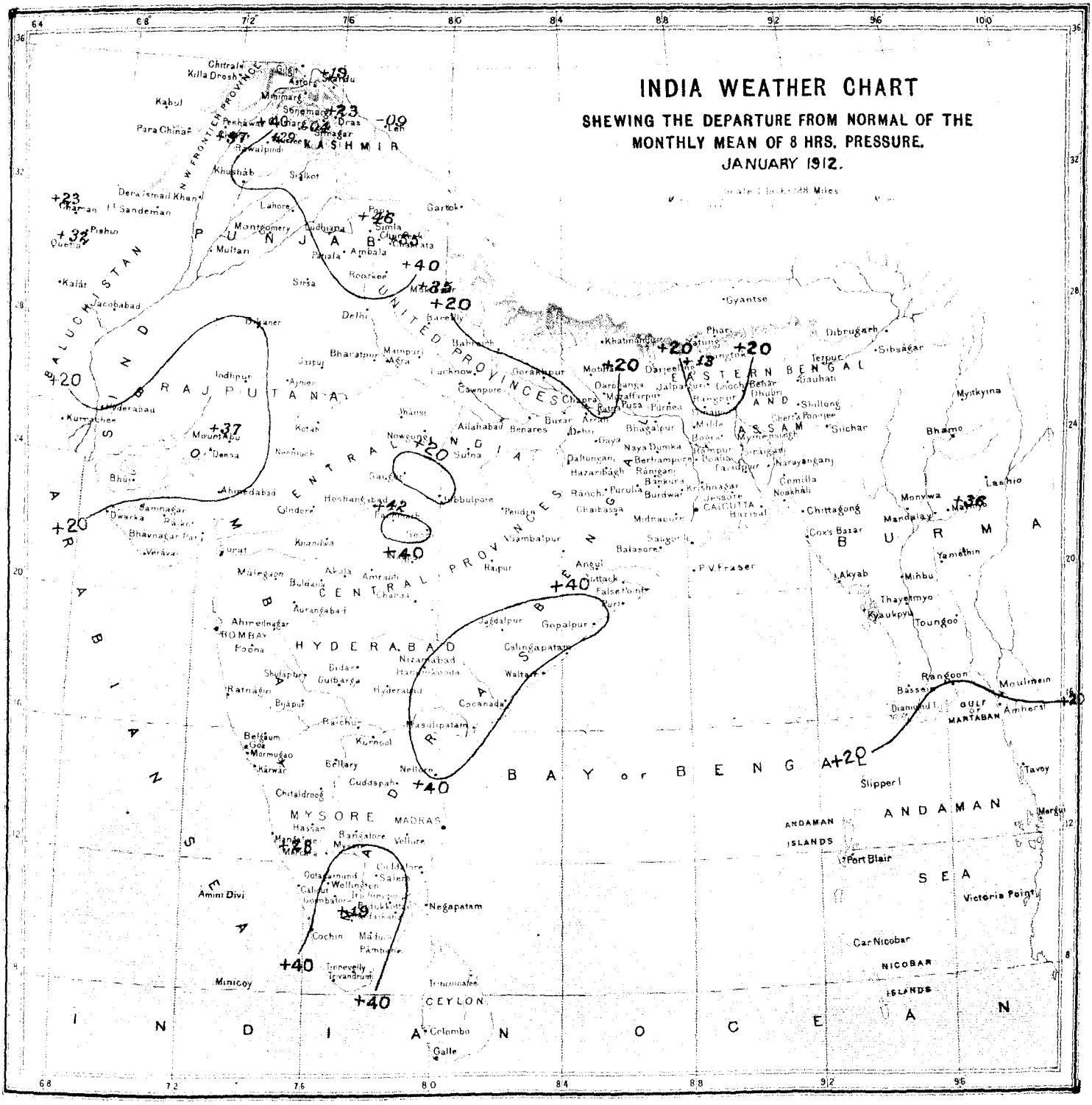
* Mean of 30 days. ‡ Snow water. § Rain and snow water. ¶ Wind variable 11.

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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.



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

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

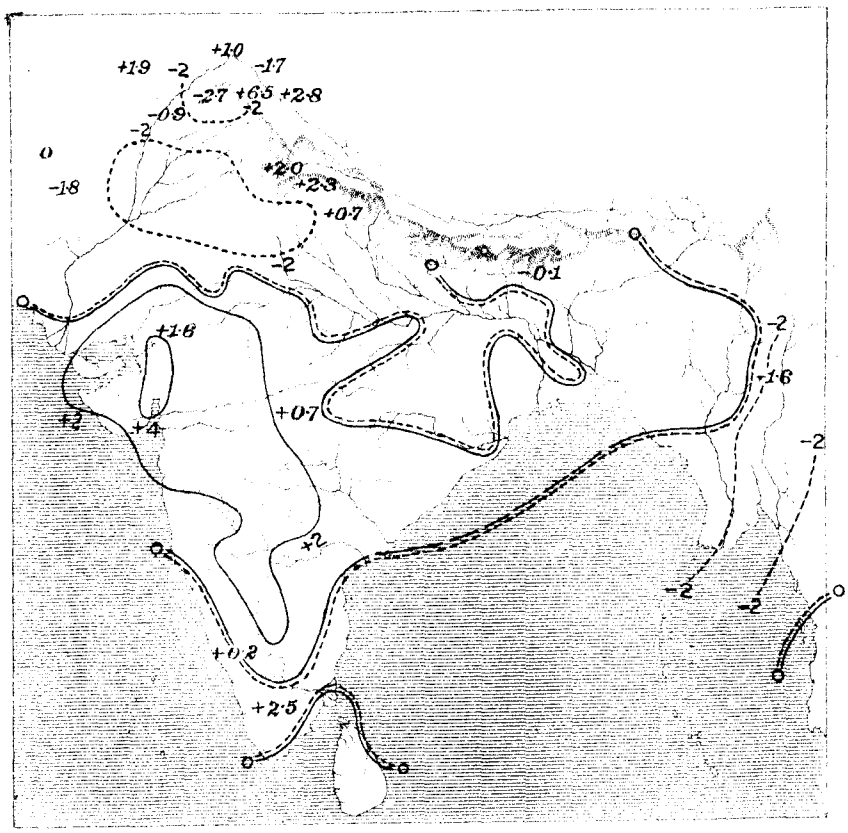


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.

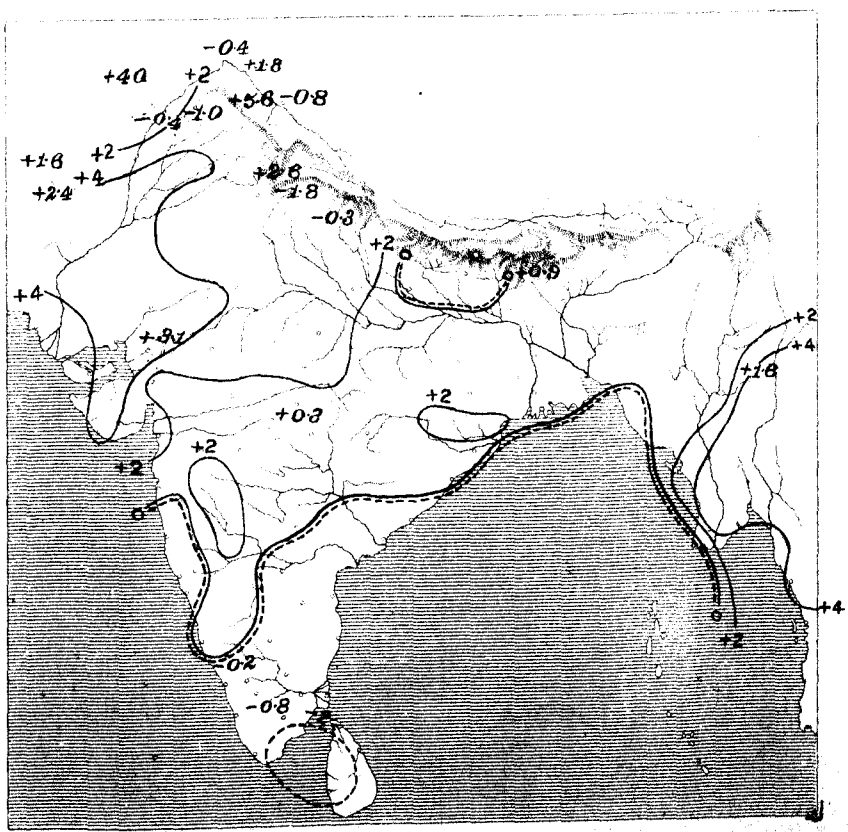


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

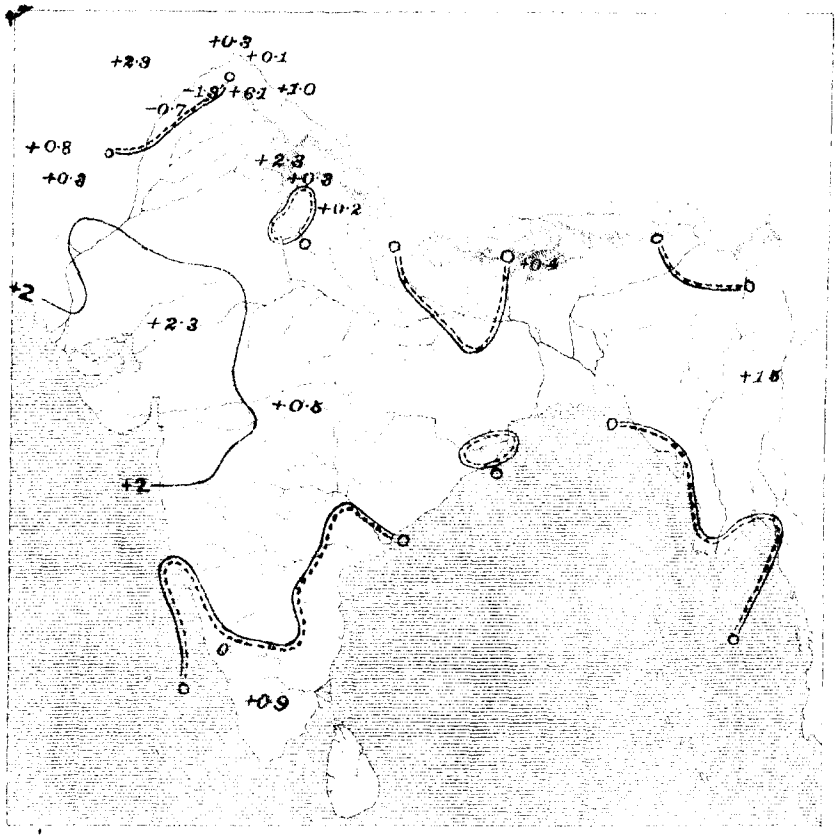


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

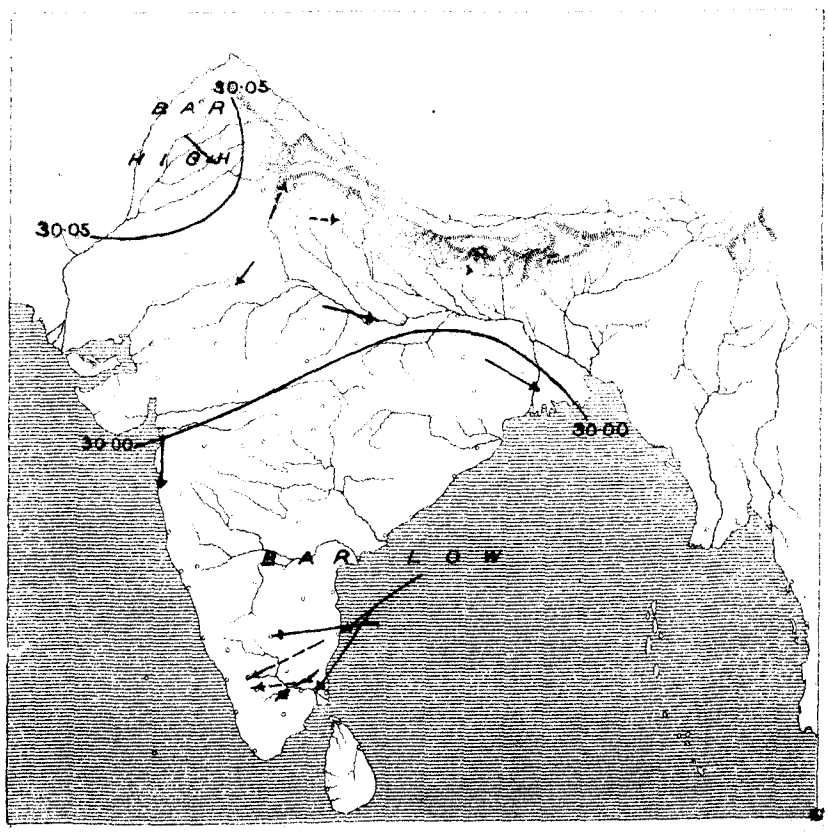


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

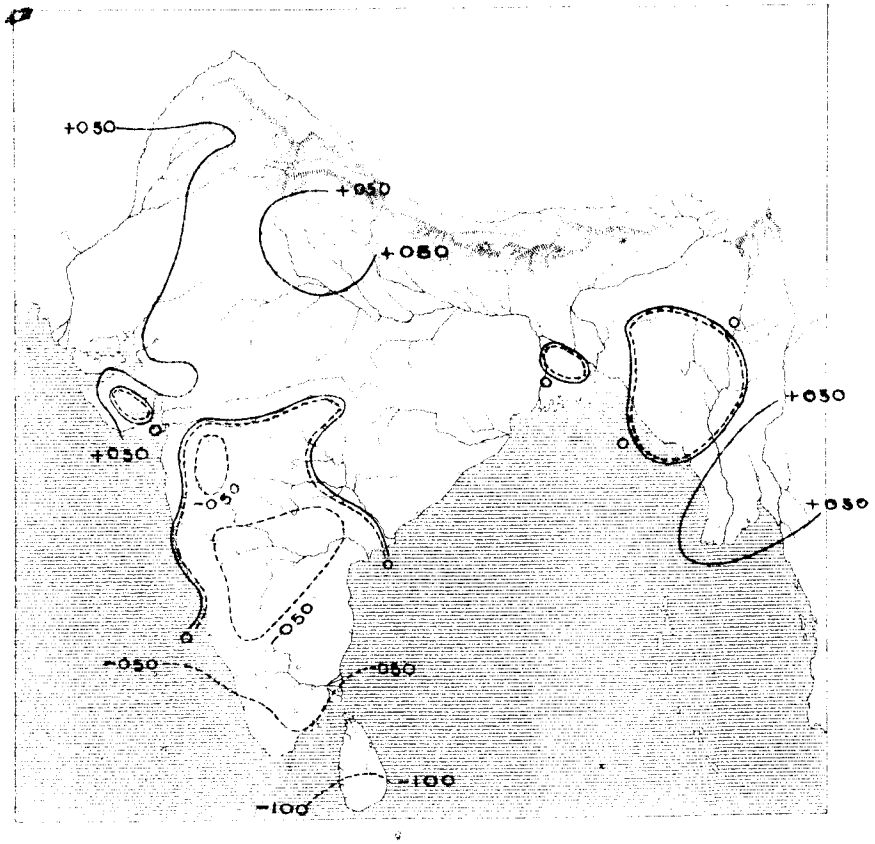


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.

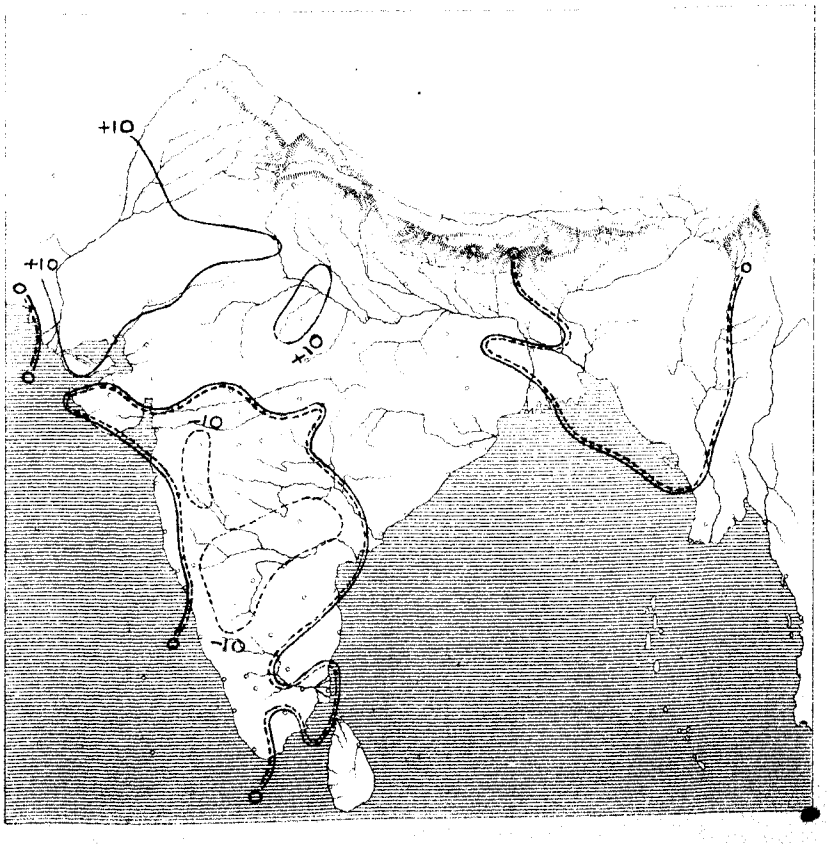


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 HRS.

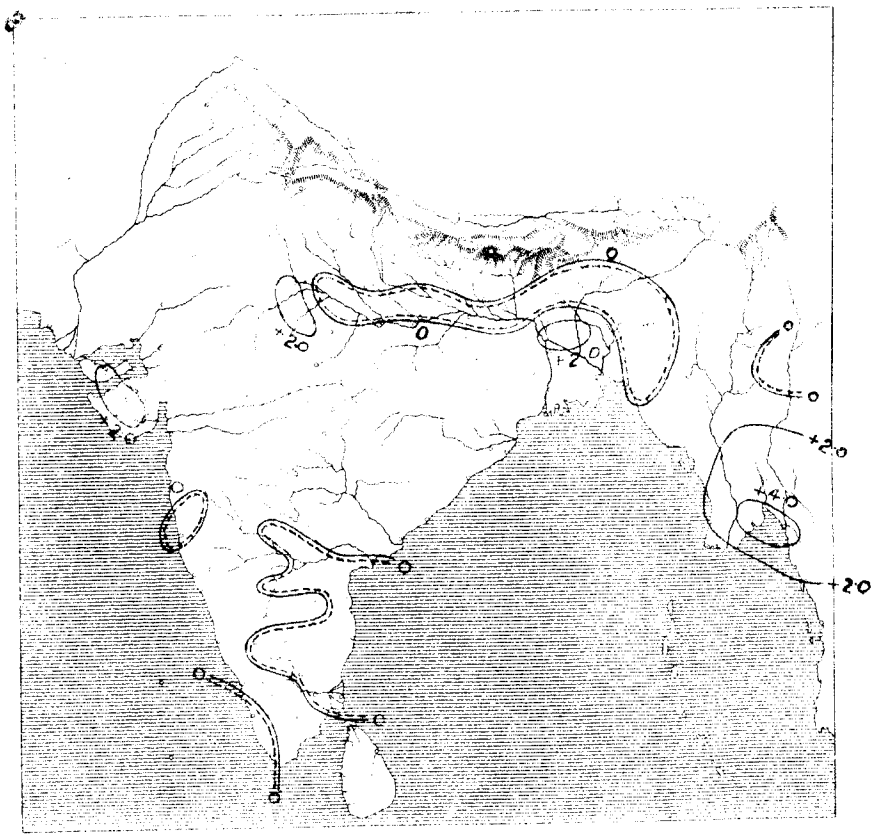
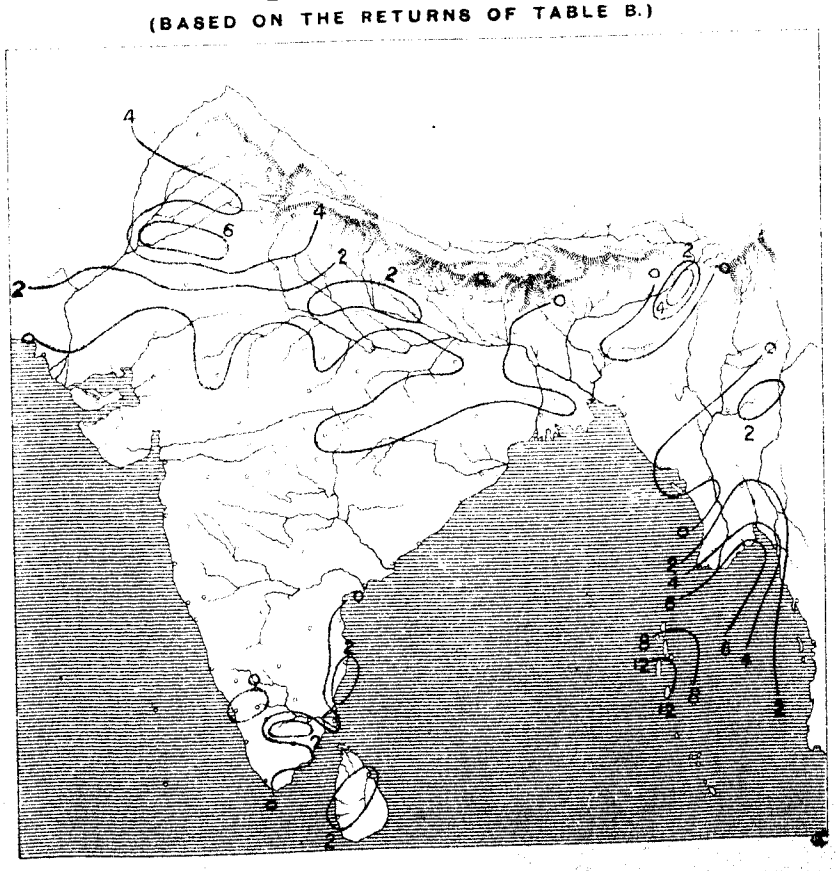
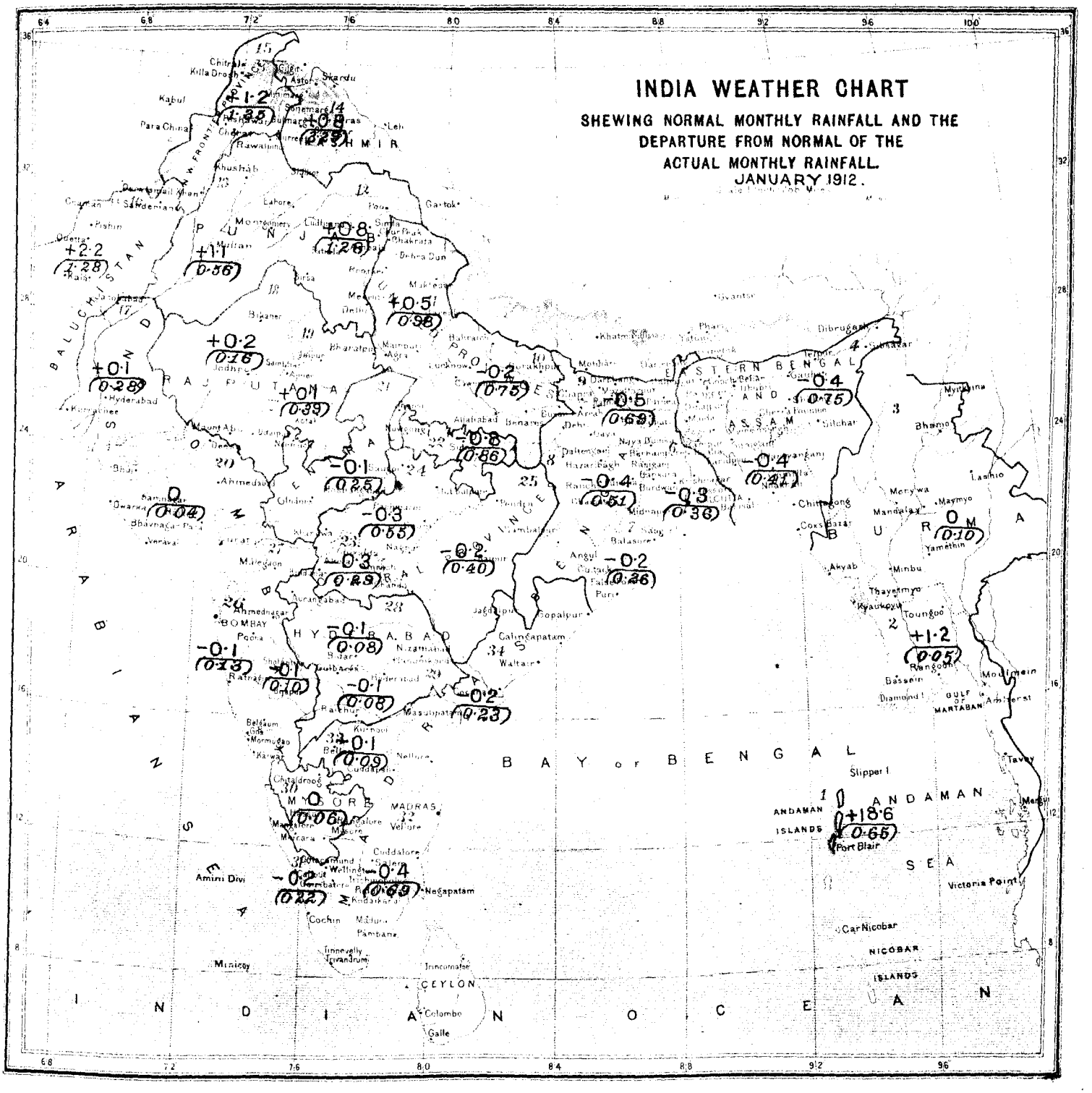


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)





The country is divided into 34 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 monthly 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. Eastern Bengal
6. Bengal
7. Orissa
8. Chota Nagpur
9. Bihar
10. United Provinces, East
11. Do., West
12. Punjab, East and North
13. Do., Southwest
14. Kashmir
15. Northwest Frontier Province
16. Baluchistan
17. Sind
18. Rajputana, West
19. Rajputana, East
20. Gujarat
21. Central India, West
22. Do., East
23. Berar
24. Central Provinces, West
25. Do., East
26. Konkan
27. Bombay, Deccan
28. Hyderabad, North
29. Do., South
30. Mysore
31. Malabar
32. Madras, Southeast
33. Madras, Deccan
34. Madras Coast, North

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, FEBRUARY, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of February, 1912, is based on observations taken daily at 8 hrs. at 235 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 17 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. In the region usually affected by the winter rains, weather during the month was unusually free from disturbance. Several depressions of the winter type appeared in Persia, but they were only feeble and either did not enter India at all or gave comparatively little precipitation. The total precipitation of the month was consequently markedly below normal over nearly the whole of the area stretching eastwards from Baluchistan to Bengal—the usual region of the winter rains.

In the Central Provinces and the north Deccan, on the other hand, there was a pronounced tendency to the formation of shallow depressions, which caused series of thunderstorms there and over Orissa and the north coast of Madras. The resulting rainfall in this region was markedly in excess of the small normal amount.

Conditions over the remainder of India gave rise to somewhat irregularly distributed rainfall. Thus while the aggregate in Assam was considerably greater than usual, weather at the majority of the recording stations in Burma was absolutely dry. And again, in the Peninsula, rainfall was below normal in the Konkan, the Bombay Deccan, Malabar and Madras Southeast, and above normal in Hyderabad, Mysore and the Madras Deccan.

Temperature was unusually high over practically the whole country, the excess being especially marked in the day temperatures of northwest India and in the night temperatures of the Peninsula. The air contained more moisture than usual everywhere excluding Burma, but owing to the prevailing high temperatures it was not perceptibly damper than is normally the case except in the Central Provinces, Hyderabad and Mysore. The amount of cloud was above normal in central and northeast India and in the Peninsula, but below normal in the northwest. Pressure was somewhat low in the plains of central and north-west India, unusually high at the level of the hill stations of northwest India, and about normal elsewhere.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar Observations.*—Solar Observations were made on all the days during the month.

No sunspots were observed during the whole of February.

There were 63 large, 1 metallic and 3 eruptive prominences recorded, about 9 of these were over 2′ in height. The highest was observed on the 6th at latitude + 30°E and attained a height of 180″.

Only "small" magnetic disturbances were recorded during the month; these occurred on the 13th, 16th and 26th.

Seismological records.

TABLE 1.

No.	Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G.M. T.	Maximum amplitude.	Duration.	REMARKS.
	1912.	H. M.	H. M.	H. M.	H.M.	mm	H. M.	
7	Feb. 13	17 06·7	...	...	17 30·0	..	0 13·3	Widening of line.
8	" 16	10 00·3	10 19·1	10 19·3	10 35·4	0·5=0·3	0 35·1	

J. EVERSHED,
Director,
Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of February 1912 the traces showed 16 calm days and 13 days of small disturbance.

The days of the month selected as "quiet" for the purposes of the Magnetic Survey of India are the 1st, 9th, 14th, 20th and 28th.

The following table represents the magnetic character of each day during the month :—

TABLE 2.

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

C = calm; S = small; M = moderate; G = great; V. G. = very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and the declination for the month, are as follow :—

Easterly declination	0° 52′ 32″
Horizontal force	0·36874 C. G. S. unit.
Vertical force	0·16328 " "
Inclination	23° 53′·0
Inclination (observed)	23° 52′·5
Horizontal force range	0·00030 C. G. S. unit.
Horizontal force summed range	0·00172 " "
Declination range	2′·1
Declination summed range	8′·6

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

Seismic disturbances.

No seismic disturbance was recorded during the month.

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

CALCUTTA OBSERVATORY.

5.—*List of displacements recorded by the Milne seismograph.*

There was no displacement in February 1912.

C. W. PEAKE,
Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6.—*List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 3.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Max. amplitude.	End approx.	Duration.	Max. displacement of style.*	REMARKS.
		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	mm.	
4th	A	19 47·5	?	19 47·9	19 47·9	20 21	0 33	1·9	
	B	19 47·5	?	19 48·0	19 48·0	19 58	0 10	2·0	
23rd	A	22 29·3	?	?	22 31·5	22 38	0 9	Small	Local.
	B	22 29·4	?	?	?	?	?	?	Trace broken.
26th	A	6 50·3	?	?	6 50·4	6 50·7	0 0·4	Small	Local.

All times are given in G. M. T. B = N—S component.
A = E—W component. Magnification of each instrument was 15.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that have been reported :—

TABLE 4.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity. Rossi-Forel scale.	No. of shocks.
		H. M.	Sec.		
Drosh	31st Jan.	21 15	15	5	3
"	6th Feb.	7 10	6	5	2
Chitral	6th "	7 15	5	5	2
Shillong	8th "	16 1	2	7	1
Drosh	9th "	2 43	3	5	1
Salonah	12th "	7 40	12	5	1
Chitral	13th "	3 30	10	5	5
Drosh	13th "	3 40	5	5	1
Chitral	15th "	3 45	15	5	4
Drosh	15th "	3 51	2	5	1
Chitral	19th "	18 45	40	6	5
Midnapur	20th Feb.	17 14	2	4	1
Chitral	23rd "	22 15	15	5	3
Drosh	23rd "	22 34	5	6	3
"	23rd "	23 0	2	6	1

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·55
Minimum	1·44
Mean	1·49
Number of days of observation	12

W. A. HARWOOD,

Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. Pressure at both Zanzibar and Seychelles was normal, and the mean wind direction also was practically the same as usual at both places. Rainfall was more than twice the normal at Zanzibar, and 79 per cent. in excess at Seychelles.

TABLE 5.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	...	0	0
Actual mean wind direction	...	N 34° E	N 14° W
Normal mean wind direction	...	N 27° E	N 21° W
Actual mean wind velocity (miles per diem).	...	170	98
Normal mean wind velocity (miles per diem).	...	118	147
Rainfall departure from normal	...	+2·89	+9·93

Depressions and cyclonic storms.

9. Several disturbances appeared in the Persian area, but they were of small vitality and either did not enter India at all or produced comparatively little precipitation. There was a pronounced tendency to the formation in the Central Provinces and the north Deccan of shallow depressions which in general moved eastwards and caused thunderstorms there and over Orissa and the north coast of Madras.

Pressure.

10. Pressure was well above normal at the hill stations in the western Himalayas and Baluchistan, but nearly normal at those in Rajputana, the Central Provinces, northeast India and the south of the Peninsula. In the plains of the north-west and central parts of the country the barometer was generally lower than usual, and elsewhere about normal. The association of an excess of pressure in the hills of north-west India with a defect in the neighbouring plains is a frequent, but not the invariable, accompaniment of a marked deficiency in the number of winter storms and the consequent winter rains.

TABLE 6.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
	"
Burma	+·011
Eastern Bengal and Assam	—·009
Bengal	—·013
United Provinces	—·013
Punjab	—·010
North-West Frontier Province	—·036
Sind	—·032
Rajputana	—·017
Bombay	—·017
Central India	—·014
Central Provinces	—·016
Hyderabad	—·010
Mysore	+·006
Madras	—·001

TABLE 7.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B—A.
	"		"	"
Quetta	+·041	Jacobabad	—·036	—·077
Leh	+·090	Lahore	—·023	—·113
Murree	+·039	Peshawar	—·028	—·067
Simla	+·040	Ludhiana	—·005	—·045
Chakrata	+·038	Roorkee	+·011	—·027
Darjiling	—·00	Dhubri	+·001	+·004
Mount Abu	+·001	Deesa	—·030	—·031
Pachmarhi	—·003	Khandwa	—·016	—·013
Kodaikanal	—·009	Madura	+·011	+·020

Temperature.

11. Day temperature was unusually high over northern India, and particularly so in the northwest; while it was on the whole about normal in the Peninsula, the Central Provinces and Burma. It was relatively highest in the Punjab southwest, where it was 6·9 degrees above normal, and relatively lowest in the Central Provinces East where it was 3·4 degrees in defect.

Night temperature was everywhere higher than usual. The excess was greatest in the Peninsula, the departure from normal in north-west India being less marked than that of the day temperature. The largest departures reported were 4·4 degrees in the Madras Deccan, 4·1 degrees in Rajputana East, and 3·8 degrees in Hyderabad North.

The daily range was larger than the normal in parts of northwest India, owing to the excessive temperatures during the day; but elsewhere, it was for the most part smaller than usual.

Except in Burma, the mean of the maximum and minimum temperatures was above normal.

TABLE 8.

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	84·9	75·5	80·2	9·5	15·1	−1·4	+1·0	−2·4
2. Lower Burma	88·4	67·4	77·9	21·0	28·9	−0·4	+0·7	−1·1
3. Upper Burma	86·4	57·7	72·1	28·7	41·3	−1·3	+0·7	−2·0
4. Assam	76·5	56·4	66·5	20·1	32·7	−0·1	+1·8	−1·9
5. Eastern Bengal	82·1	59·1	70·6	23·0	34·4	+2·3	+3·0	−0·7
6. Bengal	84·6	62·5	73·6	22·0	35·1	+1·4	+3·7	−2·3
7. Orissa	85·0	66·0	75·5	19·0	32·5	−1·6	+2·4	−4·0
8. Chota Nagpur	81·6	58·2	69·9	23·4	37·2	+1·0	+2·9	−1·9
9. Bihar	81·4	56·0	68·7	25·3	38·0	+2·6	+2·4	+0·2
10. United Provinces, East	81·0	53·3	67·1	27·6	42·0	+2·1	+1·7	+0·4
11. Do., West	79·1	52·4	65·7	26·8	41·3	+2·2	+1·3	+0·9
12. Punjab, East and North	75·8	48·6	62·2	27·2	42·2	+4·4	+2·1	+2·3
13. Do., Southwest	78·6	50·3	64·4	28·3	44·2	+6·9	+3·6	+3·3
14. Kashmir	49·2	27·3	38·3	21·9	37·3	+3·3	+1·0	+2·3
15. North-West Frontier Province	73·5	46·5	60·1	27·1	40·1	+4·5	+2·7	+1·8
16. Baluchistan	69·9	44·7	57·3	25·1	47·1	+5·7	+2·5	+3·2
17. Sind	83·8	57·5	70·7	26·3	41·9	+5·0	+3·1	+1·9
18. Rajputana, West	83·9	56·1	70·0	27·7	46·3	+6·2	+2·7	+3·5
19. Do., East	82·9	56·2	69·5	26·7	44·4	+3·7	+4·1	−0·4
20. Gujarat	88·1	60·1	74·1	28·0	43·6	+3·3	+1·7	+1·6
21. Central India, West	85·6	55·5	70·5	30·1	42·9	+3·3	+3·4	−0·1
22. Do., East	82·1	54·7	68·4	27·5	43·3	+2·2	+2·9	−0·7
23. Berar	89·8	63·1	76·5	26·7	39·4	+0·7	+3·2	−2·5
24. Central Provinces, West	85·7	58·9	72·3	26·8	41·8	+0·5	+3·0	−2·5
25. Do., East	84·2	61·1	72·7	23·1	36·7	−3·4	+3·3	−6·7
26. Konkan	84·4	70·1	77·2	14·3	27·2	−1·0	+1·2	−2·2
27. Bombay Deccan	91·1	60·5	75·8	30·6	42·7	+0·8	+1·6	−0·8
28. Hyderabad, North	89·1	64·4	76·7	24·7	35·9	−0·6	+3·8	−4·4
29. Do., South	91·1	68·7	79·9	22·4	34·4	−0·5	+3·2	−3·7
30. Mysore	88·3	65·0	76·7	23·3	31·1	+0·7	+3·4	−2·7
31. Malabar	88·1	75·1	81·6	13·0	17·3	−0·1	+2·5	−2·6
32. Madras, Southeast	90·6	72·0	81·3	18·6	27·7	+1·2	+2·9	−1·7
33. Do., Deccan	95·6	70·8	83·2	24·7	36·1	+1·0	+4·4	−3·4
34. Do. Coast, North	86·4	70·9	78·7	15·4	23·9	−0·3	+2·1	−2·4

TABLE 9.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	—0·7	+0·7	0
Eastern Bengal and Assam	+1·6	+2·6	+2·1
Bengal	+1·0	+2·9	+1·9
United Provinces	+2·2	+1·5	+1·9
Punjab	+5·1	+2·5	+3·8
North-West Frontier Province	+4·5	+2·7	+3·6
Sind	+5·0	+3·1	+4·0
Rajputana	+4·7	+3·6	+4·1
Bombay	+1·4	+1·5	+1·5
Central India	+2·8	+3·2	+3·0
Central Provinces	−0·2	+3·1	+1·4
Hyderabad	—0·5	+3·4	+1·4
Mysore	+0·7	+3·4	+2·1
Madras	+0·6	+2·9	+1·7

Winds.

12. Except locally, the average direction of the winds was about normal. It was more uniform than usual in the Peninsula and the central parts of the country, and elsewhere on the whole somewhat less uniform than usual. Wind velocity was in general slightly below normal.

TABLE 10.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	+0·1	−9
Eastern Bengal and Assam	—0·2	+6
Bengal	—0·2	−1
United Provinces	—0·6	−5
Punjab	—0·2	−3
North-West Frontier Province	—0·6	−1
Sind	—0·6	−7
Rajputana	+0·3	+13
Bombay	—0·5	+1
Central India	—0·6	+5
Central Provinces	+0·4	+5
Hyderabad	—0·4	+8
Mysore	—0·4	+4
Madras	0	+7

Humidity and cloud.

13. Relative humidity was about normal except in the Central Provinces, Hyderabad and Mysore, where it was somewhat high; but the amount of moisture in the air was above normal everywhere excluding Burma. Skies were cloudier than usual in the Peninsula and in central and northeast India, but considerably less cloudy than usual in the northwest.

TABLE 11.

Division.	Hygrometry, 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma . . .	79	—1	·556	—·007	2·0	—0·1
Eastern Bengal and Assam.	85	0	·500	+·033	3·1	+0·6
Bengal . . .	78	+ 4	·488	+·055	2·3	+0·4
United Provinces .	71	0	·360	+·022	1·2	—1·4
Punjab . . .	72	— 2	·305	+·017	1·8	—1·9
North-West Frontier Province.	74	+ 1	·278	+·022	2·5	—1·3
Sind	61	— 2	·371	+·052	1·0	—1·7
Rajputana . . .	49	— 3	·264	+·006	1·3	—1·4
Bombay . . .	61	+ 2	·454	+·026	1·4	+0·4
Central India . .	59	+ 2	·343	+·043	1·9	+0·2
Central Provinces .	63	+ 7	·409	+·067	2·5	+0·7
Hyderabad . . .	62	+ 7	·506	+·090	2·7	+1·2
Mysore . . .	72	+ 8	·541	+·069	3·1	+1·1
Madras . . .	78	+ 1	·730	+·054	3·0	+0·9

Rainfall.

14. The distribution of precipitation during the month was very unusual. Thus the month's aggregate was markedly below the normal over nearly the whole of the area from Persia to Bengal—the usual region of the winter rains; and in moderate to large excess in Assam, Orissa, the whole of the Central Provinces, Hyderabad, Mysore, the Madras Deccan and the Madras Coast North, stations in these areas receiving up to ten times their small normal quantities. In the region of scanty rainfall the largest actual deficiency occurred in Kashmir and Baluchistan, but the percentage deficiency was largest in Sind, Rajputana West, Gujarat and the Konkan. The deficiency over northern India and Burma was more than balanced by the excess in the peninsular region, and the total for the whole country was some what above normal.

TABLE 12.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	0	0·8	0·01	0·59	—0·58	— 98
2. Lower Burma	0·1	0·3	0·06	0·20	—0·14	— 70
3. Upper do.	0·3	0·4	0·09	0·17	—0·08	— 47

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
4. Assam	5·0	3·1	2·41	1·27	+1·14	+ 90
5. Eastern Bengal	1·2	1·5	0·59	0·82	−0·23	— 28
6. Bengal	1·5	1·5	0·68	0·95	—0·27	— 28
7. Orissa	4·7	1·3	2·29	0·74	+1·55	+209
8. Chota Nagpur	1·8	1·6	0·97	0·76	+0·21	+ 28
9. Bihar	0·6	1·3	0·19	0·54	—0·35	— 65
10. United Provinces, East	0·6	1·1	0·20	0·48	—0·28	— 58
11. Do., West	0·8	1·6	0·35	0·87	—0·52	— 60
12. Punjab, East and North	0·8	2·1	0·35	1·06	—0·71	— 67
13. Punjab, Southwest	0·3	1·4	0·06	0·56	—0·50	— 89
14. Kashmir	2·5	4·8	1·27	2·79	—1·52	— 54
15. North-West Frontier Province	1·9	2·7	1·03	1·31	—0·28	— 11
16. Baluchistan	0·5	3·7	0·19	1·57	—1·38	— 88
17. Sind	0	0·7	0	0·25	—0·25	—100
18. Rajputana, West	0	0·3	0	0·13	—0·13	—100
19. Do., East	0·3	0·6	0·17	0·26	—0·09	— 35
20. Gujarat	0	0·2	0	0·11	—0·11	—100
21. Central India, West	0·5	0·6	0·22	0·29	—0·07	— 24
22. Do., East	0·9	1·3	0·33	0·64	—0·31	— 48
23. Berar	1·8	0·6	0·91	0·23	+0·68	+296
24. Central Provinces, West	3·2	0·8	1·94	0·38	+1·56	+411
25. Do., East	6·1	0·8	3·46	0·45	+3·01	+669
26. Konkan	0	0·1	0	0·05	—0·05	—100
27. Bombay Deccan	0·1	0·2	0·03	0·09	—0·06	— 67
28. Hyderabad, North	2·3	0·3	0·93	0·16	+0·77	+481
29. Do., South	2·9	0·4	1·40	0·18	+1·22	+678
30. Mysore	0·5	0·2	0·18	0·08	+0·10	+125
31. Malabar	0·1	0·2	0·05	0·18	—0·13	— 72
32. Madras, Southeast	0·3	0·7	0·10	0·49	—0·39	— 80
33. Do., Deccan	0·4	0	0·20	0·10	+0·10	+100
34. Do. Coast, North	1·4	0·6	0·62	0·45	+0·17	+ 38

TABLE 13.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	0·08	0·19	−0·11	− 58
Eastern Bengal and Assam	1·52	1·04	+0·48	+ 46
Bengal	0·77	0·73	+0·04	+ 5
United Provinces	0·27	0·66	−0·39	− 59
Punjab	0·29	0·96	−0·67	− 70
North-West Frontier Province	1·03	1·31	−0·28	− 21
Sind	0	0·25	−0·25	−100
Rajputana	0·11	0·22	−0·11	− 50
Bombay	0·01	0·09	−0·08	− 89
Central India	0·26	0·41	−0·15	− 37
Central Provinces	1·86	0·34	+1·52	+447
Hyderabad	1·19	0·17	+1·02	+600
Mysore	0·18	0·08	+0·10	+125
Madras	0·27	0·40	−0·13	− 33
Mean of India	0·54	0·46	+0·08	+ 17

Snowfall.

I.—AFGHANISTAN.

15. Snow fell over the greater part of Afghanistan, and the accumulations at the end of the month were: Kabul 6 inches, Paghman 2 feet, Killa Kazi 9 inches, Kohistan 6 inches, Shakar Dara 2 feet, Hazarajat 4 feet and Koh Baba 5 feet.

II.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Wano.*—Snow fell on the heights on the 10th and 15th, but to a depth of only a few inches.

(*b*) *Dera Ismail Khan.*—Heavy snowfall occurred on some of the peaks of the Shirani country.

(*c*) *Kurram.*—Snowfall was below the average, but light falls occurred daily on the Sufed Koh from the 12th to the 16th and again on the 22nd and 23rd. The fall of 16th gave a little snow in Parachinar.

(*d*) *Kohat.*—There were falls of a few inches on the 15th and 16th in the Samalzai hills and at Fort Lockhart.

(*e*) *Chitral.*—Falls of a few inches occurred on the surrounding hills on seven days during the month.

(*f*) *Drosh.*—No snow fell in Drosh and only a few inches on the surrounding hills; but about 4 feet still lay on the Lowarai and neighbouring passes.

(*g*) *Hazara.*—Snow fell on all the ranges during the month, and the total amount was reported to be in general less than usual.

III.—KASHMIR.

(*a*) *Srinagar.*—There was no fresh snowfall in the main valley, but snow fell on the surrounding hills.

(*b*) *Skardu.*—Snow fell on seven days, but the falls were not heavy and the accumulation in Skardu at the end of the month was only 6 inches.

(*c*) *Dras.*—Some snow fell and the accumulation at the end of the month was reported to be 12 feet on the Zoji-la and 7 feet at the level of Dras.

(*d*) *Kargil.*—Falls occurred on the 1st, 17th, 22nd, 23rd and 24th both on the hills and in the station, and the estimated accumulations at the end of the month were 11 feet and 2 feet respectively.

IV.—PUNJAB.

Kilba (Simla Hills).—A few inches of snow fell on the 1st, 16th, 23rd and 24th.

V.—UNITED PROVINCES.

(*a*) *Garhwal.*—Some snow fell on the highest peaks on the 10th, 17th and 24th, but the weather was generally mild.

(*b*) *Almora.*—There was a total fall of 5 feet 7 inches in Malla Danpur, 11 feet in Malla Johar, 11 feet 6 inches in Malla Darma, 3 feet in Byans, and 8 feet 3 inches in Darma.

TABLE 14.

Name of pass.	Depth of accumulation at the end of the month.	
	Reported.	Normal.
	Feet.	Feet.
Nuwe Pass	72	35
Binkaru "	20	37½
Lipulekh "	30	19
Lampia "	40	21½
Untadhura "	17	25
Ralamdhura "	12	20½

SUMMARY.

16. So far as can be judged from the information available, the snowfall in the hills to the north of India was below normal, except perhaps in Almora.

W. A. H.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 17 stations in India, etc., in February, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912).

Table

Abstract of observations taken at 10 hrs. and 16 hrs.

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
6	Calcutta . .	21	30·007	29·882	·125	29·937	−·020	29·903	84·8	64·5	20·3	93·6	58·0	35·6	77·1	83·3	73·8	+3·5	62·5	68·7	68·0	66·4
	IV.—United Provinces of Agra and Oudh.																					
10	Allahabad . .	309	29·722	·595	·127	·647	−·021	·916	83·0	54·0	29·0	91·5	47·5	44·0	71·3	82·2	67·4	+2·5	51·5	60·3	61·7	57·8
	V.—Punjab.																					
12	Lahore . . .	702	·303	·216	·087	·250	−·031	·944	77·8	48·7	29·1	86·8	42·8	44·0	65·6	75·9	62·1	+4·8	46·5	56·2	59·6	54·1
	VIII.—Rajputana.																					
19	Jaipur . . .	1,431	28·582	28·479	·103	28·519	−·019	·915	82·4	55·1	27·3	93·0	47·4	45·6	73·1	80·9	67·6	+3·4	49·2	57·8	60·0	55·7
	IX.—Bombay.																					
26	Bombay . .	37	29·992	29·877	·115	29·929	−·004	·906	84·7	71·2	13·5	92·0	66·4	25·6	77·1	80·8	77·1	+2·3	66·5	70·1	71·3	69·3
	XIII.—Mysore.																					
30	Bangalore . .	3,021	27·036	26·902	·134	26·966	−·003	·783	88·2	63·7	24·5	93·3	60·2	33·1	78·0	85·7	75·2	+3·2	60·8	65·4	65·3	63·8
	XIV.—Madras.																					
32	Pudukkottai .	318	29·712	29·556	·156	29·634		·882	92·3	71·5	20·8	97·5	67·0	30·5	83·0	89·9	81·9		71·0	74·4	77·0	74·1
	Madras . .	22	30·016	·896	·120	·954	−·012	·907	86·7	71·3	15·4	89·3	66·5	22·8	83·3	83·4	78·1	+1·5	70·8	75·5	75·6	74·0
	Kashmir.																					
14	Srinagar . .	5,204	24·996	24·913	·083	24·951	+·014	24·922	52·1	33·3	18·8	57·4	27·9	29·5	40·6	50·3	40·9	+7·9	31·5	38·1	46·6	38·7
	Hill Stations, excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	23·138	23·093	·045	23·108	+·037	23·071	51·8	39·8	12·0	61·6	31·0	30·6	46·8	49·0	45·6	+5·0	33·0	37·7	40·8	37·2
	Sarain . . .		·180	·122	·058	·139		·101	50·5	30·5	20·0	63·3	25·5	37·8	43·7	42·1	40·3			37·2	37·9	
	Kalabagh . .								Observations not received.													
	Mukteswar . .	7,592	22·861	22·801	·060	22·824		22·782	55·2	37·8	17·4	64·0	29·8	34·2	47·5	52·7	46·3		30·9	39·0	43·6	37·8
	Katmandu . .	4,388	25·763	25·657	·106	25·707	+·059†	25·661	69·0	40·4	28·6	76·4	34·8	41·6	56·8	67·0	54·5	+2·0†	38·5	50·3	53·9	47·6
	Ootacamund .	*7,327*	23·124	23·049	·075	23·077		23·012	69·3	45·4	23·9	74·0	39·7	34·3	64·1	63·3	57·1		43·7	52·7	54·8	50·4
	Kodaikanal . .	7,688	22·897	22·829	·068	22·863		22·796	67·6	49·4	18·2	71·5	44·2	27·3	62·3	61·0	58·5		43·4	52·0	55·1	50·2
	Dodabetta . .	8,539?	·133	·070	·063	·091		·028	61·1	46·9	14·2	65·7	43·7	22·0	57·5	57·4	53·8		42·2	49·1	51·8	47·7
	Extra India.																					
	Diego Garcia .								Observations not received.													
	Seychelles . .	15	29·968	29·874	·094	29·929	0 †	29·867	84·0	78·1	5·9	86·5	75·0	11·5	81·5	82·9	80·0	+0·9†	72·5	76·8	77·4	75·6
	Mauritius . .	181							Observations not received.													

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

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

A.

at 17 stations in India, etc., in February, 1912.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind direction.											Wind steadiness.		Wind velocity.		Rainfall.		Station.	Number of subdivision.
														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.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·541	·593	·483	·565	+·080	89	65	44	69	+ 3	2·7	3·3	3·0	+0·8	3	3	3		3	5	26	9	6	S 60° W	N 73° W	55	25	69*	79	0·74	0·52	Calcutta . .	6
																															IV.—United Provinces of Agra and Oudh.	
·352	·354	·280	·343	+·016	84	44	26	56	− 2	1·3	1·2	1·3	−1·1	7	3	8	7	2	2	2	16	11	N 44° W	N 63° W	28	34	42	108	0·02	0·01	Allahabad .	10
																															V.—Punjab.	
·292	·330	·298	·315	+·028	84	53	34	60	− 2	1·5	1·7	1·6	−2·3	6	11	5	3	5			9	18	N 26° W	N 30° W	43	30	37	53	0	0	Lahore . .	12
																															VIII.—Rajputana.	
·281	·292	·263	·286	+·024	65	37	26	47	0	1·5	1·9	1·7	−1·4	6	5	5	11	1	3	3	7	17	N 22° W	N 20° W	27	33	80*	91	1·58	1·35	Jaipur . .	19
																															IX.—Bombay.	
·583	·641	·641	·645	+·026	77	69	61	73	+ 2	2·3	0·9	1·6	+0·4		2	5	13	2	2	1	15	18	N 36° W	N 1° W	31	57	142*	250	0	0	Bombay . .	26
																															XIII.—Mysore.	
·497	·481	·386	·460	+·053	84	51	32	58	+ 4	2·0	2·0	2·0		3	1	4	16	16	8	5	3		S 54° E	S 69° E	59	59	121	120	0·18	0·18	Bangalore . .	30
																															XIV.—Madras.	
·752	·784	·753	·763		98	69	54	74		3·8	3·2	3·5		9	5	19	7	13	2	1	2		N 76° E		48		105		0	0	Pudukkottai .	32
·747	·778	·780	·792	+·077	97	69	68	81	+ 3	3·7	1·9	2·8	−0·4				24	26	4	3	1		S 58° E	S 84° E	80	72	84*	120	0	0	Madras.	
																															Kashmir.	
·159	·203	·279	·210	+·036	83	80	76	80‡	− 4	5·2	4·8	5·0	−1·6	13	4	4		4	2	3	2	26	N 43° W	S 9° W	44	8	48	61	1·05	0·52	Srinagar.	14
																															Hill Stations, excluding Kashmir and Baluchistan.	
·121	·134	·167	·151	−·008	51	43	51	51	−10	3·5	4·1	3·8	−1·9																1·65	0·71	Simla.	
	·156	·187				57	71			4·0	4·9	4·5		30		1			20	5	1	1	S 11° W		40		30		2·17	0·54	Sarain.	
														Observations not received.																	Kalabagh.	
·105	·151	·191	·159		48	48	50	52		2·6	4·1	3·3		18	2		2	1	1	2	32		S 88° W		54		137		1·55	1·41	Mukteswar.	
·213	·293	·267	·268	+·008	85	63	40	66	− 3	1·4	3·6	2·5	−1·0	43							14	1	N 87° W	N 87° W	25	47	25*	29	0·07	0·05	Katmandu.	
·267	·284	·343	·313		88	48	59	68		3·6	6·4	5·0		7	5	7	12	11	7	2	1	6	S 84° E		31		36		0·14	0·05	Ootacamund.	
·228	·290	·378	·298		64	52	71	62		2·6	6·0	4·3		1	9	9	9	19	4			7	N 83° E		40		177*		0·64	0·42	Kodaikanal.	
·222	·269	·327	·273		68	57	69	65		3·6	6·9	5·3			5	9	10	14	8	5	3	4	S 65° E		32		220		0·41	0·16	Dodabetta.	
																															Extra India.	
														Observations not received.																	Diego Garcia.	
·727	·862	·870	·843	+·001	75	80	77	80	− 3	7·1	6·9	7·0	−0·5†	10	13	8	1	4	1	1	4	16	N 14° W	N 21° W	45	53	98*	147	22·53	8·35	Seychelles.	
														Observations not received.																	Mauritius.	

* Uncorrected for scale error.
‡ Mean of three previous columns.
† Departure from old normal.

Table B.—Abstract of observations taken at 8 hrs. at 235 stations in India, etc., in February, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912).

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

	Pressure departure from normal.	Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
		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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·011	87·5	−0·7	63·1	+0·7	75·3	0	24·5	34·4	+0·1	−9	79	−1	·556	−·007	2·0	−0·1	0·08	0·19	−0·11
Eastern Bengal and Assam	−·009	80·6	+1·6	58·4	+2·6	69·5	+2·1	22·2	33·9	−0·2	+6	85	0	·500	+·033	3·1	+0·6	1·52	1·04	+0·48
Bengal	−·013	82·9	+1·0	59·8	+2·9	71·4	+1·9	23·1	36·1	−0·2	−1	78	+4	·488	+·055	2·3	+0·4	0·77	0·73	+0·04
United Provinces of Agra and Oudh	−·013	80·1	+2·2	52·9	+1·5	66·5	+1·9	27·2	41·7	−0·6	−5	71	0	·360	+·022	1·2	−1·4	0·27	0·66	−0·39
Punjab	−·010	76·6	+5·1	49·1	+2·5	62·8	+3·8	27·5	42·8	−0·2	−3	72	−2	·305	+·017	1·8	−1·9	0·29	0·96	−0·67
North-West Frontier Province	−·036	73·5	+4·5	46·5	+2·7	60·1	+3·6	27·1	40·1	−0·6	−1	74	+1	·278	+·022	2·5	−1·3	1·03	1·31	−0·28
Sind	−·032	83·8	+5·0	57·5	+3·1	70·7	+4·0	26·3	41·9	−0·6	−7	61	−2	·371	+·052	1·0	−1·7	0	0·25	−0·25
Rajputana	−·017	83·3	+4·7	56·2	+3·6	69·7	+4·1	27·1	45·2	+0·3	+13	49	−3	·264	+·006	1·3	−1·4	0·11	0·22	−0·11
Bombay	−·017	88·1	+1·4	62·7	+1·5	75·4	+1·5	25·4	39·3	−0·5	+1	61	+2	·454	+·026	1·4	+0·4	0·01	0·09	−0·08
Central India	−·014	83·9	+2·8	55·1	+3·2	69·5	+3·0	28·8	43·1	−0·6	+5	59	+2	·343	+·043	1·9	+0·2	0·26	0·41	−0·15
Central Provinces	−·016	86·2	−0·2	60·5	+3·1	73·4	+1·4	25·7	39·7	+0·4	+5	63	+7	·409	+·067	2·5	+0·7	1·86	0·34	+1·52
Hyderabad	−·010	90·3	−0·5	66·9	+3·4	78·6	+1·4	23·4	35·0	−0·4	+8	62	+7	·506	+·090	2·7	+1·2	1·19	0·17	+1·02
Mysore	+·006	88·3	+0·7	65·0	+3·4	76·7	+2·1	23·3	31·1	−0·4	+4	72	+8	·541	+·069	3·1	+1·1	0·18	0·08	+0·10
Madras	−·001	89·7	+0·6	72·1	+2·9	80·9	+1·7	17·6	26·1	0	+7	78	+1	·730	+·054	3·0	+0·9	0·27	0·40	−·013

Table

(2) *Abstract of observations taken at 8 hrs. at 235 stations*

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	150	29·837		29·917	29·927	5th	29·761	25th	·166	78·7	90·4		74·9		82·7		15·5	93·7	25th & 28th.	71·7	14th & 17th.	22·0
	Mergui	65	29·933	+·015	29·929	30·037	5th	29·851	25th	·186	75·0	90·2	+0·6	63·5	−0·6	79·4	0	21·7	93·0	25th & 27th.	63·8	1st	29·2
	Tavoy	19	29·990	+·005	29·943	30·086	1st	29·918	24th	·168	70·1	92·0	+0·9	66·4	−0·4	79·2	+0·3	25·6	95·5	23rd, 24th & 27th.	51·8	18th	33·7
	Moulmein	94	29·919	+·026	29·952	30·009	7th	29·840	24th & 29th.	·169	71·4	91·8	+0·3	67·9	+0·2	79·8	+0·3	23·9	97·0	23rd	64·8	29th	32·2
	Rangoon	18	29·983	+·002	29·939	30·094	1st	29·895	29th	·189	70·6	90·9	−1·9	68·1	+2·2	79·5	+0·1	22·8	95·6	24th	65·9	1st, 15th & 29th.	29·7
	Bassein	27?	29·976	+·014	29·941	30·075	5th	29·894	29th	·181	72·0	90·1	+0·1	66·9	+2·0	78·5	+1·1	23·2	94·2	24th	62·4	2nd & 13th.	31·8
	Diamond Island	41	29·964	+·004	29·941	30·066	1st	29·871	26th	·195	77·5	83·7	−0·5	70·5	−1·8	77·1	−1·1	13·2	88·4	11th	68·2	2nd, 3rd & 4th.	20·2
	Toungoo	164	29·813	+·023	29·955	29·937	1st	29·750	29th	·187	67·6	88·9	−2·0	62·5	+1·4	75·7	−0·3	26·4	93·0	23rd	59·9	26th	33·1
	Kyaukpyu	18	29·982		29·910	30·080	5th	29·890	26th & 29th.	·190	69·6	81·7		64·3		73·0		17·4	87·0	27th	59·4	24th	27·6
	Akyab	20	29·996	+·005	29·960	30·102	5th	29·893	26th	·209	67·5	83·7	−1·1	63·2†	+1·7†	73·5†	+0·3	20·5	88·9	23rd	59·0	5th & 11th.	29·9
3	Thayetmyo	121	29·872	+·010	29·937	29·967	5th	29·753	25th	·214	69·5	92·1	−0·5	58·0	+1·1	75·1	+0·3	31·1	97·9	28th	52·9	1st	45·0
	Minbu	*165*	29·827	+·013	29·940	29·933	8th	29·683	25th	·250	68·6	91·1	−0·5	62·1	+0·9	76·6	+0·2	29·0	97·3	25th —	55·5	4th	41·8
	Yamethin	657	29·305	+·003	29·931	29·408	9th	29·190	25th	·218	67·8	91·3	−1·2	61·5	+0·9	76·4	−0·1	29·8	96·3	24th —	55·5	15th	40·8
	Mandalay	250	29·741	+·018	29·948	29·837	8th	29·594	26th	·243	67·2	92·5	+2·6?	60·7	+0·6	76·6	+1·6?	31·8	97·2	25th	53·1	2nd	44·1
	Monywa	*280*	29·731		29·969	29·831	8th	29·554	26th	·277	68·3	89·1		61·3		75·2		27·8	95·8	26th	56·6	15th	39·2
	Lashio	*2,820*	27·192	+·013	30·025?	27·324	8th	27·069	29th	·255	54·8	75·8	−3·2	49·8	+1·1	62·8	−1·1	26·0	82·3	26th	43·0	22nd	39·3
	Bhamo	*381*	29·636	+·042?	29·990	29·782	8th	29·453	25th	·329	58·9	81·2	−1·0	52·8	−0·3	67·0	−0·7	28·4	90·4	26th	47·6	22nd	42·8
	Myitkyina	458	29·543		29·983	29·685	8th	29·364	25th	·321	59·1	78·3		55·2		66·7		23·1	87·2	26th	50·0	12th & 14th.	37·2
	II.—Eastern Bengal and Assam.																						
4	Dibrugarh	353	29·661		29·995	29·813	8th	29·399	26th	·414	58·3	72·1		56·0		64·1		16·1	79·4	24th	50·6	6th	28·8
	Sibsagar†	333	29·706	−·009	30·010	29·845	5th	29·448	26th	·397	59·4	71·6	−1·5	55·2	+1·9	63·4	+0·2	16·4	77·6	24th	49·0	8th	28·6
	Tezpur	252	29·768		29·992	29·926	8th	29·534	25th	·392	60·0	76·9		57·4		67·2		19·5	82·6	24th	51·8	8th	30·8
	Gauhati	195	29·835		29·995	29·986	7th	29·612	26th	·374	61·2	76·6		54·8		66·7		23·8	82·8	18th & 24th.	48·6	5th	34·2
	Dhubri	115	29·895	+·001	29·969	30·038	8th	29·663	26th	·375	62·5	79·6	+1·6	57·3	+1·3	68·5	+1·5	22·3	86·0	25th	53·1	5th	32·9
	Silchar	104	29·923	−·010	29·984	30·038	5th	29·734	26th	·304	62·1	80·4	−0·3	57·8	+2·2	69·1	+0·9	22·6	95·3	25th	54·3	13th & 14th.	41·0
5	Cox's Bazar	36	29·973		29·960	30·078	5th	29·855	26th	·223	68·7	83·3		61·6		72·5		21·7	88·7	17th	55·7	14th	33·0
	Chittagong	87	29·924	−·006	29·960	30·028	5th, 7th & 8th.	29·765	26th	·263	65·9	82·8	+0·5	61·3†	+2·3†	72·0†	+1·4	21·5	88·0	23rd	56·5	12th	31·5
	Noakhali	43	29·977†		29·968†	30·083	8th	29·804	26th	·279	67·4	81·5		61·3		71·4		20·2	85·3	18th	55·9	8th & 13th.	29·4
	Barisal	12	29·999	−·001	29·958	30·114	8th	29·838	26th	·276	69·9	83·4	+1·7	62·7	+3·0	73·0	+2·3	20·7	88·3	18th & 29th.	56·6	11th	31·7
	Comilla	36	29·975		29·960	30·081	5th	29·808	29th	·273	67·5	84·8		61·6		73·2		23·2	89·3	4 days	56·3	12th & 13th.	33·0
	Narayanganj	26	29·968	−·020	29·943	30·085	8th	29·793	25th	·292	67·1	83·3	+1·1	62·5	+3·9	72·9	+2·5	20·8	88·5	29th	57·8	13th	30·7
	Faridpur	46	29·961		29·959	30·081	8th	29·767	25th	·314	66·4	83·1		59·6		71·3		23·5	89·8	26th	53·9	13th	35·9
	Sirajganj	49	29·950		29·951	30·081	8th	29·744	25th	·337	63·7	81·4		59·2		70·3		22·2	88·4	25th	55·3	8th & 13th.	33·1
	Mymensingh	63	29·951	−·001	29·968	30·072	8th	29·767	29th	·305	62·3	81·8	+3·4	59·6	+4·0	70·7	+3·7	22·2	88·1	25th	55·1	8th	33·0
	Bogra	75	29·924	−·007	29·954	30·061	8th	29·739	25th	·322	62·5	83·8	+3·6	57·8	+3·3	70·8	+3·5	26·0	91·2	25th	53·2	4th	38·0
	Rampur Boalia	70	29·945		29·966	30·085	8th	29·742	29th	·343	65·7	82·9		58·1		71·0		23·8	89·6	25th	53·6	28th	36·0
	Malda	72	29·927		29·953	30·080	8th	29·721	25th	·359	63·4	81·0		56·4		68·7		24·6	88·8	26th	51·5	14th	37·3
	Dinajpur	123	29·860	−·021	29·944	30·018	8th	29·648	26th	·370	60·3	81·7	+2·3	54·4	+1·3	68·1	+1·8	27·3	90·3	26th	48·5	4th & 14th	41·8
	Rangpur	123	29·884†		29·968†	30·034	8th	29·663	26th	·371	62·0	80·6		55·8		68·2		24·8	88·1	26th	50·0	4th	38·1

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

† Mean of 28 days.

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau

B.

in India, etc., in February, 1912.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec. 1911 to 29th Feb., 1912.	Normal rainfall for period, 1st Dec. to 29th Feb.	Departure from normal of period, 1st Dec. 1911 to 29th Feb., 1912.	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	56	57
																																I.—Burma.
1	2	16	5	3				2	N 54° E		5·1*			74		78		·757		3·6		0			0·12			2·16			0·07	Victoria Point
27		1		1					E	N 8° W	2·7	1·5	+1·2	5	−42	85	+ 2	·743	−·014	1·0	−2·6	2	2·80	−0·80	0·87	2·12	− 1·25	2·31	3·51	−1·20	0·48	Mergui.
29									(a)	N 54° W	1·1*	1·0	+0·1			86	− 2	·634	−·060	1·5	−0·9	0	0·80	−0·80	0	0·59	− 0·59	0·38	0·95	− 0·57	0	Tavoy.
6		8	14	1					N 76° E	N 84° E	2·9	1·7	+1·2	70	+22	84	0	·641	−·032	0·8	−0·5	0	0·50	−0·50	0	0·19	− 0·19	2·13	0·51	+ 1·62	0	Moulmein.
14	4	7			1		1	2	N 15° E	S 67° W	1·2	2·8	−1·6	32	−15	81	− 4	·601	−·029	4·3	+3·1	0	0·40	−0·40	0	0·23	− 0·23	5·55	0·52	+ 5·03	0	Rangoon.
26	2							1	N 15° W	N 43° W	3·6	3·3	+0·3	11	−43	86	− 1	·675	+·006	0·2	−1·8	0	0·30	−0·30	0	0·36	− 0·36	1·40	0·75	+ 0·65	0	Bassein.
1	10	7						11	N 7° W	N 9° W	8·3	6·4	+1·9	82	+ 7	75	− 1	·701	+·002	0·7	−1·6	0	0·40	−0·40	0	0·20	− 0·20	1·57	1·13	+ 0·44	0	Diamond Island.
10	4	4	3	4	2	1		1	N 74° E	N 6° E	0·7	1·4	−0·7	25	−10	81	− 3	·542	−·013	0·5	−0·3	0	0·30	−0·30	0	0·22	− 0·22	3·59	0·59	+ 3·00	0	Toungoo.
12	2	6	2	6	1				N 84° E		3·2*			36		86		·628		1·7		0			0			0·16			0	Kyaukpyu.
3	7	15	4						N 40° E	N 24° E	2·8	2·6	+0·2	78	− 5	86	+ 4	·574	+·034	2·7	+1·5	1	0·30	+0·70	0·59	0·12	+0·47	1·15	0·92	+ 0·23	0·56	Akyab.
25	2			1	1				N 67° E	N 50° W	1·8*	2·6	−0·8	2	−41	67	+ 1	·481	+·038	0·7	+0·1	0	0·10	−0·10	0	0·12	− 0·12	0·02	0·35	− 0·33	0	Thayetmyo
						13		16	N 84° W	N 70° W	3·2	4·6	−1·4	70	+52	60	− 4	·412	−·032	2·7	+1·9	0	0·10	−0·10	0	0·10	− 0·10	0·37	0·59	− 0·22	0	Minbu.
17	1			7				6	S 62° E	S 63° E	4·5	2·3	+2·2	7	− 5	69	− 1	·468	+·001	0·4	−0·3	0	0·30	−0·30	0	0·32	− 0·32	0·32	0·76	− 0·44	0	Yamethin.
14	1	2	1	3	2	2	2	2	S 11° W	S 30° W	1·8	1·8	0	6	− 5	65	− 4	·431	−·024	1·6	+0·5	0	0·30	−0·30	0·02	0·07	− 0·05	0·29	0·44	− 0·15	0·05	Mandalay.
4	13	1		1	1	1		8	N 16° W		1·9			63		69		·477		2·3		0	0	0	0	0·03	− 0·03	0	0·40	− 0·40	0	Monywa.
29									(a)		2·1*					83	+ 1	·351	−·001	3·7	−0·7	3			0·51	0·28	+ 0·26	2·70	1·28	+ 1·42	0·22	Lashio.
25	1	2	1						N 45° E	N 18° W	1·1	2·0	−0·9	11	−13	92	+ 5	·450	+·026	3·7	+0·9	1	1·10	−0·10	0·61	0·46	+ 0·15	0·61	1·63	− 1·02	0·41	Bhamo.
21	1	5	1		1				N 52° E		1·1			21		85		·425		4·1		2			0·71	0·66	+ 0·05	0·71	1·65	− 0·94	0·55	Myitkyina.
																																II.—Eastern Bengal and Assam.
29									(a)		0·9					95		·457		5·6		9	6·70	+2·30	3·95	1·94	+ 2·01	5·46	4·06	+1·40	0·90	Dibrugarh.
8	1	17			1			1	N 42° E	N 48° E	5·8	1·7	+4·1	69	+24	91	− 7	·461	+·003	6·7	+0·8	9	4·90	+4·10	2·95	1·86	+ 2·09	4·77	3·68	+ 1·09	0·53	Sibsagar.
5		12	11				1		N 65° E		3·5			70		85		·438		3·6		5	2·60	+2·40	1·58	0·84	+ 0·74	1·69	1·58	+ 0·11	0·40	Tezpur.
24		2	2		1				N 83° E		1·3			12		87		·468		4·3		5	1·80	+3·20	2·10	0·92	+ 1·18	2·10	1·39	+ 0·71	1·23	Gauhati.
	1	11	12	1	1	3			N 75° E	N 67° E	4·2	3·1	+1·1	63	+32	82	− 2	·460	+·033	2·3	+0·1	1	1·29	−0·29	0·18	0·67	− 0·49	0·22	1·08	− 0·86	0·15	Dhubri.
16		8	5						N 62° E	S 63° E	1·2*	1·8	−0·6	46	+38	37	0	·438	−·004	2·7	−1·0	5	3·70	+1·30	4·99	2·01	+ 2·95	5·13	3·30	+ 1·83	2·49	Silchar.
	1	10	7	7	2		1	1	N 84° E		3·4*			60		85		·590		3·4		0			0·05			0·06			0·05	Cox's Bazar.
7		19	3						N 51° E	N 45° E	1·3	2·8	−1·5	70	+15	84	0	·541	+·018	3·6	+1·3	1	1·39	−0·39	0·59	0·98	− 0·39	0·67	2·11	− 1·44	0·56	Chittagong.
7	3	9	2	1	5		1	1	N 60° E		1·9			28		89		·597		3·3		0	1·81	−1·81	0·06	1·13	− 1·07	0·06	1·79	− 1·73	0·04	Noakhali.
24		1			1	2	1		S 45° W	N 13° W	0·3	1·5	−1·2	11	+ 3	86	+ 1	·621	+·062	3·8	+1·4	2	1·77	+0·23	0·74	1·02	− 0·28	0·74	2·04	− 1·30	0·30	Barisal.
26				3					S 45° E		0·8			10		85†		·578†		2·6		1	2·18	−1·18	2·37	0·98	+ 1·39	2·37	1·52	+ 0·85	2·27	Comilla.
14		2	3	1	2	4	2	1	S 7° W	N 27° W	1·6	2·1	−0·5	12	+ 4	84	0	·560	+·049	4·3	+1·3	2	2·12	−0·12	0·73	1·32	− 0·59	0·73	1·83	− 1·10	0·42	Narayanganj
8	5			1	9	1	3	2	S 45° W		1·5			21		85		·550		2·5		2	2·00	0	0·77	1·18	− 0·41	0·82	1·81	− 0·99	0·49	Faridpur.
7	1		3	3	6	5	3	1	S 11° W		1·5			35		84		·493		3·4		2	1·57	+0·43	0·58	0·76	− 0·18	0·58	1·26	− 0·68	0·47	Sirajganj.
25	1	1		1	1				S	N 74° E	0·3	1·4	−1·1	5	−26	86	+ 1	·492	+·035	3·7	+1·6	2	1·48	+0·52	0·47	1·00	− 0·53	0·47	1·49	− 1·02	0·33	Mymensingh
26			1		1	1			S 11° E	N 27° W	0·8	1·8	−1·0	6	− 5	82	+ 3	·469	+·048	2·5	+0·7	0	1·52	−1·52	0·15	0·88	− 0·73	0·15	1·38	− 1·23	0·05	Bogra.
15	2	2	1	1	1	4	2	1	S 75° W		1·5			10		78		·496		2·8		0	1·35	−1·35	0	0·61	− 0·61	0·05	1·04	− 0·99	0	Rampur Boalia.
10	2	4		1	6	3	1	2	S 18° W		2·0*			10		81		·472		0·4		2	1·23	+0·77	0·42	0·95	− 0·53	0·53	1·67	− 1·14	0·30	Malda.
7	3	1	4	1	1	1	6	5	N 45° W	N 83° W	1·5	2·6	−1·1	29	0	84	+ 4	·440	+·047	2·0	+0·5	1	1·39	−0·39	0·25	0·53	− 0·28	0·32	0·95	− 0·63	0·13	Dinajpur.
5		13	6	1	1	2		1	N 63° E		1·7			52		83		·462		2·5		0	1·13	−1·13	0·03	0·57	− 0·54	0·07	1·05	− 0·98	0·04	Rangpur.

(a) Indeterminate.

* Uncorrected for scale error.

stations, the elevations of which exceed 3,200 feet.

Table

(2) *Abstract of observations taken at 8 hrs. at 235 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	II.—Eastern Bengal and Assam—*concld.*																						
5	Jalpaiguri	283	29·708	—·018	29·964	29·855	8th	29·464	26th	·391	58·9	80·1	+3·6	55·8	+3·0	68·0	+3·3	24·3	85·4	25th	49·9	5th	35·5
	Cooch Behar	156	29·845		29·966	29·999	8th	29·606	26th	·393	59·8	78·1		56·8		67·5		21·3	83·3	25th	51·6	5th	31·7
	III.—Bengal.																						
6	Saugor Island	25	29·978	—·013	29·948	30·087	9th	29·788	29th	·299	72·7	80·7	—0·5	69·6	+4·1	75·2	+1·8	11·1	87·7	28th	60·7	21st	27·0
	Midnapore	149	29·839†		29·840†	29·957	9th	29·663	25th	·294	69·6‡	87·2‡		63·1‡		75·2‡		24·1	94·3	26th & 29th.	55·7	14th	38·6
	Calcutta	21	29·983	—·020	29·952	30·098	8th	29·803	25th	·295	67·6	84·5	+2·5	64·1	+3·7	74·3	+3·1	20·4	90·9	29th	58·0	21st	32·9
	Jessore	33	29·980	—·005	29·961	30·100	8th	29·779	25th	·321	67·6	84·2	+1·1	61·0	+3·7	72·6	+2·4	23·2	91·0	26th	54·7	21st	36·3
	Krishnagar	47	29·961		29·959	30·085	8th	29·768	25th	·317	65·4	84·3		59·7		72·0		24·6	91·4	26th	53·5	28th	37·9
	Burdwan	99	29·902	—·019	29·952	30·028	8th	29·713	29th	·315	66·9	86·3	+2·5	62·2	+3·6	74·3	+3·1	24·1	93·9	26th	56·8	14th	37·1
	Bankura	313	29·679		29·954	29·797	9th	29·494	29th	·303	68·8	85·6		62·4		74·0		23·2	94·1	26th	58·7	20th, 21st & 28th.	35·4
	Raniganj	334	29·664		29·969	29·797	8th	29·468	25th	·319	61·2	85·2		60·6		72·9		24·6	93·5	25th & 26th.	56·5	28th	37·0
	Berhampore	67	29·934	—·020	29·954	30·081	8th	29·730	25th	·351	64·3	83·2	+1·2	60·1	+3·6	71·7	+2·4	23·1	89·6	25th, 26th & 29th.	56·2	28th	33·4
7	Balasore	50	29·956	—·015	29·952	30·066	9th	29·764	29th	·302	69·4	85·5	+0·1	64·8	+2·9	75·1	+1·5	20·7	91·9	26th	58·6	21st	33·3
	False Point	21	29·990	—·011	29·954	30·108	8th	29·827	29th	·281	72·9	83·4	+0·6	66·9	+2·1	75·3	+1·3	16·5	91·2	27th	59·6	22nd	31·6
	Cuttack	80	29·933	—·004	29·957	30·044	9th	29·765	29th	·279	70·1	87·6	—2·5	66·8	+1·1	77·2	—0·7	20·8	95·4	29th	61·2	20th	34·2
	Puri	24	29·986		29·949	30·088	5th	29·830	29th	·258	74·9	84·1		71·0		77·4		13·1	87·1	28th	64·1	21st	23·0
	Angul	455	29·548‖		29·980‖	29·650	5th	29·389	29th	·261	68·4	85·9		63·0		74·4		22·9	93·1	29th	54·0	15th	39·1
	Sambalpur	486	29·522	—·006	29·975	29·642	5th	29·371	29th	·271	68·1	83·3	—4·7	63·5	+3·6	73·4	—0·5	19·8	91·1	29th	57·6	27th	33·5
8	Chaibasa	*733*	29·241	—·017	29·957	29·340	5th	29·070	29th	·270	63·5	85·2	+0·6	60·0	+2·3	72·6	+1·7	25·2	94·1	25th	54·8	21st	39·3
	Ranchi	2,128	27·840	+·003	29·960	27·943	8th	27·694	29th	·249	62·3	78·8	+0·6	58·0	+3·2	68·4	+1·9	20·8	87·2	25th	52·9	20th	34·3
	Purulia	*816*	29·168¶		29·967¶	29·293	4th	29·006	29th	·287	63·8	83·2		60·2‖		71·9‖		23·0	93·5	25th	55·1	1st	38·4
	Hazaribagh	2,007	27·965	+·005	29·966	28·069	8th	27·807	29th	·262	63·9	79·9	+1·9	57·3	+2·3	68·6	+2·3	22·6	88·6	25th	52·0	20th	36·6
	Daltonganj	*730*	29·270		29·992	29·377	9th	29·094	29th	·283	58·4**	80·8**		55·5**		68·1**		25·3	89·6	1st	52·0	3rd & 4th.	37·6
9	Purnea	134	29·867	—·006	29·963	30·015	8th	29·655	29th	·360	61·1	80·8	+1·7	52·8	+1·4	66·8	+1·5	28·0	85·6	24th	46·2	5th	39·4
	Bhagalpur	160	29·833		29·952	29·978	8th	29·627	29th	·351	64·0	82·1		56·9		69·5		25·2	89·2	26th	51·8	4th	37·4
	Monghyr	155	29·852		29·966	29·974	5th	29·644	29th	·330	66·8	81·1		58·7		69·9		22·4	88·2	25th	53·9	5th	34·3
	Darbhanga	165	29·822	—·022	29·950	29·969	7th	29·603	25th	·366	62·0	80·3	+3·5	54·4	0	67·3	+1·7	25·9	86·6	25th	49·7	5th	37·9
	Pusa	188	29·795		29·949	29·939	8th	29·581	29th	·358	59·6	81·3		53·0		67·1		28·3	87·8	25th	46·4	5th	41·4
	Muzaffarpur	177	29·828‖		29·972‖	29·973	8th	29·612	29th	·361	60·5	79·9		54·1		67·9		25·8	86·2	25th	48·5	5th	37·7
	Motihari	221	29·761		29·959	29·920	8th	29·561	29th	·359	56·8	78·7		52·5		65·6		26·2	84·6	25th	47·8	13th	36·8
	Chapra	181	29·813‖		29·959‖	29·914	8th	29·612	29th	·332	60·8	81·0		55·7		68·3		25·3	88·8	25th	50·3	5th	38·5
	Patna	183	29·809	—·027	29·955	29·944	5th	29·599	29th	·345	65·3	79·5	+1·3	57·8	+4·2	68·6	+2·7	21·7	87·0	25th	52·2	4th	34·8
	Arrah	190	29·799		29·953	29·925	5th	29·600	29th	·325	60·9†	81·1†		55·6†		68·3†		25·5	89·1	25th	50·8	7th	38·3
	Buxar	239	29·750		29·958	29·868	7th	29·557	29th	·311	61·1	82·8		56·3		69·5		26·5	92·5	25th	51·1	5th	41·4
	Dehri	351	29·630		29·953	29·755	5th	29·442	29th	·313	64·9	83·2		60·2		71·7		23·0	93·8	25th	56·0	5th	37·8
	Gaya	372	29·621	—·024	29·961	29·747	5th	29·436	29th	·311	61·2	83·7	+2·4	59·1	+2·9	71·4	+2·7	24·6	89·9	29th	54·2	4th	35·7
	Naya Dumka	489	29·499	—·012	29·961	29·643	8th	29·310	29th	·333	65·3	83·7	+4·0	57·5	+3·3	70·6	+3·7	26·2	91·9	26th	51·0	3rd	40·9
	IV.—United Provinces of Agra and Oudh.																						
10	Gorakhpur	257	29·722	—·017	29·951	29·865	8th	29·503	26th	·362	60·0	79·2	+1·2	53·1	+0·5	66·1	+0·9	26·1	86·1	25th	47·8	5th	38·3
	Benares	267	29·731	—·017	29·965	29·864	5th	29·552	29th	·312	63·5	83·4	+3·0	53·8	+1·8	68·6	+2·4	29·6	93·6	25th	47·1	7th	46·5
	Allahabad	309	29·692	—·015	29·973	29·809	5th	29·515	24th	·294	62·1	82·8	+2·6	54·0	+2·2	68·4	+2·4	28·8	91·6	25th	47·5	7th	44·1

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

† Mean of 26 days.
‡ " " 27 "
¶ " " 23 "

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau

B—*continued.*

in India, etc., in February, 1912—continued

Wind direction. Number of winds from: Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec., 1911, to 29th Feb., 1912. (53)	Normal rainfall for period, 1st Dec. to 29th Feb. (54)	Departure from normal of period, 1st Dec., 1911 to 29th Feb., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																II.—Eastern Bengal and Assam—*concld.*
20		4		1		1		3	N 12° E	N 40° E	1·3			11	−22	84	− 2	·422	+ ·040	0·9	−0·6	1	1·03	− 0·03	0·12	0·61	− 0·49	0·18	1·03	− 0·85	0·12	Jalpaiguri.
12		3	9	4		1			S 86° E		1·2			45		86		·443		2·2		1	1·21	− 0·21	0·57	0·64	− 0·07	0·62	0·87	− 0·25	0·48	Cooch Behar.
																																III.—Bengal.
	5	4	1		4	9	1	5	N 82° W	N 3° W	7·6	6·4	+1·2	25	+ 1	87	+ 1	·702	+ ·060	4·4	+1·2	2	1·74	+ 0·26	2·25	1·14	+ 1·11	2·25	1·81	+ 0·44	1·49	Saugor Island.
8	5	3	1	3	2	2	1	2	N 18° E ‡		1·5†			11		91§		·660§		2·3‡		4	1·77	+ 2·23	2·26	1·13	+ 1·13	2·26	1·95	+ 0·31	1·28	Midnapore.
6			1	1	3	10	1	7	S 62° W	S 46° W	2·6*	2·4	+0·4	46	+30	89	+ 8	·601	+ ·084	3·7	+1·5	2	1·61	+ 0·39	0·74	1·15	− 0·41	0·74	1·77	− 1·03	0·52	Calcutta.
13	3	2		1	1	3	4	2	N 70° W	N 18° W	1·5	1·5	0	18	+ 6	82	− 1	·553	+ ·051	2·5	+0·2	0	1·77	− 1·77	0·14	1·37	− 1·23	0·26	1·99	− 1·73	0·08	Jessore.
25			1		2	1			S 9° E		0·7			10		81		·510		3·1		1	1·58	− 0·58	0·40	1·15	− 0·75	0·75	1·78	− 1·03	0·33	Krishnagar.
16	4	1	1		1	2	1	3	N 33° W	N 27° W	1·2	1·5	−0·3	18	− 2	74	+ 6	·486	+ ·070	3·4	+0·9	2	1·58	+ 0·42	0·47	1·14	− 0·67	0·51	1·71	− 1·20	0·32	Burdwan.
25							3	1	N 76° W		1·5			14		63		·431		1·9		2	1·88	+ 0·12	0·62	1·00	− 0·38	0·64	1·59	− 0·95	0·27	Bankura.
25	1		1					2	N 15° W		0·8			10		73		·435		2·5		1	1·52	− 0·52	0·29	0·91	− 0·62	0·40	1·56	− 1·16	0·20	Raniganj.
25		1			1	2			S 24° W	S 83° W	0·7	1·6	−0·9	7	−24	79	− 1	·479	+ ·034	3·2	+1·0	0	1·65	− 1·65	0·05	0·94	− 0·89	0·09	1·47	− 1·38	0·05	Berhampore.
10	4				2	4	2	7	N 68° W	N 42° W	1·9	2·8	−0·9	39	+ 4	78	0	·556	+ ·030	3·2	+0·2	4	2·16	+ 1·84	3·79	1·31	+ 2·48	3·79	2·17	+ 1·62	1·54	Balasore.
2	1			1	1	9	7	8	S 86° W	N 57° W	5·1	5·7	−0·6	63	+20	86	0	·698	+ ·031	4·6	+1·5	6	1·29	+ 4·71	2·75	0·97	+ 1·78	2·75	2·29	+ 0·46	1·13	False Point.
17		1				7	3	1	S 65° W	N 36° E	1·2*	1·5	− 0·3	29	+22	81	+ 3	·604	+ ·042	3·3	+0·9	5	1·16	+ 3·84	1·54	0·60	+ 0·94	1·54	1·20	+ 0·34	0·59	Cuttack.
	4	4	1		1	8	8	3	N 81° W		7·3			41		82		·707		4·3		2	1·08	+ 0·92	0·83	0·75	+ 0·08	0·83	1·55	− 0·72	0·34	Puri.
4	3			1	3		4	14	N 55° W		3·8			55		79		·547		3·9		6			3·44	0·96	+ 2·48	3·61	2·20	+ 1·41	1·11	Angul.
		3		4	15	5	1	1	S 1° W	N 27° E	3·4	2·1	+1·3	64	+ 2	81	+14	·555	+ ·097	3·6	+1·6	7	1·00	+ 6·00	3·30	0·74	+ 2·56	3·44	1·40	+ 2·04	0·91	Sambalpur.
13						10	6		S 62° W	S 86° W	1·5	1·1	+0·8	49	− 8	83	+10	·486	+ ·063	3·3	+1·2	5	1·61	+ 3·39	1·56	1·56	0	1·61	2·61	− 1·00	0·59	Chaibasa.
11	1			2	2	1	6	6	N 84° W	N 68° W	3·8	4·2	−0·4	32	− 3	67	+ 8	·371	+ ·045	2·8	+0·7	3	2·10	+ 0·90	1·96	1·55	+ 0·41	2·13	2·55	− 0·42	1·27	Ranchi.
22	2						4	1	N 59° W		1·7			21		78‡		·467‡		1·7		1	1·97	− 0·37	0·59	1·44	− 0·85	0·67	2·66	− 1·99	0·59	Purulia.
6	2	1	2	2	2	7	6	1	S 56° W	S 87° W	4·1	5·3	−1·2	29	−15	53 **	− 4	·306 **	+ ·002	2·1	−0·5	1	1·84	− 0·84	0·24	1·07	− 0·83	0·61	2·06	− 1·45	0·20	Hazaribagh.
21	1		4	3					S 81° E		1·7			21		92		·460		2·0		1	1·30	− 0·30	0·42	1·14	− 0·72	0·62	2·35	− 1·73	0·26	Daltonganj.
17		5				2	3	2	N 34° W	S 64° W	1·5	2·3	−0·8	14	− 6	82	− 2	·440	+ ·047	0·3	−1·2	0	1·13	− 1·13	0·02	0·60	− 0·58	0·09	1·15	− 1·06	0·01	Purnea.
29									(a)		1·5					75‖		·443‖		1·4		1	1·52	− 0·52	0·23	0·77	− 0·54	0·36	1·41	− 1·05	0·16	Bhagalpur.
6			4	3	1	5	8	2	S 54° W		2·8			28		72 ††		·470 ††		1·2		1			0·61			0·83			0·54	Monghyr.
24			2			2	1		S 18° W	N 89° W	1·5	2·7	−1·2	5	−26	92	+15	·488	+ ·096	0·7	−0·9	1	1·23	− 0·23	0·26	0·49	− 0·23	0·41	1·10	− 0·69	0·26	Darbhanga.
11	1	2		5	3	5	2		S 7° W		2·2			28		83		·424		0·7		1			0·11			0·24			0·11	Pusa.
22			1			2	3	1	S 76° W		5·0*			14		84		·437		0·5		1	1·27	− 0·27	0·33	0·48	− 0·15	0·67	1·18	− 0·51	0·33	Muzaffarpur.
19		1	3		1	3	2		S 15° W		1·3			10		89		·408		1·1		1	1·00	0	0·18	0·47	− 0·29	0·90	1·20	− 0·30	0·18	Motihari.
									?		?			?		78		·413		0·9		1	1·13	− 0·13	0·10	0·58	− 0·48	0·26	1·39	− 1·13	0·10	Chapra.
7			4	1	3	9	4	1	S 34° W	S 70° W	2·8	2·4	+0·4	39	− 8	70	+ 2	·436	+ ·065	1·2	−1·2	1	1·16	− 0·16	0·13	0·71	− 0·58	0·25	1·41	− 1·16	0·13	Patna.
10		2	2		3	5	6	1	S 60° W		1·2			28		74†		·391†		2·1		1	1·10	− 0·10	0·45	0·71	− 0·26	0·58	1·62	− 1·04	0·45	Arrah.
2	1	1	5	3	4	10	3		S 10° W		3·4			38		72		·383		2·3		1	1·39	− 0·39	0·17	0·72	− 0·55	0·17	1·65	− 1·48	0·17	Buxar.
7		2	2	1	6	9	2		S 18° W		2·5			45		69		·424		0·9		1	1·29	− 0·29	0·47	0·76	− 0·29	0·47	1·62	− 1·15	0·47	Dehri.
22					2	2	3		S 52° W	S 37° W	2·0	2·6	−0·6	18	−17	74	+ 6	·442	+ ·059	1·8	−0·5	1	1·39	− 0·39	0·36	0·83	− 0·47	0·44	1·69	− 1·25	0·26	Gaya.
28								1	N 45° W		0·9			4		62		·389		1·2		0	1·62	− 1·62	0·09	0·72	− 0·63	0·10	1·49	− 1·39	0·09	Naya Dumka.
																																IV.—United Provinces of Agra and Oudh.
21		2		1		1	4		W	N 73° W	1·3	1·6	−0·3	9	−30	79	+ 6	·405	+ ·041	0·9	−1·0	1	1·30	− 0·30	0·63	0·53	+ 0·10	1·58	1·44	+ 0·14	0·63	Gorakhpur.
17				3		6	2	1	S 41° W	S 52° W	1·5	2·8	−1·3	29	− 5	70	− 6	·402	+ ·024	1·3	−0·9	0	1·20	− 1·20	0	0·70	− 0·70	0	1·67	− 1·67	0	Benares.
11			2	1	2	2	10	1	S 70° W	S 81° W	1·8	3·3	−1·5	32	+ 8	66	− 3	·365	+ ·004	2·0	−0·5	0	1·00	− 1·00	0·02	0·50	− 0·48	0·08	1·59	− 1·51	0·01	Allahabad.

stations, the elevations of which exceed 3,200 feet. * Uncorrected for scale error. (a) Indeterminate. § Mean of 25 days. ** „ „ 16 „ ‖ Mean of 28 days. †† „ „ 12 „

Table

(2) *Abstract of observations taken at 8 hrs. at 235 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	IV.—United Provinces of Agra and Oudh—*concld.*																							
10	Cawnpore	416	29·566	−·013	29·962	29·687	5th	29·374	24th	·313	59·2	81·3	+2·5	53·3	+1·8	67·3	+2·1	28·0	89·7	29th	45·9	7th	43·3
	Lucknow	368	29·627	−·009	29·972	29·755	8th	29·450	24th	·305	61·0	80·8	+2·0	52·0	+2·1	66·9	+2·1	27·8	90·0	29th	47·1	7th	42·9
	Bahraich	401	29·564	−·018	29·948	29·695	8th	29·367	26th	·328	58·8	78·3	+1·6	52·8	+2·1	65·5	+1·9	25·5	84·6	25th	48·0	4th, 5th & 13th.	36·6
11	Jhansi	824	29·174	−·021	29·992	29·293	4th	28·998	24th	·295	62·6	83·8	+2·6	55·7	+0·3	69·7	+1·5	28·1	94·0	24th	48·5	5th & 7th.	45·5
	Agra	556	29·442	−·017	29·986	29·555	8th	29·257	24th	·298	60·8	80·3	+1·7	54·1	+1·8	67·2	+1·7	26·2	90·0	24th	48·0	6th	42·0
	Mainpuri	516	29·458	−·015	29·964	29·576	8th	29·267	24th	·309	56·9	79·2	+2·4	51·9	+1·5	65·5	+1·9	27·3	87·8	29th	45·1	5th & 7th.	42·7
	Bareilly	568	29·399	−·014	29·961	29·534	8th	29·223	29th	·311	57·5	77·9	+2·8	51·3	+1·6	64·6	+2·2	26·6	85·3	29th	46·0	7th	39·3
	Roorkee	899	29·079	+·011	30·000?	29·218	8th	28·890	26th	·328	54·9	74·5	+1·4	48·8	+1·1	61·6	+1·3	25·7	81·0	28th	43·9	29th	37·1
	V.—Punjab.																							
12	Delhi	718	29·264	−·011	29·987	29·388	8th	29·097	24th	·291	57·6	76·0	+1·2	53·7	+1·9	64·8	+1·5	22·3	84·0	29th	50·3	4th & 10th	33·7
	Sirsa	662	29·327	−·010	29·998	29·440	8th	29·177	24th	·263	55·3	78·6	+3·4	49·9	+3·1	64·3	+3·3	28·7	90·3	23rd	45·0	7th	45·3
	Patiala	*818*	29·135‡		29·972‡	29·265	1st	29·001	27th	·264	55·0	75·5		54·5		65·0		21·0	83·4	23rd	49·1	6th	34·3
	Ambala	892	29·060	0	29·975	29·202	8th	28·910	24th	·292	54·3	78·1	+6·6	48·9	+1·1	63·5	+3·9	29·2	85·5	21st, 28th & 29th.	41·9	7th	43·6
	Ludhiana	812	29·161	−·005	29·993	29·304	8th	29·013	24th	·291	54·0	75·8	+4·6	50·5	+3·0	63·1	+3·8	25·3	84·0	23rd	44·0	7th	40·0
	Lahore	702	29·274	−·023	29·985	29·402	8th	29·134	23rd	·268	52·8	77·2	+4·5	48·4	+4·3	62·8	+4·4	28·8	86·9	22nd	42·7	7th	44·2
	Sialkot	830	29·153	+·005	30·011	29·292	8th	29·018	23rd	274	52·8	74·2	+4·6	45·6	−0·5	59·9	+2·1	28·6	82·0	22nd	39·0	6th	43·0
	Rawalpindi	1,674	28·298	−·002	30·051	28·413	8th	28·164	28th	·249	48·2	70·4	+5·6	42·9	+1·5	56·7	+3·5	27·5	81·4	22nd	35·9	6th	45·5
13	Khushab	612	29·388	−·009?	30·011	29·510	1st	29·238	23rd	·272	56·1	77·7	+9·0	50·2	+4·1	63·9	+6·5	27·5	86·4	22nd	43·4	7th	43·0
	Montgomery	558	29·430	−·016	29·994	29·558	8th	29·269	23rd	·289	55·5	78·1	+5·3	48·5	+2·1	63·3	+3·7	29·6	87·9	22nd	41·0	1st & 2nd.	46·9
	Multan	420	29·593	−·027	30·004	29·730	1st	29·443	28th	·287	58·5	80·0	+6·3	52·1	+4·6	66·1	+5·5	27·9	88·3	22nd	45·5	2nd	42·8
	VI.—North-West Frontier Province.																							
15	Peshawar	1,113	28·898	−·028	30·067	29·020	8th	28·731	28th	·289	49·0	70·8	+4·7	45·3	+2·7	58·1	+3·7	25·5	77·2	21st	39·9	10th	37·3
	D. I. Khan	590	29·416	−·044	30·019	29·546	1st	29·269	28th	·277	52·6	76·3	+4·4	47·6	+2·7	62·0	+3·5	28·7	82·3	29th	40·1	3rd & 4th	42·8
	VII.—Sind.																							
17	Jacobabad	186	29·824	−·036	29·980	29·979	1st	29·627	27th	·352	60·2	85·2	+7·3	52·3	+3·8	68·7	+5·5	32·9	93·6	22nd	44·8	2nd & 6th	48·8
	Hyderabad	96	29·918	−·041	29·970	30·071	1st	29·803	28th	·268	63·8	85·5	+4·7	57·1	+2·7	71·3	+3·7	28·4	95·5	21st	48·5	2nd	47·0
	Karachi	13	30·025	−·020	29·989	30·160	1st	29·923	13th	·237	67·3	80·7	+2·9	63·2	+2·8	72·0	+2·9	17·5	87·0	25th	57·0	3rd & 6th	30·0
	VIII.—Rajputana.																							
18	Bikaner	*771*	29·212	−·012	29·984	29·311	4th	29·076	23rd & 28th.	·235	60·6	81·5	+5·6	55·7	+2·2	68·6	+3·9	25·8	94·0	22nd	48·5	7th	45·5
	Jodhpur	780	29·213	−·016	29·986	29·320	2nd	29·086	13th	·234	62·4	86·2	+6·8	56·6	+3·3	71·4	+5·1	29·6	94·5	22nd	47·3	26th	47·2
19	Jaipur	1,431	28·553	−·013	29·995	28·650	8th	28·413	24th	·237	62·3	81·8	+3·2	55·2	+3·3	68·5	+3·3	26·6	93·2	22nd	47·6	6th	45·6
	Ajmer	1,611	28·385	−·010	30·024	28·472	5th	28·260	24th	·212	56·9	80·5	+2·7	54·6	+5·2	67·6	+3·9	25·9	89·9	22nd	47·7	4th	42·2
	Kotah	819?	29·152	−·034	29·859?	29·257	4th	29·011	24th	·246	65·4	86·4	+5·3	58·7	+3·8	72·5	+4·5	27·7	97·1	23rd	51·6	18th	45·5

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

‡ Mean of 26 days.

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.

B—*continued.*

in India, etc., in February, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 29th Feb., 1912.	Normal rainfall for period, 1st Dec. to 29th Feb.	Departure from normal of period, 1st Dec., 1911 to 29th Feb., 1912.	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	56	57
																																IV.—United Provinces of Agra and Oudh—*concld.*
16	1		2		1	2	5	2	W	N 81° W	2·1	2·8	−0·7	20	− 4	72	+ 5	·356	+·022	0·3	−1·6	1	1·00	0	0·35	0·63	−0·28	0·84	1·46	−0·62	0·32	Cawnpore.
17	1		2				9		N 82° W	N 74° W	2·2	2·2	0	25	− 5	67	− 5	·366	+·022	1·3	−1·5	1	1·20	−0·20	0·21	0·57	−0·36	0·86	1·76	−0·90	0·16	Lucknow.
3	2		3	2		7	7	5	S 36° W	N 68° W	2·0	2·3	−0·3	39	+ 8	73	− 5	·360	−·008	1·3	−1·7	2	1·60	+0·40	0·44	0·99	−0·55	2·82	2·20	+0·62	0·34	Bahraich.
11	2	4				6	3	3	N 67° W	S 81° W	3·1	1·8	+1·3	25	+ 2	56	+ 3	·307	+·011	2·8	+1·1	0	0·80	−0·80	0·08	0·45	−0·37	0·15	1·40	−1·25	0·08	Jhansi.
16		2	2	1	1	4	3		S 29° W	N 53° W	2·1	3·1	−1·0	14	−25	67	+ 2	·353	+·043	1·0	−1·4	0	0·60	−0·60	0·12	0·37	−0·25	1·65	1·24	+0·41	0·08	Agra.
8	1	1	2	3		1	8	5	N 72° W	N 63° W	1·4	1·5	−0·1	25	+ 5	72	0	·335	+·008	0·3	−3·5	1	0·70	+0·30	0·24	0·72	−0·48	1·51	1·84	−0·33	0·16	Mainpuri.
27			1				1		(a)	N 51° W	0·5	2·3	−1·8			73	− 3	·352	+·028	0·8	−2·3	1	1·18	−0·18	0·19	0·77	−0·58	0·65	2·20	−1·55	0·19	Bareilly.
25		1						3	N 27° W	N 40° W	1·4	2·0	−0·6	11	−1	84	+ 4	·360	+·052	1·2	−2·1	1	2·90	−1·90	0·25	1·49	−1·24	2·88	3·71	−0·83	0·25	Roorkee.
																																V.—Punjab.
4	1		1	3		2	12	6	N 83° W	N 86° W	2·2	2·6	−0·4	53	+20	72	+ 7	·339	+·057	0·9	−2·8	1	1·40	−0·40	0·88	0·66	+0·22	2·66	2·21	+0·45	0·88	Delhi.
22			2	1		1	3		S 38° W	S 76° W	2·2	3·0	−0·8	4	0	69	− 4	·299	+·011	1·1	−3·0	1	1·10	−0·10	0·58	0·34	+0·24	2·69	1·32	+1·37	0·58	Sirsa.
3	3			4	2		1	16	N 45° W		4·3			45		76		·325		2·1		1			0·18	1·44	−1·26	1·65	3·15	−1·50	0·18	Patiala.
6	7		5	1	3		1	6	N 4° E	N 39° W	3·2	1·7	+1·5	25	0	76	− 8	·318	−·006	2·3	−1·1	1	2·30	−1·30	0·13	2·08	−1·95	1·94	4·34	−2·40	0·12	Ambala.
25				1	1		1	1	S 45° W	N 52° W	0·6	1·4	−0·8	4	−24	75	− 3	·306	−·002	1·2	−2·3	1	2·40	−1·40	0·27	1·38	−1·11	1·93	3·85	−1·92	0·25	Ludhiana.
17	4			3			4	1	N 45° W	N 23° W	1·5	1·6	−0·1	14	+ 5	78	0	·314	+·019	1·9	−1·7	0	2·20	−2·20	0	0·99	−0·99	2·24	2·45	−0·21	0	Lahore.
25		1		2				1	E	N 18° E	0·5	1·3	−0·8	5	− 9	88	+ 9	·351	+·044	1·7	−1·5	1	3·50	−2·50	0·16	1·72	−1·56	3·33	4·70	−1·37	0·16	Sialkot.
18	4	1			1	1	1	3	N 31° W	N 45° W	1·9	1·7	+0·2	21	− 3	78	− 4	·263	0	2·7	−1·6	1	4·40	−3·40	0·37	2·29	−1·92	3·71	5·93	−2·22	0·37	Rawalpindi.
15	2	2	1	2	1	2	3	1	N 75° W	N 29° E	2·3	2·4	−0·1	4	− 7	63†	− 7	·285†	+·053	3·3	0	1	1·80	−0·80	0·12	0·87	−0·75	1·45	2·09	−0·64	0·12	Khushab.
10	3	1	1	6	2		3	3	S 63° E	N 18° E	3·0	3·1	−0·1	3	−13	58	−11	·251	−·024	1·4	−2·3	0	1·30	−1·30	0	0·48	−0·48	1·56	1·43	+0·13	0	Montgomery.
24	4	1							N 9° E	N 37° E	0·9	1·3	−0·4	18	− 2	66	− 2	·319	+·015†	1·1	−1·2	0	1·20	−1·20	0·07	0·40	−0·33	2·45	1·04	+1·41	0·07	Multan.
																																VI.—North-West Frontier Province.
12	1			3	5	4	4		S 28° W	S 27° W	1·6	2·3	−0·7	36	− 3	72	− 4	·253	+·001	3·4	−1·1	3	2·90	+0·10	1·72	1·31	+0·41	4·12	3·44	+0·68	1·10	Peshawar.
19	2	2				1		5	N 25° W	N 22° W	0·9	1·4	−0·5	25	+ 1	76	+ 5	·303	+·043	1·7	−1·6	1	2·00	−1·00	0·10	0·71	−0·61	1·43	1·44	−0·01	0·10	D. I. Khan.
																																VII.—Sind.
19		4	2	1				3	N 39° E	N 37° E	1·7	2·2	−0·5	18	− 2	57	0	·292	+·043	1·0	−2·4	0	0·90	−0·90	0	0·36	−0·36	0·20	0·78	−0·58	0	Jacobabad.
7	10			3	2	4	1	2	N 35° W	N 21° W	3·6	5·0	−1·4	21	−19	61	+ 4	·367	+·065	0·9	−1·8	0	0·60	−0·60	0	0·28	−0·28	0·66	0·57	+0·09	0	Hyderabad.
3	9	7	3				3	4	N 7° E	N 39° E	7·3	7·2	+0·1	60	+ 1	66	− 9	·455	+·049	1·1	−1·0	0	0·80	−0·80	0	0·41	−0·41	0	1·16	−1·16	0	Karachi.
																																VIII.—Rajputana.
5	1	1	5	5	5	4	2	1	S 22° E	N 39° W	3·7	3·3	+0·4	36	+12	48	− 5	·251	+·003	1·4	−1·9	0	0·80	−0·80	0	0·29	−0·29	1·46	0·80	+0·66	0	Bikaner.
5	3	17	1			1	1	1	N 35° E		3·1			67		35	− 9	·200		1·2		0	0·50	−0·50	0	0·22	−0·22	0	0·53	−0·53	0	Jodhpur.
9	5	6	4	1			1	3	N 28° E	N 2° W	3·3*	2·8	+0·5	46	+15	55	− 2	·298	+·021	1·7	−1·2	2	0·50	+1·50	1·58	0·26	+1·32	1·77	0·97	+0·80	1·25	Jaipur.
27		1				1			(a)	N 2° W	1·9	1·8	+0·1			60	− 4	·278	−·006	1·1	−1·2	0	0·70	−0·70	0·02	0·28	−0·26	0·23	0·95	−0·72	0·02	Ajmer.
25		2						2	N		1·1			10		49	+ 3	·292		1·0		0	0·50	−0·50	0·06	0·24	−0·18	0·15	0·76	−0·61	0·06	Kotah.

* Uncorrected for scale error. † Mean of 28 days. (a) Indeterminate.

Table

(2) Abstract of observations taken at 8 hrs. at 235 stations

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	IX.—Bombay.																						
20	Deesa	466	29·523	−·030	29·960	29·631	1st	29·442	27th	·189	67·1	92·4	+5·9	57·9	+2·8	75·1	+4·3	34·5	100·3	22nd & 24th.	53·4	25th & 26th.	46·9
	Bhuj	385	29·595	−·037	29·958	29·712	1st	29·500	13th	·212	64·4	87·5	+3·2	59·6	+1·5	73·5	+2·3	27·9	95·0	22nd	51·0	2nd	44·0
	Jamnagar	61	29·972		29·981	30·091	1st	29·894	29th	·197	72·0	86·2		57·3		71·7		28·9	92·0	22nd	46·7	4th	45·3
	Dwarka	37?	29·993	−·040	29·977	30·137	1st	29·906	13th	·231	70·3	81·5	+3·5	66·1	+4·3	73·8	+3·9	15·4	89·3	21st	58·7	2nd	30·6
	Rajkot	429	29·571	−·025	29·967	29·685	1st	29·497	13th	·188	64·6	89·5	+2·3	55·7	+1·2	72·6	+1·7	33·8	96·1	22nd	44·5	3rd	51·6
	Veraval	*18*	29·989	−·014	29·951	30·124	1st	29·907	26th	·217	67·4	82·3	+0·8	61·6	+0·9	71·9	+0·9	20·7	92·1	23rd	53·5	3rd	38·6
	Bhavnagar Para	55	29·964	−·027	29·967	30·078	1st	29·890	26th	·188	67·5	90·5	+4·6	60·4	+0·5	75·3	+2·5	30·1	98·0	22nd	54·5	3rd & 4th	43·5
	Surat	39	29·971	−·018	29·954	30·071	1st	29·883	26th	·188	68·9	91·1	+1·4	61·7	+2·7	76·4	+2·1	29·4	101·9	22nd	55·1	2nd	46·8
	Ahmadabad	163	29·825	−·030	29·942?	29·916	2nd	29·745	27th & 28th.	171	68·9	91·9	+4·5	60·4	+0·1	76·2	+2·3	31·5	100·1	22nd	54·7	1st	45·4
26	Bombay	37	29·972	−·009	29·949	30·057	1st	29·890	26th	·177	73·5	84·6	+2·0	71·3	+2·6	77·9	+2·3	13·3	92·0	22nd	66·5	3rd	25·5
	Ratnagiri	110	29·880	−·002	29·930	29·964	1st	29·809	29th	·155	73·7	84·6	−1·8	68·0	+0·7	76·3	−0·5	16·6	93·8	22nd	60·9	3rd	32·9
	Goa †	199	?	?	?	?	?	?	?	?	73·6	83·7	−2·9	71·4	+1·3	77·5	−0·8	12·3	92·1	21st & 22nd.	67·1	4th & 16th.	25·0
	Marmagao	*60*	29·941	+·008	29·937	30·030	1st	29·860	29th	·170	74·2	84·5	−0·4	71·5	+0·3	78·0	−0·1	13·0	91·5	22nd	65·7	3rd	25·8
	Karwar	44	29·963	+·005	29·942	30·037	1st & 5th.	29·890	29th	·147	70·5	84·5	−1·8	68·3	+1·0	76·4	−0·4	16·2	90·2	22nd	63·5	16th	26·7
27	Malegaon	1,430	28·552	−·020	29·964	28·635	1st	28·473	26th	·162	67·8	92·5	+2·6	58·0	+2·6	75·2	+2·6	34·5	97·9	23rd & 24th.	47·6	2nd	50·3
	Ahmadnagar	2,154	27·833	−·002?	29·945	27·917	21st	27·772	25th	·145	67·7	90·3	+2·2	58·2	+3·1	74·3	+2·7	32·1	94·6	24th, 28th & 29th.	52·0	3rd	42·6
	Poona	1,846	28·141	−·018	29·981	28·215	1st	28·051	26th	·154	62·8	91·0	−0·3	57·5	+0·4	74·3	+0·1	33·5	96·0	10th & 24th.	49·3	3rd	46·7
	Sholapur	1,590	28·386	−·021	29·934	28·459	21st	28·305	26th	·154	71·8	92·9	−0·8	64·7	+2·5	78·8	+0·9	28·2	97·3	25th, 27th & 29th.	57·6	3rd	39·7
	Bijapur	*1,948*	28·021	−·007	29·810	28·098	1st	27·941	26th	·157	72·9	92·6	+2·2	65·9	+1·7	79·2	+1·9	26·7	97·7	28th	60·3	3rd	37·4
	Belgaum	2,539	27·443	−·007	29·912	27·515	1st	27·366	26th	·149	69·4	87·6	−1·0	58·8	−0·8	73·2	−0·9	28·8	91·8	27th	52·0	4th	39·8
	X.—Central India.																						
21	Neemuch	1,624	28·355	−·017	29·981	28·432	21st	28·251	24th	·181	62·6	84·8	+3·6	54·9	+2·3	69·9	+3·2	29·9	90·9	28th	49·5	3rd & 26th	41·4
	Indore	1,823	28·153	−·015	29·960	28·236	21st	28·059	24th	·177	67·1	86·4	+3·1	56·1	+4·0	71·2	+3·5	30·3	94·1	23rd & 24th.	49·6	19th	44·5
22	Nowgong	754	29·244	−·015	29·991	29·346	4th & 5th	29·081	24th	·265	60·5	81·8	+1·5	53·7	+2·6	67·7	+2·1	28·1	91·0	29th	47·0	7th	44·0
	Sutna	1,041	28·944	−·010	29·978	29·050	9th	28·787	25th	·263	64·6	82·5	+2·9	55·6	+3·3	69·1	+3·1	26·9	91·3	29th	48·8	7th	42·5
	XI.—Central Provinces.																						
23	Buldana	2,132	27·735		29·809?	27·820	21st	27·660	26th	·160	70·8	87·4		63·7		75·6		23·7	93·9	23rd	59·8	3rd	34·1
	Akola	930	29·051	−·014	29·955	29·145	21st	28·961	29th	·184	68·8	92·1	+1·4	60·6	+3·1	76·4	+2·3	31·5	98·7	24th	52·1	19th	46·6
	Amraoti	1,215	28·749	−·017	29·911?	28·841	21st	28·651	25th	·190	70·1	90·0	−0·1	65·0	+3·3	77·5	+1·6	25·0	96·8	29th	59·3	2nd & 20th.	37·5
24	Khandwa	1,044	28·939	−·016	29·962	29·021	21st	28·858	24th	·163	69·0	92·0	+3·2	60·1	+4·2	76·0	+3·7	31·9	99·2	23rd & 24th.	49·6	3rd	49·6
	Hoshangabad	1,006	28·981	−·021	29·978	29·069	21st	28·886	24th	·183	63·3	87·2	+1·8	57·6	+1·6	72·4	+1·7	29·6	95·1	24th	52·9	20th	42·2
	Saugor	1,807	28·156	−·019	29·953	28·241	21st	28·051	29th	·190	65·4	83·5	+2·2	58·6	+3·2	71·1	+2·7	24·9	92·3	24th	54·1	3rd & 10th.	38·2
	Jubbulpore	1,327	28·631	−·033	29·961	28·717	9th	28·513	29th	·204	61·6	82·6	+0·2	56·7	+4·3	69·6	+2·3	25·9	90·8	24th & 29th.	50·3	10th, 20th & 27th.	40·5
	Seoni	2,033	27·953	−·004	9·974	28·040	21st	27·844	25th & 29th.	·196	65·0	81·8	−2·0	57·4	+2·0	69·6	0	24·4	90·6	29th	50·5	20th	40·1
	Nagpur	1,017	28·964	−·009	29·956	29·044	21st	28·843	25th	·201	68·7	87·0	−2·3	62·7	+2·7	74·8	+0·2	24·3	95·6	29th	55·3	20th	40·3
25	Pendra	2,123?	27·940		29·958	28·019	9th	27·795	29th	·224	63·9	79·2		57·0		68·1		22·2	86·8	29th	52·2	3rd & 4th	34·6
	Raipur	970	29·023	−·002	29·972	29·116	5th	28·878	29th	·238	66·7	83·6	−3·8	62·1	+1·6	72·8	−1·1	21·5	91·7	29th	57·6	3rd	34·1
	Chanda	*634*	29·339	−·025	29·936	29·426	21st	29·201	29th	·225	71·0	88·8	−2·0	64·1	+4·9	76·4	+0·9	24·7	95·5	29th	54·5	20th	41·0
	Jagdalpur	1,813	28·183		29·968	28·281	9th	28·042	29th	·239	67·2	85·3		61·2		73·3		24·1	93·2	29th	56·1	24th	37·1

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

† Mean of 28 days.

NOTE.—The barometric readings are not reduuced to sea-level, in the

B—*continued.*

in India, etc., in February, 1912—continued.

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal, in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec., 1911 to 29th Feb., 1912. (53)	Normal rainfall for period, 1st Dec. to 29th Feb. (54)	Departure from normal of period, 1st Dec., 1911 to 29th Feb., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																IX.—Bombay.
	1	5	3			2	3		N 34° E¶	N 30° E	§5·9	6·3	−0·4	29	−7	39	−4	·256	+·009	0·7	−1·3	0	0·27	−0·27	0	0·16	−0·16	0	0·35	−0·35	0	Deesa.
2	1					3	23		S 88° W	N 69° W	4·6	5·3	−0·7	88	+53	52‡	−7	·401‡	+·017	0·5	−0·8	0	0·30	−0·30	0	0·16	−0·16	0	0·28	−0·28	0	Bhuj.
	4	13	3		1	1	2	5	N 22° E		6·6			56		53		·425		0·1		0			0	0·15	−0·15	0	0·25	−0·25	0	Jamnagar.
1	10	5	1				4	8	N 15° W		8·5			70		69	−1	·520		1·3		0			0	0·51	−0·51	0·02	0·62	−0·60	0	Dwarka.
9	2	3	3	1		1	7	3	N 40° W	N 2° W	5·2	4·5	+0·7	25	−6	55	−4	·334	−·034	2·1	+1·1	0	0·30	−0·30	0	0·13	−0·13	0	0·22	−0·22	0	Rajkot.
18	9		1					1	N 2° E	N 7° E	5·0	5·2	−0·2	34	−38	70	+11	·468	+·067	1·1	−0·1	0	0·10	−0·10	0	0·03	−0·03	0	0·16	−0·16	0	Veraval.
12	1				1	2	2	11	N 61° W	S 85° W	1·6	5·9	−4·3	45	−20	48	−14?	·322	−·073?	1·1	0	0	0·20	−0·20	0	0·13	−0·13	0·02	0·26	−0·24	0	Bhavnagar Para.
2	6	3	3	8	5	1		1	S 75° E	N 27° W	2·3	3·7	−0·8	32	−11	76	+11	·552	+·115	0·6	−0·5	0	0·10	−0·10	0	0·08	−0·08	0	0·20	−0·20	0	Surat.
6	1	12	3		1	1	1	4	N 34° E	N 11° E	3·3	2·9	+0·4	46	−12	52	+2	·376	+·055	0·4	−1·0	0	0·30	−0·30	0	0·12	−0·12	0	0·18	−0·18	0	Ahmadabad.
	4	9	12	3	1				N 71° E	N 47° E	*5·9	7·6	−1·7	74	+3	77	+6	·636	+·057	2·0	+0·8	0	0·10	−0·10	0	0·03	−0·03	0	0·19	−0·19	0	Bombay.
											6·7	6·0	+0·7			70	+5	·577	+·038	0·9	+0·2	0	0·10	−0·10	0	0·02	−0·02	0	0·23	−0·23	0	Ratnagiri.
	1	7	20						N 77° E	N 67° E	5·1	4·3	+0·8	92	+15	81	+7	·669	+·028	2·9	+2·3	0			0	0	0	0	0·32	−0·32	0	Goa.
2	9	10	6	1				1	N 39° E	N 80° E	*6·6	6·8	−0·2	70	+22	85	+3	·710	+·024	2·8	+2·2	0			0	0·02	−0·02	0	0·23	−0·23	0	Marmagao.
24	1	3						1	N 21° E	N 55° E	1·9	[illegible]	−1·1	14	−69	88	+4	·662	+·049	3·3	+2·8	0	0	0	0	0·01	−0·01	0·15	0·26	−0·11	0	Karwar.
4	1	2		1	1	4	12	4	N 87° W	N 63° W	5·0	4·5	+0·5	53	−18	42	−15	·289	−·064	0·5	−0·8	0	0·10	−0·10	0	0·06	−0·06	0·47	0·42	+0·05	0	Malegaon.
1	6	1				2	2	17	N 40° W	N 13° W	3·8	6·1	−2·3	78	+43	44	−15	·295	−·087	1·2	+0·3	0	0·30	−0·30	0	0·19	−0·19	0·04	0·77	−0·73	0	Ahmadnagar
18		2	1			2	5	1	N 81° W	N 76° W	4·7	5·2	−0·5	18	+2	65	+13	·361	+·044	0·1	−0·7	0	0·10	−0·10	0	0·05	−0·05	0·08	0·30	−0·22	0	Poona.
1	5	5	1	2	2	2	2	9	N 21° W	N 72° E	7·0	5·5	+1·5	39	+23	44	+4	·340	+·030	1·9	+1·0	1	0·10	+0·90	0·23	0·03	+0·20	2·08	0·62	+1·46	0·21	Sholapur.
5	3		2	1	2	3	5	8	N 69° W	N 79° W	3·7	3·5	+0·2	39	+17	57	+1	·461	+·024	2·2	+1·2	1	0·20	+0·80	0·26	0·04	+0·22	0·26	0·35	−0·09	0·20	Bijapur.
17		2	5	5					S 78° E	N 65° E	6·4	7·1	−0·7	36	+12	60	+12	·421	+·075	2·0	+1·1	0	0·10	−0·10	0	0·03	−0·03	0·64	0·47	+0·17	0	Belgaum.
																																X.—Central India.
5	1	7	11	2	1		1	1	N 75° E	N 30° E	4·9	5·1	−0·2	56	+25	52	+4	·290	+·027	2·1	+0·8	0	0·50	−0·50	0	0·17	−0·17	0·17	0·57	−0·40	0	Neemuch.
9	1	7	5	1	1	1	4		N 59° E	N 29° W	1·9	2·0	−0·1	25	+13	52	0	·344	+·050	1·3	0	1	0·50	+0·50	0·22	0·17	+0·05	0·22	0·56	−0·34	0·21	Indore.
13	1	1	3		4	3	2	2	S 31° W	N 85° W	1·4	1·5	−0·1	14	−5	68	+1	·358	+·023	1·3	−1·2	1	1·00	0	0·34	0·53	−0·19	0·45	1·70	−1·25	0·34	Nowgong.
8			5	3	2	4	6	1	S 21° W	N 30° W	1·4	3·5	−2·1	21	−14	63	+4	·381	+·073	2·8	+1·1	2	1·50	+0·50	0·51	0·73	−0·22	0·51	2·11	−1·60	0·32	Sutna.
																																XI.—Central Provinces.
	5	2	8	5			1	8	N 34° E		†4·2	4·7	−0·5	38		46		·322		1·3		0			0·03	0·27	−0·24	0·03	1·09	−1·06	0·03	Buldana.
6	1	5	4	2		1	4	6	N	S 34° E	3·1	3·1	0	23	+15	49	+4	·347	+·058	2·8	+1·3	3	0·30	+2·70	0·89	0·24	+0·65	0·89	1·26	−0·37	0·42	Akola.
9		3	9	5		2	1		S 77° E	S 83° E	4·9	3·5	+1·4	42	+10	53	+4	·374	+·025	2·2	+0·9	2	0·60	+1·40	0·43	0·31	+0·12	0·43	1·23	−0·80	0·28	Amraoti.
5	3	6	4	1	2		6	2	N 15° E	N 18° W	3·7	3·0	+0·7	21	−3	45	−1	·318	+·049	1·3	+0·1	0	0·30	−0·30	0·02	0·10	−0·08	0·02	0·65	−0·63	0·02	Khandwa.
16		8	4	1					N 64° E	N 60° E	2·2	2·1	+0·1	39	−1	63	+5	·363	+·040	1·8	+0·4	1	0·50	+0·50	0·50	0·34	+0·16	0·50	1·12	−0·62	0·50	Hoshangabad
5		3	7	8	2	2	1	1	S 62° E	S 72° E	5·4	2·7	+2·7	46	+15	50	−2	·301	+·021	2·7	+1·3	3	0·80	+2·20	0·74	0·41	+0·33	0·76	1·54	−0·78	0·32	Saugor.
14	1	1		6	5	1	1		S 22° E	S 63° E	1·0	1·8	−0·8	29	+9	77	+11	·420	+·073	1·9	−0·2	4	1·10	+2·90	2·57	0·69	+1·88	2·65	1·75	+0·90	1·54	Jubbulpore.
4	4	2	2	1	7	5	1	3	S 35° W	N 31° E	3·3	2·1	+1·2	18	−18	65	+3	·392	+·025	2·5	+0·3	5	1·50	+3·50	1·86	0·87	+0·99	3·01	1·92	+1·09	0·97	Seoni.
6	5	6	9	2				1	N 58° E	N 18° E	2·4	3·2	−0·8	56	+20	66	+14	·459	+·099	2·7	+0·9	5	0·90	+4·10	4·58	0·43	+4·15	4·58	1·33	+3·25	1·61	Nagpur.
14	3	1		1	4	4		2	S 49° W		3·3			11		68		·396		2·9		8			4·24	1·52	+2·72	5·09	2·75	+2·34	1·11	Pendra.
16	1	3	2		2	2	2	1	N	N 4° W	2·4	2·9	−0·5	1	−11	75	+22	·489	+·134	2·5	+0·4	7	0·70	+6·30	3·05	0·65	+2·40	3·05	1·12	+1·93	1·40	Raipur.
17		1	3	5	1	1		1	S 56° E	N 76° E	1·5	2·0	−0·5	29	+9	74	+14	·564	+·145	3·1	+1·8	6	0·60	+5·40	3·97	0·51	+3·46	3·97	1·02	+2·95	1·05	Chanda.
12			5	4	4		4		S 29° E					32		86		·566		4·6		3			2·21			2·26			0·96	Jagdalpur.

case of hill or plateau stations, the elevations of which exceed 3,000 feet.

* Uncorrected for scale error.

§ Mean of 15 days.
‡ " 23 "
¶ " 14 "

Table

(2) *Abstract of observations taken at 8 hrs. at 235 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XII.—Hyderabad.																						
28	Aurangabad	1,905	28·087	—·037	29·951	28·170	21st	28·014	26th	·156	70·7	87·7†	−1·1†	61·6	+3·6	74·5†	+1·3	26·1	91·2	24th	56·2	20th	35·0
	Nizamabad	1,248	28·718		29·929	28·797	1st & 21st.	28·620	29th	·177	71·9	90·3	−0·1	65·3	+4·0	77·8	+1·9	25·0	97·9	29th	56·7	21st & 22nd.	41·2
	Bidar	*2,165*									73·6	89·4		66·4		77·9		23·0	95·8	29th	64·4	4 days	31·4
29	Gulbarga	1,503	28·475	—·005	29·934	28·554	21st	28·388	29th	·166	72·3	92·7	+0·1	66·8	+2·5	79·8	+1·3	25·9	99·5	28th	61·3	21st	38·2
	Raichur	*1,311*	28·673	+·016?	29·931	28·751	1st	28·556	26th	·195	76·9	92·9	+0·1	71·8	+3·8	82·3	+1·9	21·1	97·5	29th	66·1	21st	31·4
	Hyderabad (Deccan).	1,690	28·290	+·003	29·936	28·375	5th	28·197	29th	·178	71·3	89·6	−1·7	67·1	+3·7	78·3	+1·0	22·5	95·2	28th	60·7	21st	34·6
	Hanamkonda	877	29·122	—·002	29·958	29·201	9th	29·002	29th	·199	73·9	89·4	−0·6	69·2	+2·9	79·3	+1·1	20·2	95·5	28th	62·2	21st	33·3
	XIII.—Mysore.																						
30	Chitaldrug	2,405	27·593	+·003	29·908	27·668	1st	27·520	26th	·148	74·1	89·4	+0·1	67·5	+1·6	78·5	+0·9	21·9	93·6	28th	61·8	5th	31·8
	Hassan	3,149	26·894	+·015	29·922	26·956	1st	26·826	29th	·130	69·0	86·7	+0·3	62·1	+4·3	74·4	+2·3	24·6	90·9	29th	59·2	19th	31·7
	Bangalore	3,021	27·018	+·002	29·930	27·085	1st	26·947	26th	·138	69·5	87·8	+2·0	63·7	+4·1	75·7	+3·1	24·1	91·8	29th	60·3	24th	31·5
	Mysore	2,518	27·497	+·005	29·919	27·561	1st	27·428	25th	·133	73·0	89·3	+0·5	66·6	+3·7	78·0	+2·1	22·7	92·5	29th	63·0	22nd	29·5
	XIV.—Madras.																						
31	Mangalore	65	29·920	—·011	29·923	30·008	1st	29·857	29th	·151	79·0	87·5	−1·9	74·2	+3·0	80·8	+0·5	13·3	89·8	22nd & 23rd.	71·9	3rd & 19th.	17·9
	Calicut	27	29·956	—·012	29·912	30·032	1st	29·885	29th	·147	78·1	87·9	−0·8	75·1	+2·5	81·5	+0·9	12·8	89·8	6th & 12th.	73·1	14th	16·7
	Cochin	9	29·975	—·007	29·911	30·044	1st	29·909	29th	·135	79·2	90·1	+0·2	76·1	+2·4	83·1	+1·3	14·0	92·2	9th	74·7	5 days	17·5
	Trivandrum	198	29·784	+·020	29·913	29·856	1st	29·706	26th	·150	77·6	86·9	+1·9	74·9	+1·9	80·9	+1·9	12·0	89·5	16th	72·5	12th	17·0
32	Tinnevelly	168	29·849	+·015	29·948	29·934	1st	29·754	26th	·180	79·0	93·6	+1·6	74·3	+1·6	83·9	+1·6	19·3	98·2	27th & 29th.	69·9	25th	28·3
	Pamban	37	29·960	—·002	29·924	30·040	1st & 5th.	29·867	26th	·173	80·1	87·0	+2·1	74·3	—0·6	80·6	+0·7	12·7	88·7	28th & 29th.	73·5	1st, 4th & 5th.	15·2
	Madura	447	29·575	+·011	29·958	29·656	1st	29·476	25th	·180	78·7	92·5	+0·5	72·9	+3·4	82·7	+1·9	19·6	98·0	29th	68·6	24th	29·4
	Pudukkottai	318	29·685		29·948	29·770	1st	29·606	26th	·164	77·3	92·0		71·5		81·7		20·5	97·5	29th	67·0	23rd	30·5
	Negapatam	31	29·972	—·009	29·931	30·040	1st	29·883	26th	·157	80·2	88·1	+3·7	75·6	+3·5	81·9	+3·6	12·5	91·5	22nd	69·0	24th	22·5
	Trichinopoly	255	29·766	—·003	29·955	29·840	5th	29·674	26th	·166	78·5	93·3	+1·0	71·7	+3·3	82·5	+2·1	21·6	98·1	26th	65·8	23rd	32·3
	Coimbatore	1,341	28·663	—·007	29·948	28·739	1st	28·577	26th	·162	74·4	92·3	+0·3	69·6	+4·1	81·0	+2·2	22·7	96·0	28th & 29th.	62·3	24th	33·7
	Salem	940	29·101	—·001	29·984	29·172	1st	29·020	26th	·152	76·8	95·0	+1·4	70·5	+5·0	82·8	+3·2	24·5	100·5	28th	66·3	24th	34·2
	Cuddalore	37	29·982	+·012	29·949	30·059	1st	29·895	26th	·164	77·2	85·8	+0·4	71·6	+2·7	78·7	+1·5	14·2	88·3	29th	66·7	23rd	21·6
	Vellore	707	29·298		29·949	29·370	5th	29·206	26th	·164	74·2	90·3		68·9		79·6		21·4	95·7	29th	61·5	23rd	34·2
	Madras	22	29·991	—·014	29·945	30·071	1st	29·903	26th	·168	77·8	86·7	—0·2	71·2	+3·2	78·9	+1·5	15·5	89·5	29th	66·5	26th & 27th.	23·0
33	Cuddapah	433	29·555	—·008	29·930	29·650	5th	29·443	26th	·207	78·5	96·0	+0·9	72·2	+3·1	84·1	+2·0	23·6	101·2	29th	68·1	23rd	33·1
	Bellary	1,476	28·496	—·019	29·916	28·570	5th	28·395	26th	·175	75·9	95·8	+1·6	70·0	+4·6	82·9	+3·1	25·8	101·0	28th	65·3	24th	35·7
	Kurnool	923	29·046	—·018	29·921	29·121	5th	28·950	26th	·171	75·1	94·9	+0·4	70·3	+5·5	82·6	+2·9	24·6	100·7	28th	61·1	21st	39·6
34	Nellore	66	29·940	+·002	29·942	30·030	5th	29·830	29th	·200	76·6	85·7	—1·9	71·7	+2·6	80·2	+0·3	17·0	91·6	21st	68·6	26th	23·0
	Masulipatam	15	30·007	—·002	29·956	30·099	5th	29·896	29th	·203	78·1	87·1	+0·2	70·9	+2·6	79·0	+1·4	16·2	90·3	29th	66·7	1st	23·6
	Cocanada	26	30·005	+·008	29·968	30·103	5th	29·899	29th	·204	77·0	86·0	+0·2	71·6	+2·0	78·8	+1·1	14·4	92·7	27th	67·1	1st	25·6
	Waltair (Vizagapatam).	*226*	29·801	+·003	29·972	29·901	5th	29·682	29th	·219	77·0	84·3		72·6		78·5		11·7	86·6	22nd	70·4	1st	16·2
	Calingapatam	19	30·007		29·964	30·116	5th	29·874	29th	·242	73·7	88·5		69·8		79·2		18·7	93·3	28th	65·3	1st	28·0
	Gopalpur	33	29·985	+·014	29·960	30·100	5th	29·828	29th	·274	71·7	83·7	+0·2	69·1	+1·2	76·4	+0·7	14·6	87·7	28th	60·5	21st	27·2

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau

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

† Mean of 27 days.

B—*continued.*

in India, etc., in February, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 29th Feb., 1912.	Normal rainfall for period, 1st Dec., 1911 to 29th Feb., 1912.	Departure from normal of period, 1st Dec., 1911 to 29th Feb., 1912.	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	56	57
																																XII.—Hyderabad.
2	4	5	8	4	1	2	2	1	N 73° E		6·4			36		43	+ 3	·321		1·8		0	0·20	−0·20	0	0·15	− 0·15	0	0·73	− 0·73	0	Aurangabad.
17		1	1	6	1	2	1		S 31° E		2·9			25		67	+10	·523		2·7		6	0·40	+5·60	3·56	0·45	+ 3·11	3·56	0·66	+ 2·90	1·95	Nizamabad.
12	1		1	6	1	6	1	1	S 7° W		3·0			28		60		·494		3·0		3	0·40	+2·60	1·86	0·25	+ 1·61	1·86	0·76	+ 1·10	0·67	Bidar.
5		5	8	1	5	5			S 57° E	N 89° E	4·4	5·6	−1·2	39	+13	59	+10	·466	+ ·073	1·0	+0·1	3	0·40	+2·60	1·23	0·15	+ 1·08	1·53	0·49	+ 1·04	0·55	Gulbarga.
		4	2	11	5	3	2	2	S 33° E	S 23° E	6·2	5·1	+1·1	46	+15	61	+ 9	·571	+ ·133	2·9	+1·9	3	0·20	+2·80	0·79	0·25	+ 0·54	0·83	0·48	+ 0·35	0·48	Raichur.
27		1		1					E	S 68° E	1·9	3·0	−1·1	5	− 4	74	+ 7	·559	+ ·064	3·0	+1·6	3			2·35	0·24	+ 2·11	2·35	0·64	+ 1·71	1·69	Hyderabad (Deccan).
5			1	17	5		1		S 36° E		5·9			74		73	+ 4	·610		4·6		4	0·60	+3·40	2·34	0·20	+ 2·14	3·42	0·87	+ 2·55	1·06	Hanamkonda
																																XIII.—Mysore.
12	1		2	3		3	6	2	S 71° W	S 6° E	2·3	4·6	−2·3	18	+2	62	+11	·527	+ ·103	2·8	+1·3	1	0·10	+0·90	0·90	0·06	+ 0·84	0·90	0·63	+0·27	0·90	Chitaldrug.
14	1		3	6		2	2	1	S 50° E	S 72° E	3·1	2·0	+1·1	28	−23	81	+14	·542	+ ·063	3·4	+1·0	0	0·10	−0·10	0·07	0·13	− 0·06	0·50	1·01	− 0·51	0·06	Hassan.
			8	11	4	5	1		S 36° E	S 62° E	5·1	3·7	+1·4	67	+12	73	+ 3	·521	+ ·045	2·6	+0·9	1	0·20	+0·80	0·18	0·18	0	0·80	0·94	− 0·14	0·18	Bangalore.
4		2	2	6	7	5	2	1	S 6° E	S 89° E	4·1	5·8	−1·7	46	+24	71	+ 3	·576	+ ·068	3·6	+1·4	0	0·30	−0·30	0	0·15	− 0·15	0·56	0·74	− 0·18	0	Mysore.
																																XIV.—Madras.
1	4	14	10						N 55° E	N 76° E	4·6	2·1	+2·5	85	+18	73	− 4	·730	+ ·025	2·7	+1·0	0	0·10	−0·10	0	0·02	− 0·02	1·03	0·58	+ 0·45	0	Mangalore.
10		6	10	3					N 83° E	N 69° E	4·9	7·2	−2·3	56	−11	83	+ 5	·794	+ ·059	2·0	0	0	0·40	−0·40	0	0·16	− 0·16	0·73	1·68	− 0·95	0	Calicut.
3	3	21	1					1	N 39° E	N 41° E	5·1*	4·0	+1·1	82	+11	74	− 1	·739	− ·002	2·3	+0·7	2	1·70	+0·30	1·01	0·75	+ 0·26	5·15	3·00	+ 2·15	0·73	Cochin.
9	1	14	5						N 54° E	N 55° E	3·6*	3·4	+0·2	63	+16	81	+ 3	·768	+ ·045	2·4	−0·2	0	1·10	−1·10	0	0·61	− 0·61	6·51	3·47	+ 3·04	0	Trivandrum.
1	16	5		1			1	5	N 1° W	N 17° W	3·0	3·6	−0·6	77	+ 1	76	− 1	·756	+ ·044	4·1	+1·8	0	1·80	−1·80	0·01	0·98	− 0·97	5·70	5·66	+ 0·04	0·01	Tinnevelly.
14	1	7	7						N 62° E	N 56° E	4·1	6·6	−2·5	46	−29	78	− 1	·790		2·9		0	0·50	−0·50	0·06	0·98	− 0·92	11·59	10·50	+ 1·09	0·05	Pamban.
4	7	10	6	1				1	N 43° E	N 14° E	4·7	3·3	+1·4	67	+ 4	78	+ 3	·756	+ ·069	5·2	+3·2	0	0·90	− 0·90	0	0·45	− 0·45	4·50	2·74	+ 1·76	0	Madura.
5	9	13	1					1	N 25° E		4·5			72		84		·782		2·8		0			0	0·66	− 0·66	7·82	2·94	+ 4·88	0	Pudukkottai.
3		2	16					8	N 60° E	N 18° E	4·8*	4·7	+0·1	46	+ 6	75	− 5	·773	+ ·019	3·9	−0·5	0	0·80	−0·80	0	0·72	− 0·72	31·70	13·76	+17·94	0	Negapatam.
9	5	11	2				1	1	N 31° E	N 27° E	1·8	2·8	−1·0	53	+17	77	− 1	·746	+ ·061	2·5	−0·2	0	0·50	−0·50	0	0·68	− 0·68	4·34	3·95	+ 0·39	0	Trichinopoly.
5		24							N 45° E	N 63° E	2·4	2·1	+0·3	82	+19	88	+ 5	·754	+ ·092	4·1	+1·6	0	0·80	−0·80	0	0·37	− 0·37	2·75	2·12	+ 0·63	0	Coimbatore.
5		4	18	1			1		N 84° E	N 53° E	4·7	3·9	+0·8	74	+19	77	+ 3	·721	+ ·087	3·2	+1·6	0	0·50	−0·50	0	0·32	− 0·32	0·69	1·76	− 1·07	0	Salem.
14		2	2			1	4	6	N 48° W	N 60° W	3·8	1·6	+2·2	29	−22	82	− 7	·768	−·012?	4·1	+0·6	0	0·70	−0·70	0	1·06	− 1·06	12·96	9·50	+ 3·46	0	Cuddalore.
28								1	N 45° W		1·5*			3		84		·712		2·1		0	0·50	−0·50	0	0·46	− 0·46	5·38	5·50	− 0·22	0	Vellore.
7			1	4	2	6	6	3	S 51° W	S 34° W	3·5	3·7	−0·2	39	+23	83	+ 1	·795	+ ·053	2·4	−0·3	0	0·60	−0·60	0	0·33	− 0·33	9·20	7·48	+ 1·72	0	Madras.
		5	11	11		1		1	S 78° E	S 72° E				74	+11	67	+ 1	·652	+ ·038	2·2	+1·3	0	0·20	−0·20	0	0·14	− 0·14	0·38	1·54	− 1·16	0	Cuddapah.
11	1		1	5	3	2	3	3	S 23° W	S 11° E	2·3*	2·9	−0·6	21	+ 1	58	+ 2	·515	+ ·047	1·3	−0·2	1	0·10	+0·90	0·25	0·08	+ 0·17	0·31	0·31	0	0·22	Bellary.
11			6	5	2	4	1		S 35° E	S 58° E	5·0*			36	+28	66	+ 8	·573	+ ·095	2·1	+1·3	0	0·10	−0·10	0·01	0·16	− 0·15	0·24	0·57	− 0·33	0·01	Kurnool.
9			1		18	1			S 1° E	S 14° E	3·2	3·4	−0·2	64	+48	86	+ 1	·789	+ ·047	1·9	−0·6	0	0·30	−0·30	0	0·16	− 0·16	3·94	4·66	− 0·72	0	Nellore.
9	2	2	3	9	4				S 57° E	N 41° E	3·6	3·4	+0·2	46	+22	79	− 7	·754	+ ·006	3·5	+0·9	0	0·30	−0·30	0	0·46	− 0·46	0·87	1·67	− 0·80	0	Masulipatam.
21		2	2	4					S 78° E	N 17° W	3·8	5·3	−1·5	21	−46	79	+ 5	·736	+ ·098	5·1	+2·9	1	0·50	+0·50	0·16	0·39	− 0·23	1·42	1·62	− 0·20	0·15	Cocanada.
	1	3	1			12	12		S 73° W	N 86° W	5·0			60	− 3	74	+ 3	·694	+ ·046	3·7	+1·7	0	0·50	−0·50	0·05	1·02	− 0·97	1·31	2·78	− 1·47	0·05	Waltair. (Vizagapatam)
	6	2				1	5	15	N 41° W		5·9			76		86		·709		2·9		1			0·12	0·17	− 0·05	1·12	3·34	− 2·22	0·10	Calingapatam.
	11					2	4	12	N 38° W	N 37° W	7·8	8·0	−0·2	78	+16	92	+14	·706	+ ·089	2·9	+0·5	5	0·90	+4·10	2·62	0·47	+ 2·15	2·83	1·67	+ 1·16	1·10	Gopalpur.

stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 235 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Bay Islands.																						
1	P. V. Fraser	8	30·089*		30·012*	30·140	21st	30·040	2nd	·100	77·4												
	Port Blair	58	29·933	+·002	29·921	30·016	1st	29·851	25th	·165	78·8	86·7	−1·4	75·9	+1·0	81·3	−0·2	10·8	88·7	26th & 27th.	71·0	16th	17·7
	Slipper Island	90	29·903		29·929	29·994	5th	29·813	25th	·181	77·9	83·2		75·1		79·1		8·1	85·6	26th	73·1	19th & 20th.	12·5
	Kashmir.																						
14	Muzaffarabad	2,475	27·646		30·213	27·740	1st	27·517	25th	·223	50·4	69·7		39·7		54·7		30·0	70·9	9th, 21st & 29th.	36·5	4th	34·4
	Srinagar	5,204	24·975	+·021	24·946	25·109	21st	24·832	23rd	·277	35·3	51·8	+9·5	32·9	+5·6	42·4	+7·5	18·9	57·6	28th	28·1	6th	29·5
	Dras	*10,059*	20·851	+·089	20·819	21·017	6th	20·642	23rd	·375	4·5‡	?	?	‖ −5·1		?	?	?	?	?	−17·0	29th	?
	Leh	11,503	19·701	+·090	19·669	19·839	5th & 20th.	19·551	24th	·288	13·7	33·7	+2·3	9·0	−0·8	21·4	+0·7	24·7	41·9	29th	−2·0	5th & 6th.	43·9
	Skardu	*7,505*	22·998	+·070	22·968	23·263	5th	22·754	23rd	·509	20·5	36·2	−2·2	16·6	−2·4	26·4	−2·3	19·6	47·0	23rd	−4·9	6th	51·9
	Gilgit	4,890	25·219		25·192	25·568	5th	25·030	28th	·478	41·2	54·7	+3·4	38·3	+1·7	46·5	+2·5	16·4	60·2	18th, 19th & 23rd.	33·2	5th & 6th.	27·0
	Baluchistan.																						
16	Quetta	5,502	24·701	+·041	24·661	24·825	2nd	24·567	27th	·258	39·9	59·3	+6·2	33·2	+1·5	46·3	+3·9	26·1	77·1	21st	25·7	1st	51·4
	Chaman	4,311	25·761	+·041	25·726	25·917	1st	25·604	27th	·313	48·9	61·1	+5·1	41·6	+3·5	51·3	+4·3	19·5	74·3	20th	31·8	1st	42·5
	Kalat	6,630	23·875		23·837	23·969	2nd	23·753	15th	·207	31·3	57·0		?		?		?	73·0	21st	?	?	?
	Dalbandin	2,779	27·227		30·062	27·443	1st	27·059	27th	·384	51·2	74·9		43·0		59·0		31·9	87·8	21st	32·8	1st	55·0
	Pasni		30·036		29·996	30·193	1st	29·929	26th	·264	63·2	82·0		59·9		70·9		22·1	90·0	25th	54·0	3rd	36·0
	Panjgur		26·825		26·783	26·975	1st	26·703	27th	·272	46·3	70·9		44·6		57·7		25·3	81·8	21st	35·0	1st	46·8
	Rubat		26·929		26·887	27·153	1st	26·655	15th	·498	51·2	71·1		46·2		58·7		24·9	85·0	21st	33·8	1st	51·2
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*									35·9	50·8		32·1		41·4		18·7	57·9	28th	18·0	1st	39·9
	Para Chinar	6,000	24·484		24·460	24·592	8th	24·385	28th	·207	40·6	56·0		34·6		45·3		21·4	63·2	21st	26·1	1st	37·1
	Cherat	*4,256*	25·775	+·046	25·743	25·879	8th	25·651	2.rd	·228	48·1	56·8	+4·7	43·7	+3·6	50·2	+4·1	13·1	63·7	23rd	35·9	3rd & 17th.	26·8
	Murree	6,333	23·867	+·039	23·835	23·979	21st	23·767	23rd & 24th.	·212	43·3	52·1	+4·1	39·9	+5·4	46·0	+4·7	12·2	61·1	21st	34·7	17th	26·4
	Simla	7,232	23·111	+·040	23·073	23·246	21st	22·977	26th	·269	43·1	51·5	+5·6	39·7	+4·1	45·6	+4·9	11·8	61·6	23rd	31·0	17th	30·6
	Sarain		23·157		23·119	23·271	21st	23·021	26th	·250	33·1	49·9		30·2		40·0		19·7	63·3	22nd	25·5	4th	37·8
	Kalabagh								Observations not received.														
	Chakrata	7,022	23·306	+·038	23·266	23·413	21st	23·163	26th	·250	44·2	58·3	+7·1	37·7	+1·6	48·0	+4·3	20·6	68·7	22nd	32·2	2nd & 8th	36·5
	Mukteswar	7,592	22·830	−·001	22·789	22·932	21st	22·678	26th	·254	43·7	54·6	+5·0	37·7	+3·0	46·2	+4·0	16·9	64·0	22nd	30·0	1st	34·0
	Darjiling	7,376	22·982	−·003	22·937	23·100	8th	22·794	26th	·306	42·8	50·2	+2·3	37·8	+2·2	44·0	+2·3	12·4	55·3	25th & 26th.	34·2	6th, 9th & 12th.	21·1
	Shillong	4,920	25·166		25·118	25·268	8th	24·993	26th	·275	50·3	63·5		44·1		53·8		19·4	67·9	2nd, 23rd & 25th.	36·7	7th	31·2
	Cherrapunji	4,309	25·740		25·691	25·838	8th	25·588	26th	·250	54·3	61·8		49·0		55·4		12·8	66·7	23rd	43·6	19th	23·1
	Maymyo	3,545	26·485	−·018	26·430	26·581	8th	26·352	26th	·229	52·1	74·0	−1·1	45·0	+2·4	59·5	+0·7	29·0	79·0	26th	39·6	14th	39·4
	Pachmarhi	3,528	26·518	−·003	26·465	26·599	21st	26·436	25th	·163	63·2	76·1	+0·6	53·9	+2·4	65·0	+1·5	22·2	83·5	23rd & 24th.	47·1	20th	36·4
	Mount Abu	3,945	26·111	+·001	26·061	26·216	21st	26·021	13th	·195	62·1	71·8	+3·0	56·0	+2·4	63·9	+2·7	15·8	80·7	22nd	47·9	2nd	32·8
	Mercara	3,781	26·271	−·014	26·204	26·323	1st	26·200	29th	·123	67·0	81·7	+0·5	60·9	+2·1	71·3	+1·3	20·8	85·0	9th & 16th.	58·0	1st & 25th.	27·0
	Ootacamund	*7,397*	23·108		23·044	23·166	1st	23·054	25th	·112	55·3	69·3		45·3		57·3		24·0	74·0	11th	39·7	22nd	34·3
	Kodaikanal	7,683	22·873	−·009	22·808	22·928	1st	22·819	26th	·109	55·9	67·6	+1·7	49·3	+1·1	58·5	+1·4	18·3	71·5	11th	44·0	22nd	27·5

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

* Mean of 7 days.

‡ Mean of 14 days.
‖ " " 12 "

NOTE.—The barometric readings are not reduced to sea-level, in the case of hi

B—*continued.*

in India, etc., in February, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 29th Feb., 1912.	Normal rainfall for period, 1st Dec. to 29th Feb.	Departure from normal of period, 1st Dec., 1911 to 29th Feb., 1912.	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	56	57
																																Bay Islands.
2	1				2	11	9	4	S 73° W					72		79		·742		3·9		2			0·62			0·62			0·36	P.V.Fraser.
3	11	8	3	2				2	N 27° E	N 9° E	4·4	3·7	+0·7	57	+16	80	−4	·797	−·017	3·1	−0·3	0			0·03	1·01	−0·98	32·74	8·83	+23·91	0·03	Port Blair.
	11	13	4					1	N 31° E		5·1			85		77		·726		0·9		0			0	0·17	−0·17	16·05	2·17	+13·88	0	Slipper Island.
																																Kashmir.
	1	2	5	3	5	9	3	3	S 29° W		0·4			35		67		·245		3·5		2			3·51			11·58			2·98	Muzaffarabad
10	2	2		5	5	1		4	S 24° E	S 24° E	1·8	2·6	−0·8	11	−12	87	−2	·180	+·022	6·3	−1·3	3	6·40	−3·40	1·05	2·79	−1·74	4·90	7·18	−2·28	0·52	Srinagar.
29									(a)		0·2					92‡		·054‡		3·9		5	8·20	−3·20	2·68	2·39	+0·29	7·67	6·83	+0·84	1·06	Dras.
26	1	1			1				N 45° E	S 27° W	1·1	0·9	+0·2	4	−32	65	+18	·056	+·022	5·8	−0·2	0	1·00	−1·00	0·16	0·34	−0·18	0·69	0·88	−0·19	0·05	Leh.
24		1	1		2	1			S 27° E		0·6			7		82	−11	·094		7·4		3	2·60	+0·40	0·90	0·63	+0·27	3·46	1·73	+1·73	0·48	Skardu.
20							9		W		1·4			31		48	−8	·126	−·010	5·3	−1·2	1	0·90	+0·10	0·43	0·21	+0·22	0·95	0·53	+0·42	0·41	Gilgit.
																																Baluchistan.
20	1	1		4	1	2			S 32° E	S 4° W	2·4	2·6	−0·2	14	+2	63	−11	·155	−·011	1·8	−2·0	1	6·40	−5·40	0·35	1·99	−1·64	5·57	4·85	+0·72	0·35	Quetta.
4			11	11	2	1			S 60° E	S 46° E	4·4	6·1	−1·7	70	+9	61	−3	·203	+·021	2·8	−1·3	2	4·30	−2·30	0·65	1·55	−0·90	5·24	4·05	+1·19	0·55	Chaman.
10			1	2	8	8			S 12° W	S 32° W	4·1†			53	−7	52		·095		0·4		0			0	1·33	−1·33	3·33	3·68	−0·35	0	Kalat.
3		4	11		2	2	4	3	N 77° E		5·5†			21		57		·211		1·8		0			0			2·43			0	Dalbandin.
22	2						1	4	N 39° W		1·7			25		87		·511		1·2		0			0			1·29			0	Pasni.
3	1	11	13	1					N 69° E		5·3			78		76		·237		0·6		0			0·04			1·72			0·04	Panjgur.
2		2	1		2	10	10	1	S 66° W‖		4·7			56		61		·228		2·3		2			0·67			2·09			0·65	Robat.
																																Hill stations, excluding Kashmir and Baluchistan.
23	4		1	1					N 34° E		1·2			14		79		·169		5·8		5			1·79	1·14	+0·65	4·56	3·21	+1·35	0·98	Chitral.
13	6	5				2	1	2	N 2° W		2·5			33		67		·169		3·6		5	4·80	+0·20	2·27	2·01	+0·26	7·36	5·40	+1·96	0·85	Para Chinar.
2	14	1		2	1	1		8	N 14° W	N 16° W	10·6	9·9	+0·7	63	+7	43	−17	·141	−·025	4·2	−0·2	3			1·31	3·15	−1·84	6·35	7·30	−0·95	0·71	Cherat.
13	3	3	2	7		1			S 86° E	S 68° E	5·2§	6·5	−1·3	29	−11	53	−11	·146	+·002	3·9	−0·9	4	2·70	+1·30	1·37	4·28	−2·91	6·19	9·81	−3·62	0·66	Murree.
																42	−14	·114	−·017	3·4	−1·1	5	4·00	+1·00	1·65	3·31	−1·66	5·57	7·19	−1·62	0·71	Simla.
18					5	6			S 24° W		1·2			35		85		·158		3·9		5			2·17	9·07	−6·90	9·31	17·09	−7·78	0·54	Sarain.
																		Observations not received.														**Kalabagh.**
12	14	1			1			1	N	N 66° E	4·0	4·6	−0·6	50	+19	56	−8	·157	+·008	2·4	−1·2	4	5·60	−1·60	0·86	4·59	−3·73	8·28	10·17	−1·89	0·29	Chakrata.
4	1	2	2	4	2		12	2	S 82° W		5·7			25		50	−12	·137		2·2		2			1·55	2·54	−0·99	3·75	5·75	−2·00	1·41	Mukteswar.
21	2	1				2	2	1	N 59° W	S 53° E	1·7	4·0	−2·3	11	−9	81	−3	·225	+·014	6·3	+1·5	1	2·52	−1·52	1·21	0·99	+0·22	1·37	1·85	−0·48	1·16	Darjiling.
15					3	10		1	S 40° W		2·0			42		71		·256		2·2		3	1·90	+1·10	0·99	1·35	−0·36	1·05	1·80	−0·75	0·31	Shillong.
20						5	3	1	S 69° W		2·5			25		71		·304		5·2		6	3·10	+2·90	4·72	2·69	+2·03	5·02	3·31	+1·71	2·33	Cherrapunji.
24						5			S 45° W		1·5			14		88	+5	·348		2·2		0	0·30	−0·30	0·02	0·16	−0·14	0·75	0·69	+0·06	0·02	Maymyo.
11	3	2		3	5	3		2	S	S 23° W	2·1	3·2	−1·1	12	−4	68¶	+14	·375¶	+·080	1·3	−0·9	3	1·00	+2·00	0·91	0·56	+0·35	1·00	1·74	−0·74	0·35	Pachmarhi.
8	5	6	1		1	3	2	3	N 7° W	N 45° W	4·7	4·5	+0·2	29	+1	40	−2	·212	+·006	1·0	−1·0	0	0·50	−0·50	0	0·34	−0·34	0	0·79	−0·79	0	Mount Abu.
23	1	2	2	1					N 67° E	N 60° E	1·8	3·1	−1·3	14	−28	85	+15	·553	+·105	4·7	+1·7	0	0·30	−0·30	0	0·19	−0·19	0·14	1·21	−1·07	0	Mercara.
17		3	3	2	3	1			S 62° E		1·3			25		69		·298		2·2		0	1·20	−1·20	0·14	0·71	−0·57	3·78	5·06	−1·28	0·05	Ootacamund.
	6	7	9	3	1			3	N 54° E		7·8†			60		61	+4	·269		2·0		2	2·30	−0·30	0·64	1·74	−1·10	7·83	9·05	−1·22	0·42	Kodaikanal.

(a) Indeterminate.

† Uncorrected for scale error.

§ Mean of 23 days.
¶ ,, ,, 25 ,,
‖ ,, ,, 28 ,,

or plateau stations, the elevations of which exceed 3,200 feet.

Table

(2) *Abstract of observations taken at 8 hrs. at 235 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India.																						
	Singapore (*a*)	10	29·971		29·902	30·100	3rd	29·864	25th	·236	82·9	89·0		74·0		81·5		15·0	92·0	12th	70·5	6th	21·5
	Penang (*a*)	20	29·889		29·834	29·986	3rd & 7th.	29·824	26th	·162	83·3	93·7		72·4		83·1		21·3	95·0	5 days	70·0	1st, 2nd & 7th.	25·0
	Trincomalee	99	?	?	?	?	?	?	?	?	76·8	88·3	+3·3	74·6	−0·5	81·5	+1·4	13·7	91·5	29th	69·0	25th	22·5
	Colombo	24	29·943	−·021	29·893	30·021	1st	29·865	26th	·156	72·7	90·2	+1·9	72·1	−0·8	81·2	+0·5	18·1	95·0	23rd	67·5	24th	27·5
	Minicoy	7	30·000			30·075	1st	29·945	25th	·130													
	Amini Divi	*13*	29·997	+·014	29·938	30·078	1st	29·932	26th	·146	82·6	88·3	+3·1	78·0	+1·9	83·2	+2·5	10·3	92·2	23rd	74·0	12th	18·2
	Gyantse	13,120	17·024		16·985	17·123	21st	16·942	25th	·181	20·7	44·2		7·2		25·7		37·0	61·3	29th	0	7th & 20th.	61·3
	Pharijong	14,400									15·8	36·6		−1·1		17·7		37·7	47·0	26th	−25·1	10th	72·1
	Gangtok	5,600?									47·6	59·9		43·3		51·6		16·6	68·3	23rd	39·2	19th	29·1
	Gartok (*c*)	14,140	17·561			17·600	10 days	17·450	26th	·150	5·8	33·6		−5·8		13·9		39·4	46·1	22nd	−25·4	26th	71·5
	Kashgar (*c*)	4,255	25·620			26·170	5th	25·370	21st & 28th.	·800	27·4	45·8	+0·7	23·6	+1·2	34·7	+0·9	22·2	64·2	27th	6·7	8th	57·5
	Kabul		24·292		24·261	24·394	15th	24·191	2nd	·203	28·0	51·8	+3·3	24·5	+1·3	38·1	+2·3	27·3	62·6	14th	11·0	1st	51·6
	Meshed	3,104	26·761		30·010	26·989	6th	26·369	15th	·620	36·7	55·8		33·3	+4·7	44·6		22·5	65·4	15th, 19th & 20th.	27·6	13th	37·8
	Jask	13	30·038	−·014	30·005	30·210	1st	29·906	26th	·304	63·9	76·7	+1·8	62·2	+0·4	69·5	+1·1	14·5	80·8	26th	58·8	1st	22·0
	Muscat	20	30·050	−·004	30·019	30·235	1st	29·931	26th	·304	68·8	78·4	+5·6	66·3	−1·5	72·4	+2·1	12·1	83·3	28th	60·1	24th	23·2
	Bahrein	18	30·098		30·070	30·270	1st	29·827	19th	·443	61·0	67·1		57·5		62·3		9·6	79·5	20th	51·5	1st	28·0
	Bushire	14	30·046	−·030	30·023	30·207	1st	29·729	19th	·478	57·0	67·1	+1·4	53·5	+0·7	60·3	+1·1	13·6	80·8	19th	49·0	16th	31·8
	Busrah	25	30·061		30·057	30·278	21st	29·679	19th	·599	56·1	66·0		51·5		58·8		14·5	72·3	18th	47·5	5th	24·8
	Kerman						Observations not received.																
	Ispahan (*b*) (*d*)	*5,817*	24·241			24·440	1st	23·890	14th	·550	33·3	55·3	+1·0	30·1	+0·9	42·7	+0·9	25·2	61·9	18th	19·2	1st	42·7
	Tehran (*b*) (*d*)	*4,002*	25·735			25·965	6th	25·395	14th	·570	38·3	56·1	+4·0	35·2	+2·3	45·6	+3·1	20·9	64·2	19th	29·8	21st	34·4
	Baghdad (*d*)	127	29·952	−·009	30·062	30·207	21st	29·471	14th	·736	51·5	68·8	+4·2	47·1†	+5·4†	57·9†	+4·8	21·7	76·4	25th	40·0	15th	36·4
	Beirut (*e*)	111			30·002						57·6	63·6		52·7		58·2		10·9	72·9	1st	47·1	19th & 20th.	25·8
	Aden	94	29·971	+·024	29·999	30·069	1st	29·869	17th	·200	75·4	80·4	−1·3	73·3	−0·1	76·8	−0·7	7·1	84·1	28th	70·4	23rd	13·7
	Zanzibar	72	29·908	0	29·906	29·996	17th	29·842	20th	·154	81·2	85·8	−1·2	78·9	−1·4	82·4	−1·3	6·9	90·7	6th & 20th.	71·6	26th	19·1

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*) 9 hrs. observations.
(*b*) Aneroid, uncorrected.
(*c*) ,, corrected.
(*d*) 7 hrs. observations.
(*e*) 8½ hrs. observations.

† Mean of 28 days.
,, ,, 25 ,,

B—*concluded.*

in India, etc., in February, 1912—concluded.

Wind direction. Number of winds from Calm.	N.	N.E.	E.	E.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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 29th Feb., 1912.	Normal rainfall for period, 1st Dec. to 29th Feb.	Departure from normal of period, 1st Dec., 1911 to 29th Feb., 1912.	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	56	57
																																Extra India.
11	5	12				1			N 31° E		6·2			53						6·1		11			14·46	7·60	+6·86	30·78	29·25	+1·53	3·54	Singapore.
	3	17			1			8	N 18° E		11·6			70								6			1·41	5·50	−4·09	5·03	16·67	−11·84	0·33	Penang.
2		14	3	1		7	2		N 57° E	N 7° E	5·1*	5·0	+0·1	29	+ 8	83	+ 2	·763	−·048	4·6	+1·5	0			0·06	2·12	−2·06	25·41	21·85	+3·56	0·05	Trincomale
17	2	9	1						N 41° E	N 58° E	2·8†	4·7	−1·9	36	−17	93	+21	·760†	−·028	6·7	+4·3	2			2·26	2·28	−0·02	10·69	11·22	−0·53	1·67	Colombo.
	17	10	1					1	N 16° E	N 20° E	3·6	3·8	−0·2	90						3·0		1			2·15	0·68	+1·47	9·29	5·64	+3·65	2·15	Minicoy.
	20	9							N 13° E		5·3			93		70	− 6	·779	−·052	3·0	−0·9	0			0	0·07	−0·07	1·36	1·51	−0·15	0	Amini Divi
20		4	3				1	1	N 53° E		3·9			17		74		·097		0·3		1			0·10			0·20			0·10	Gyantse.
13	2	4		1	3	3	1	2	N 68° W		7·7			5		89		·087		1·7		2			0·89			1·12			0·50	Pharijong.
25	1		3						N 72° E		1·2			10		87		·287		2·1		8			2·75	2·54	+0·21	3·44	4·43	−0·99	0·80	Gangtok.
16				9		4			S 18° E		6·9			31						2·5		0			0			0			0	Gartok.
29									§	N 29° W	0·1	1·1	−1·0			76¶		·118¶		3·8	−1·2	1			1·25	0·07	+1·18	1·70	0·36	+1·34	1·25	Kashgar.
	3	1	5	6	9	1	4		S 27° E	S 51° E				38	+29	68		·110				1			0·40	1·	−1·17	0·40‡	3·44	−3·04	0·40	Kabul.
25			1				1	2	N 45° W		1·5			3		87		·190		5·5	+0·9	2			0·47	0·95	−0·48	1·89	2·49	−0·60	0·15	Meshed.
3	8	5	4				2	7	N 2° E	N 10° E	6·2	8·9	−2·7	56	−12	81	+ 5	·488	−·009	1·4	−1·1	1			0·60	0·86	−0·26	2·69	2·92	−0·23	0·52	Jask.
12							3	14	N 52° W	S 82° W	4·7	3·4	+1·3	60	+19	73	+ 2	·518	+·007	2·9	+0·5	1			0·47	0·78	−0·31	3·07	2·48	+0·59	0·47	Muscat.
	5		1	2	1	2	7	11	N 57° W		5·1			55		81		·435		2·3		2			0·53	0·5	−0·06	1·47	1·77	−0·30	0·29	Bahrein.
7	4	6	1	3			1	7	N 7° E	N 48° E	7·0	5·8	+1·2	39	− 8	85	+ 9	·391	+·028	2·9		2			0·39	2·06	−1·67	5·64	7·99	−2·35	0·19	Bushire.
1	2			4	4	6	10	2	S 58° W		2·9			52		74		·331		3·3		2			0·27	1·05	−0·78	5·51	3·04	+2·47	0·16	Basrah.
												Observations not received.																				Kerman.
23						4	1	1	S 68° W	S 82° W.	2·3	3·4	−1·1	17	−25	66	−14	·125	−·054	2·1	−1·1	1			0·28	0·40	−0·12	3·51	1·86	+1·65	0·17	Ispahan.
5	6	14	2			1	1		N 34° E	N 22° E	2·8	2·6	+0·2	62	+32	68	+ 3	·157	−·002	2·7	−1·2	4			0·49	1·04	−0·55	2·67	4·01	−1·34	0·14	Tehran.
11	3	1		2	3	4	2	3	S 79° W	N 8° E	6·3	3·2	+3·1	17	− 6	72	+ 2	·277	+·016	2·4	−0·2	2			0·52	1·37	−0·85	3·01	3·58	−0·57	0·36	Baghdad.
14			1		9	2	2	1	S 17° W					35		76		·364		6·8		7			4·63			25·66			1·06	Beirut.
10	2	16	1						N 43° E	N 81° E	8·3	11·2	−2·9	60	−19	78	+ 2	·680	+·005	6·8	+0·4	1			0·26	0·31	−0·05	0·55	0·99	−0·44	0·14	Aden.
	12	10		3	1	1	1	1	N 24° E	N 27° E	5·2	4·9	+0·3	62	−10	82	+ 4	·865	+·001	7·7	+1·6	6			5·30	2·41	+2·89	11·52	11·3[illegible]	+0·20	2·09	Zanzibar.

* Uncorrected for scale error.

§ Indeterminate.

‡ Rainfall for December, 1911, wanting.

Table C.—Abstract of observations taken at 8 hrs. at 44 fourth and fifth class stations in India, etc., in February, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Eastern Bengal and Assam.																								
4	Bishnath	60·4	76·4	...	54·8†	...	65·6	...	21·6	84·0	18th	49·6	22nd	34·4	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	61·5	78·4	...	53·6	...	66·0	...	24·8	84·7	24th	45·4	8th	39·3	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	59·6	83·0	...	52·8	...	67·9	...	30·2	88·5	24th	46·9	13th & 14th.	41·6	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	55·2	73·1	...	52·7	...	62·9	...	20·4	82·1	24th	45·7	13th	36·4	...	...	...	...	...	...	...	...	...	...	...
	Dikom	56·7	74·3	...	52·9	...	63·6	...	21·4	83·8	24th	47·0	10th	36·8	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	60·5	61·0	...	55·4	...	58·2	...	5·6	67·3	24th	47·2	8th	20·1	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	...	...	...	...	...	...	Observations not received.					...	...	...	...	...	...	...	...		...	...	...	...
	Jorehat	60·0	73·9	...	55·2	...	64·5	...	18·7	81·1	24th	47·8	8th	33·3	...	...	...	...	...	...	...	...	...	...	...
	Messa	65·3	81·6	...	51·3	...	66·5	...	30·3	86·5	24th	42·0	8th	44·5	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	55·7	76·8	...	49·2	...	63·0	...	27·6	80·6	24th	42·0	7th	38·6	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	63·0	85·2	...	55·0	...	70·1	...	30·2	90·3	23rd	48·9	14th	41·4	...	...	...	...	...	...	...	...	...	...	...
5	Brahmanbaria	69·3	83·6	...	59·4	...	71·5	...	24·2	89·1	24th	52·1	13th	37·0	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	59·2	85·3	...	48·8	...	67·1	...	36·5	89·9	27th	43·0	4th	46·9	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	70·5	84·7	...	57·3	...	71·0	...	27·4	91·2	24th & 25th.	51·1	14th & 28th.	40·1	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	64·7	79·3	...	48·7	...	64·0	...	30·6	84·1	25th	42·4	6th	41·7	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	64·1	79·6	...	54·7	...	67·1	...	24·9	85·1	6th	49·0	7th	36·1	...	...	...	...	...	...	...	...	...	...	...
	Pabna	66·9	84·9	...	58·4	...	71·7	...	26·5	91·2	26th	53·3	7th	37·9	...	...	...	...	...	...	...	...	...	...	...
	IV.—United Provinces of Agra and Oudh.																								
10	Ballia	62·2	85·5‡	...	53·7	...	69·6	...	31·8	89·8	25th	49·0	6th	40·8	...	...	...	...	...	...	...	...	...	...	...
11	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	VIII.—Rajputana.																								
19	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XI.—Central Provinces.																								
24	Chhindwara	62·3	82·0	...	56·3	...	69·2	...	25·7	90·0	29th	49·1	20th	40·9	...	2	2	2	2	1	4	9	7	N 76° W	...
	XIV.—Madras.																								
33	Anantapur	76·5	94·8	...	69·6	...	82·2	...	25·2	99·2	28th	65·1	24th	34·1	...	...	...	...	...	...	...	...	...	...	...
34	Guntur	76·6*	91·2	...	70·0	...	80·6	...	21·2	97·0	21st	62·0	1st	35·0	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Mean of 28 days. † Mean of 23 days. ‡ Mean of 8 days.

C.

at 44 fourth and fifth class stations in India, etc., in February, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs., in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 29th February, 1912.	Normal rainfall for period, 1st Dec. to 29th February.	Departure from normal of period, 1st Dec., 1911 to 29th February, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Eastern Bengal and Assam.
...	...	...	...	...	89	...	·466	...	...	...	3	...	...	0·75	0·99	−0·24	1·06	2·35	−1·29	0·26	Bishnath.
...	...	...	...	...	80	...	·441	...	...	...	6	...	...	1·61	0·63	+0·98	1·95	1·48	+0·47	0·67	Borjuli.
...	...	...	...	...	89	...	·458	...	...	...	3	...	...	3·81	1·17	+2·64	3·81	3·03	+0·78	2·05	Chandkhira.
...	...	...	...	...	95	...	·414	...	...	...	11	...	...	5·42	2·36	+3·06	6·75	4·45	+2·30	1·20	Doom Dooma.
...	...	...	...	...	95	...	·437	...	...	...	10	...	...	5·14	1·92	+3·22	6·65	3·95	+2·70	1·31	Dikom.
...	...	...	...	...	88	...	·465	...	...	...	5	...	...	1·51	1·03	+0·48	1·88	2·49	−0·61	0·39	Golaghat.
...	...	...	...	...	...	...	Observations not received.				...	...	...	...	...	...	...	...	...	...	Hailakandi.
...	...	...	...	...	92	...	·475	...	...	...	8	...	...	2·24	0·96	+1·28	3·44	2·23	+1·21	0·78	Jorehat.
...	...	...	...	...	78	...	·484	...	...	...	4	...	...	1·68	0·68	+1·00	2·16	1·57	+0·59	0·67	Messa.
...	...	...	...	...	88	...	·393	...	...	...	4	...	...	1·31	0·80	+0·51	1·76	1·47	+0·29	0·78	Panerihat.
...	...	...	...	...	89	...	·516	...	...	...	4	...	...	2·78	1·37	+1·41	2·78	2·37	+0·41	1·17	Srimangal.
...	...	...	...	...	77	...	·549	...	...	...	2	...	...	2·01	0·76	+1·25	2·01	1·63	+0·38	1·21	Brahmanbaria.
...	...	...	...	...	90	...	·454	...	...	...	1	...	...	0·45	1·06	−0·61	0·49	1·57	−1·08	0·42	Dam Dim.
...	...	...	...	...	73	...	·538	...	...	...	2	...	...	0·64	0·88	−0·24	0·66	1·54	−0·88	0·46	Goalundo.
...	...	...	...	...	69	...	·431	...	...	...	2	...	...	0·30	0·91	−0·61	0·30	1·72	−1·42	0·18	Kalchini
...	...	...	...	...	75	...	·455	...	...	...	1	...	...	0·17	1·25	−1·08	0·22	2·37	−2·15	0·17	Nagrakata.
...	...	...	...	...	78	...	·516	...	...	...	0	...	...	0·04	0·95	−0·91	0·04	1·70	−1·66	0·04	Pabna.
																					IV.—United Provinces of Agra and Oudh.
...	...	...	...	...	72	...	·399	...	...	...	...	...	...	No rain gauge.			...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	1	1·50	−0·50	0·66	0·93	−0·27	2·79	2·59	+0·20	0·66	Meerut.
...	...	...	...	...	...	...	...	...	...	...	3	4·10	−1·10	0·72	2·33	−1·61	2·68	5·47	−2·79	0·41	Dehra Dun.
																					VIII.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	0	0·30	−0·30	0·02	0·18	−0·16	0·09	0·35	−0·26	0·02	Udaipur.
																					XI.—Central Provinces.
1·9	...	...	41	...	74	...	·412	...	2·8	...	5	...	...	2·45	...	...	3·65	...	...	1·02	Chhindwara.
																					XIV.—Madras.
...	...	...	...	...	67	...	·611	...	4·0	...	1	...	...	0·13	...	...	1·61	...	...	0·13	Anantapur.
...	...	...	...	...	89*	...	·809*	...	3·1	...	0	...	...	0	...	...	0	...	...	0	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	1	...	...	0·24	1·36	−1·12	16·93	12·07	+4·86	0·17	Car Nicobar.

Table

Aostract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Kashmir.																								
14	Jammu	61·4	72·2	...	55·1	...	63·6	...	17·1	79·3	23rd	48·3	4th & 5th.	31·0	...	6	17	3	...	3	...	...	...	N 45° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	8·6	27·4	...	0·8	...	14·1	...	26·6	43·9	24th	16·0	6th	59·9	...	3	20	5	1	...	...	...	...	N 51° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hill Stations, exclusive of Kashmir.																								
	Fanighatta	63·3	79·0	...	57·0	...	68·0	...	22·0	84·7	27th	52·0	4th	32·7	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	51·7	59·3	...	48·0	...	53·7	...	11·3	68·1	25th	41·9	16th	26·2	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	46·6	...	28·4	...	37·5	...	18·2	62·8	23rd	22·7	25th	40·1	6	1	1	11	6	...	...	4	...	S 76° E	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drosh	38·5	52·2	...	35·0	...	43·6	...	17·2	59·9	28th	27·3	1st & 2nd.	32·6	3	3	2	10	3	7	1	...	...	S 69° E	...
	Pishin	...	60·6	...	32·7	...	46·6	...	27·9	72·3	20th & 22nd.	27·0	1st, 2nd & 3rd.	45·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	66·5	...	52·1	...	59·3	...	14·4	73·4	19th	47·0	6th & 22nd.	26·4	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	27·9	46·9	...	24·9	...	35·9	...	22·0	57·5	22nd	20·2	8th	37·3	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	35·2	47·8	...	28·4	...	38·1	...	19·4	59·0	18th	13·8	1st	45·2	...	...	...	...	...	...	...	...	...	...	...
	Koweit	...	68·0	...	54·0	...	61·0	...	14·0	75·4	26th	49·7	9th	25·7	3	...	...	5	...	...	...	6	15	N 48° W	...
	Maidan	...	67·8	...	46·8	...	57·3	...	21·0	73·2	20th & 21st.	42·4	1st	30·8	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	69·9	...	53·0	...	61·5	...	16·9	75·4	26th	47·4	4th	28·0	...	1	...	...	5	2	3	...	14	N 72° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	68·7	...	41·4	...	55·1	...	27·3	87·2	21st	31·3	1st	55·9	3	9	4	1	3	1	...	2	6	N 4° W	...

C—*concluded.*

at 44 fourth and fifth class stations in India, etc., in February, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911 to 29th February, 1912.	Normal rainfall for period, 1st December to 29th February.	Departure from normal of period, 1st December, 1911 to 29th February, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Kashmir.
...	...	...	72	...	66	...	·356	...	1·1	...	1	...	...	0·24	...	...	6·50	...	...	0·24	Jammu.
...	...	...	...	...	...	...	...	...	...	...	9	...	...	7·38	9·48	—2·10	31·54	26·85	+4·69	2·20	Sonamarg.
...	...	...	86	...	20	...	·017	...	7·5	...	3	...	...	1·89‡	...	...	5·81	...	...	0·75	Kargil.
...	...	...	...	...	...	...	...	...	...	...	5	...	...	2·99	1·09	+1·90	19·69	3·53	+16·16	0·94	Astor.
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	59	...	·342	...	...	...	0	...	...	0·02	0·77	—0·75	0·09	1·56	—1·47	0·01	Panighatta.
...	...	...	...	...	73	...	·277	...	...	...	1	...	...	0·67	1·23	—0·56	0·84	2·34	—1·50	0·65	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	11	...	...	3·88	...	...	4·43	...	...	1·10	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	2·56	...	...	3·07	...	...	1·00	Lachung.
...	...	...	41	...	...	...	...	...	4·7	...	4	...	...	1·27	2·31	—1·04	3·02	5·09	—2·07	0·45	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.								Kailang.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	1·10	...	...	10·61	...	...	0·65	Bakloh.
...	...	...	48	...	72	...	·168	...	0·7	...	2	...	...	1·47	0·96	+0·51	2·99	2·82	+0·17	1·27	Drosh.
...	...	...	...	...	...	...	...	...	2·4	...	1	...	...	0·40	1·79	—1·39	6·41	4·62	+1·79	0·38	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	2·9	...	·0	...	...	0·20	...	...	5·15	...	...	0·07	Ahwaz.
...	...	...	...	...	78	...	·121	...	1·2	...	7	...	...	2·36‡	...	...	3·16	...	...	0·67	Chumbi.
...	...	...	...	...	78	...	·160	...	...	...	5	...	...	2·50	...	...	12·82	...	...	0·79	Kirmanshah.
...	...	...	55	...	...	...	...	...	2·5	...	1	...	...	0·22	...	...	3·39	...	...	0·12	Koweit.
...	...	...	...	...	...	...	...	...	...	...	2	...	...	1·31	...	...	14·13	...	...	0·56	Maidan.
...	...	...	31	...	...	...	...	...	...	...	1	...	...	0·15	...	...	4·89	...	...	0·15	Muhammerah. †
...	...	...	...	...	...	...	...	...	...	...	10	...	...	5·87	1·76	+4·11	9·96	12·05	—2·09	1·80	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.					...	...	...	Prison Island.
3·5§	...	...	45	...	...	...	...	...	...	...	1	...	...	0·16	...	...	0·16*	...	...	0·12	Seistan.

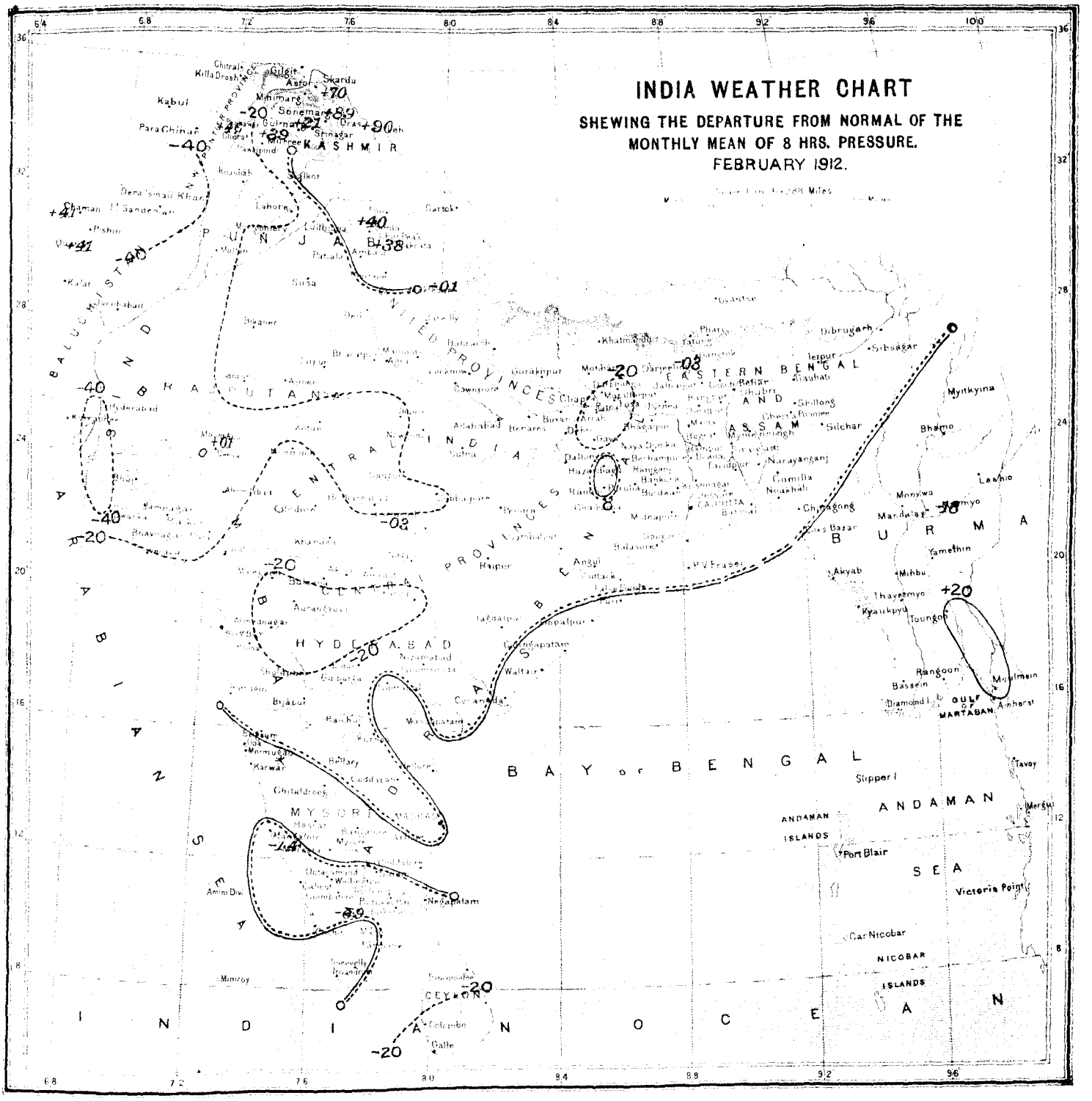
* Total rainfall since 1st February, 1912. † Wind variable 4. ‡ Snow water. § Mean of 28 days.

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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate up to December 1911 inclusive.



LITHO BY S.R MUNDLE.

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

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

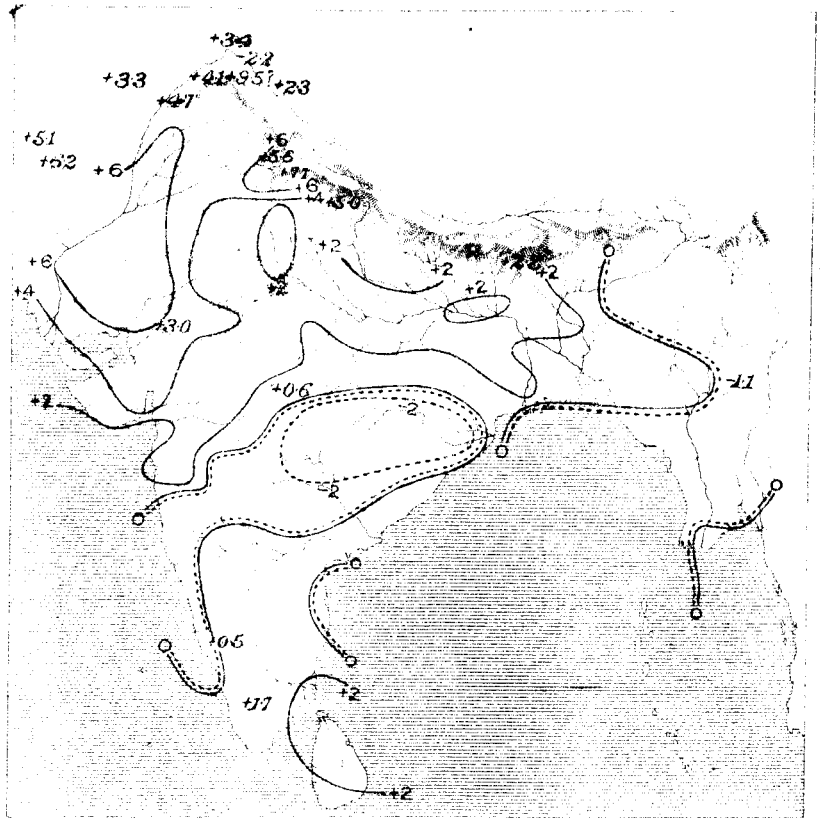
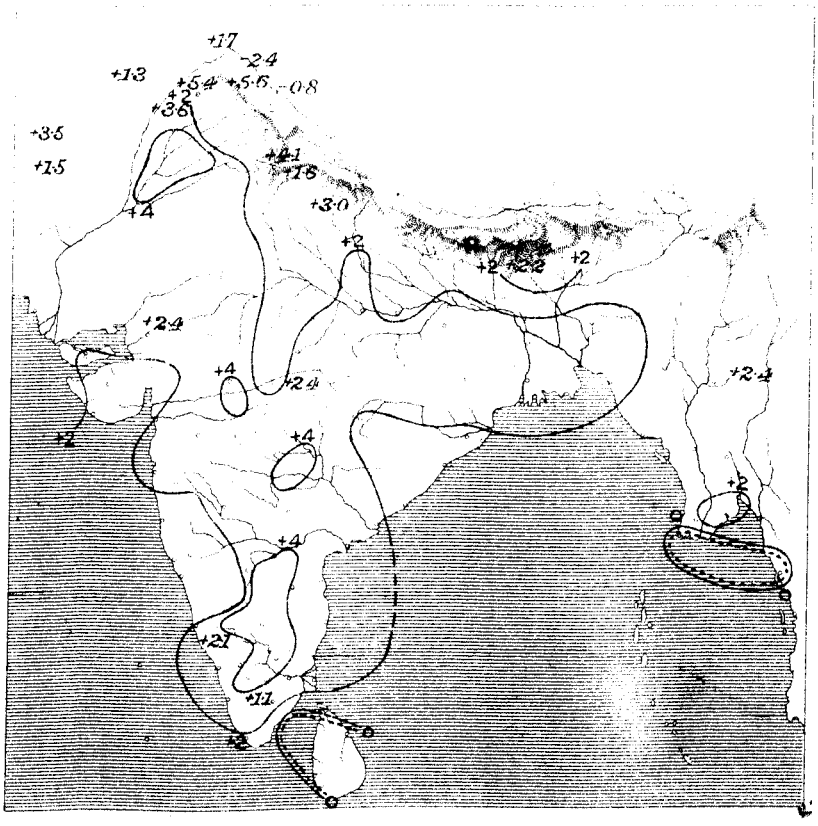


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S.& M.

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

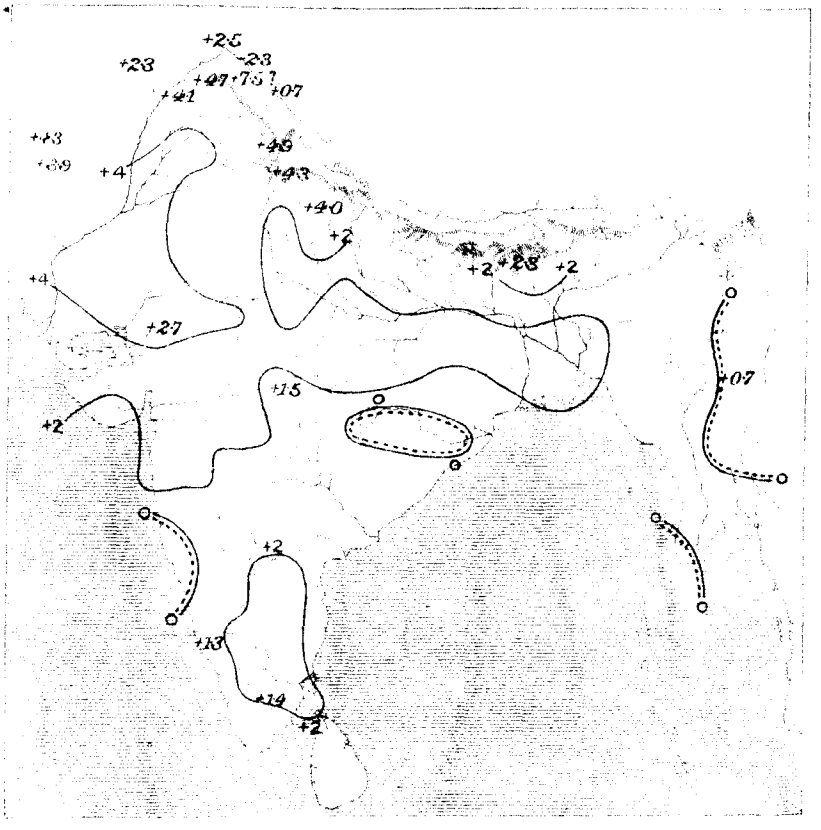
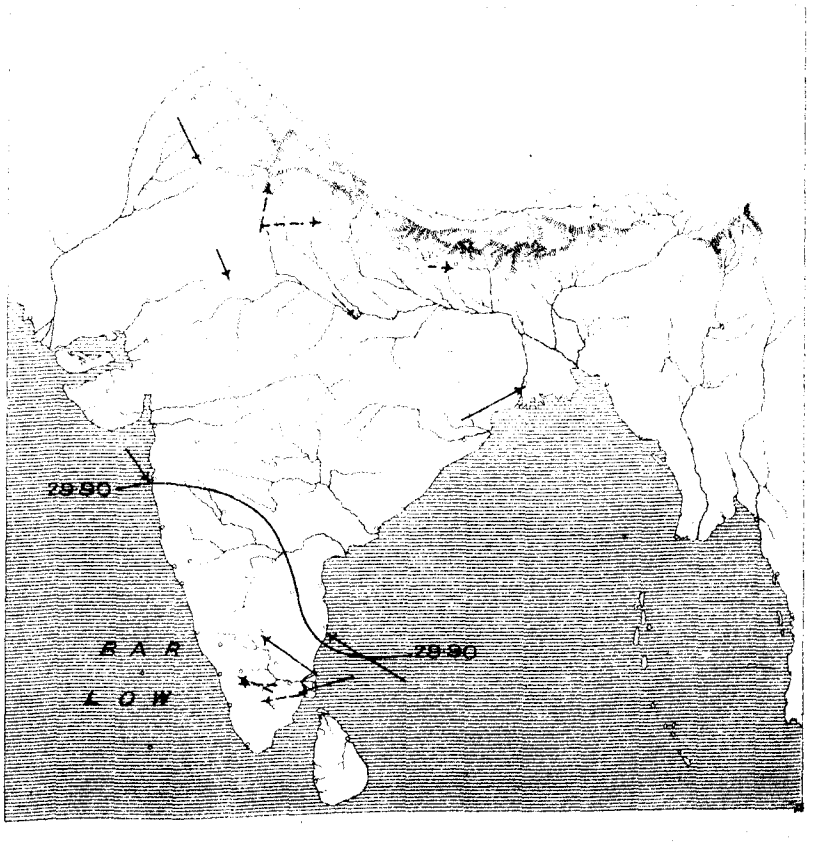


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S. & MUNDLE.

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

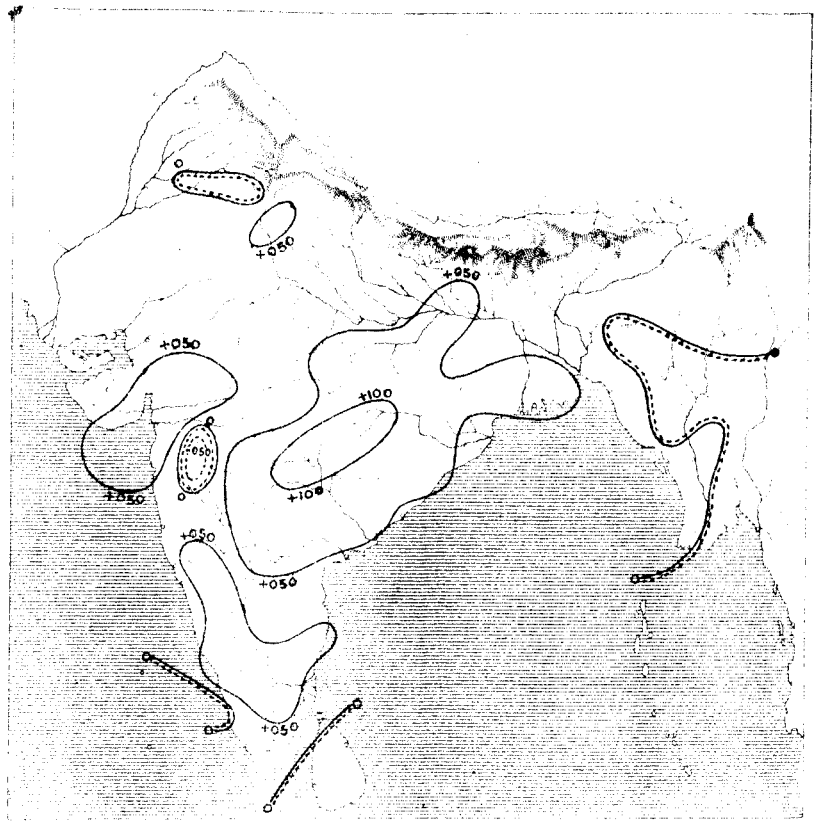


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.

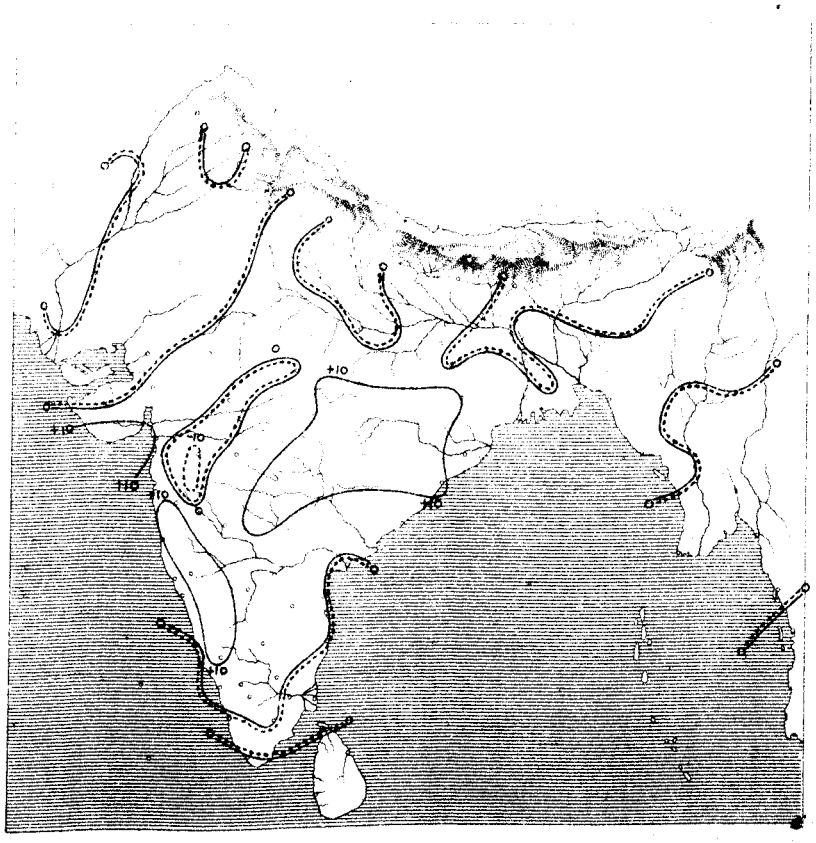


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 HRS.

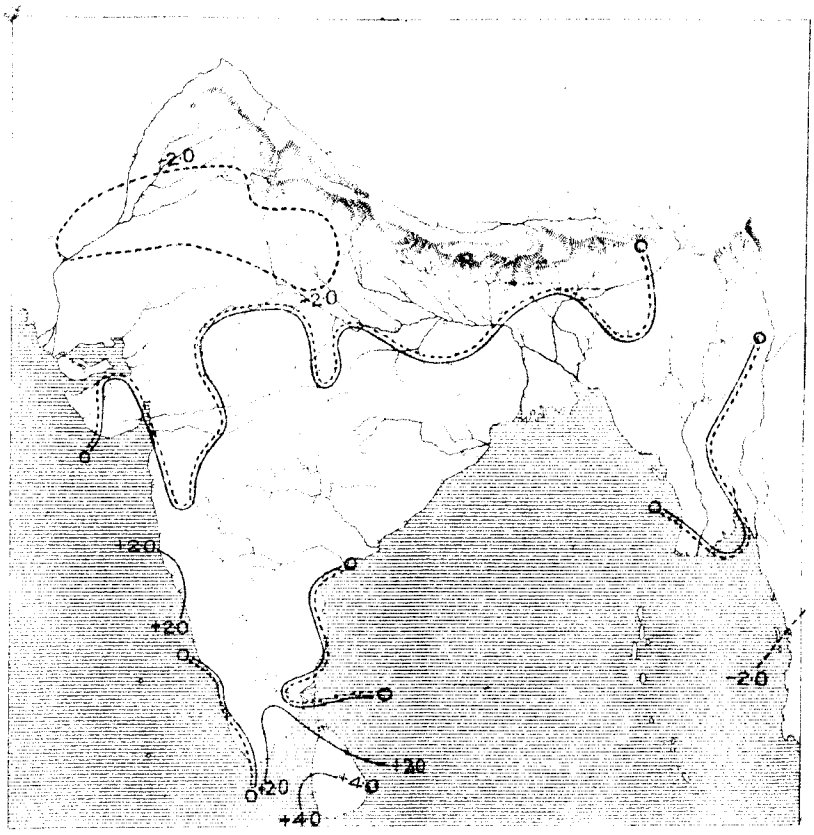
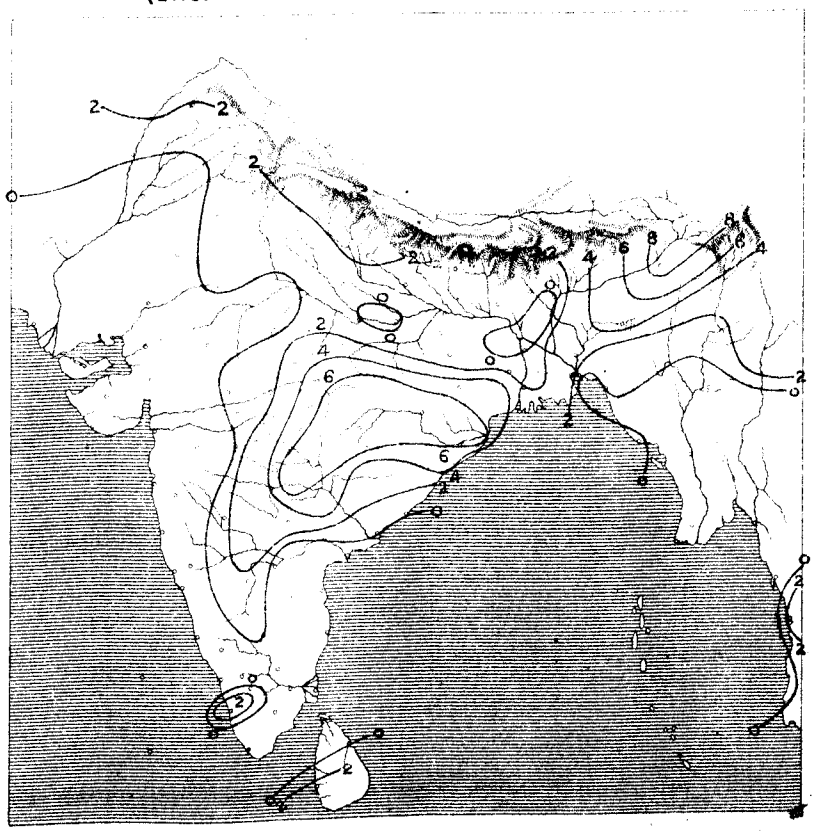
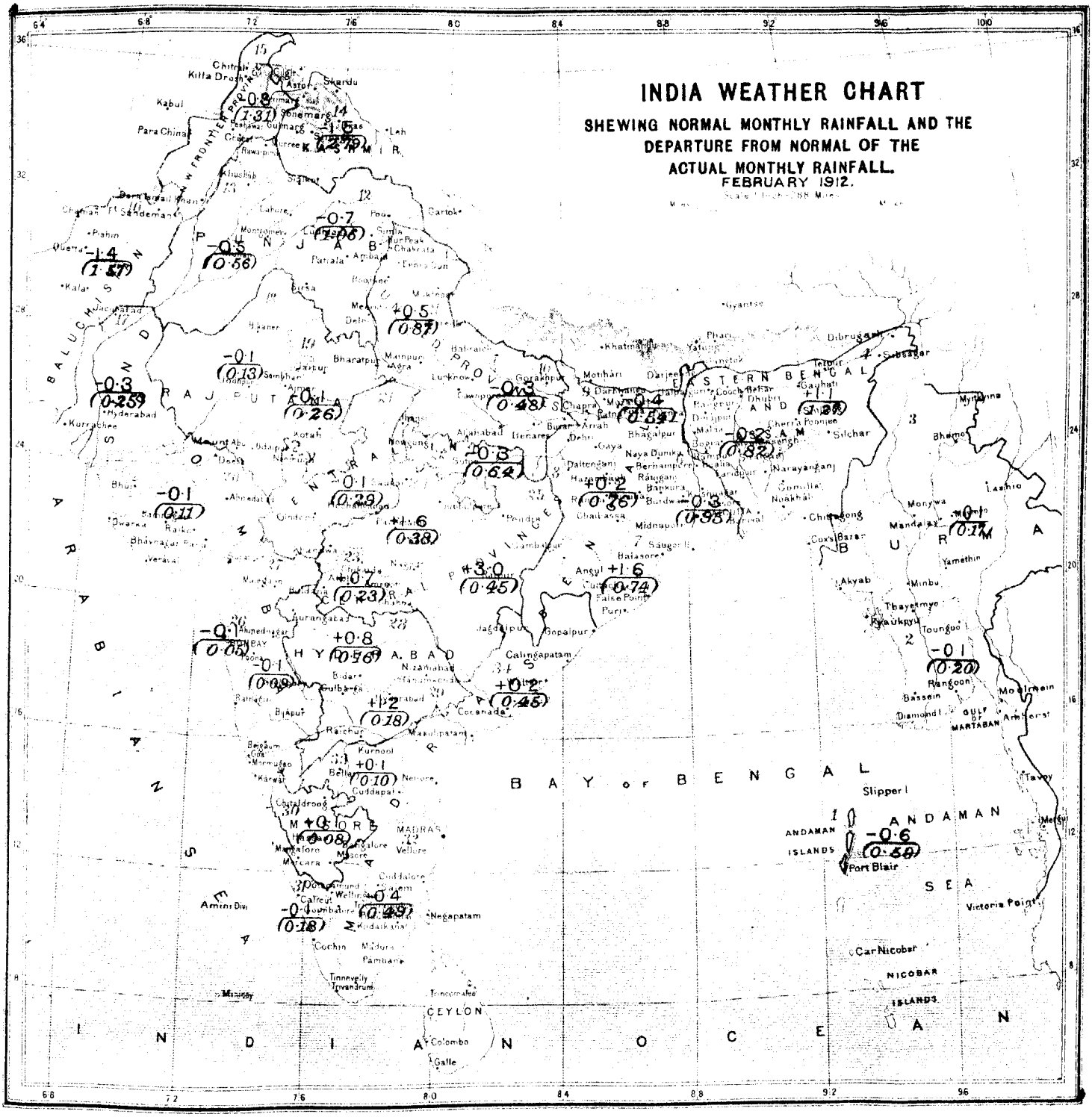


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)



LITHO. BY S.E.M.



LITHO. BY S. B. M.

The country is divided into 34 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 monthly 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. Eastern Bengal
6. Bengal
7. Orissa
8. Chota Nagpur
9. Bihar
10. United Provinces, East
11. Do., West
12. Punjab, East and North
13. Do., Southwest
14. Kashmir
15. Northwest Frontier Province
16. Baluchistan
17. Sind
18. Rajputana, West
19. Rajputana, East
20. Gujarat
21. Central India, West
22. Do., East
23. Berar
24. Central Provinces, West
25. Do., East
26. Konkan
27. Bombay, Deccan
28. Hyderabad, North
29. Do., South
30. Mysore
31. Malabar
32. Madras, Southeast
33. Madras, Deccan
34. Madras Coast, North

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METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW.

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, MARCH, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of March, 1912, is based on observations taken daily at 8 hrs. at 236 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 16 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. The first three weeks of March were characterized by an almost entire absence of rainfall. A few thundershowers occurred in the extreme north of India, the south of the Peninsula and northeast India, but elsewhere no appreciable rain fell. During the greater part of this period high pressures prevailed in the northwest and weather was unusually cool there and in the central parts of the country. At the beginning of the fourth week, however, a change occurred and between the 22nd and the 25th a feeble depression of the winter type travelled across northern India from Baluchistan to Assam, giving some precipitation in the western Himalayas and in northeast India. This disturbance was followed on the 25th by another and well defined winter depression, the only important one of the month. The latter moved eastwards and disappeared on the 30th at the head of the Bay of Bengal. It gave rise to widespread precipitation in northern India and was followed by strongly marked fall of temperature which affected the country as far east as Burma, and was shown to a very unusual extent in northeast India.

Although the precipitation of the month in northern India was almost entirely due to a single disturbance, it was much above the normal in certain districts ; but no rain whatever fell in many places, and the total amount for India as a whole was 2 per cent. in defect.

Over the greater part of the country the air was drier and cooler than usual and the amount of cloud was below normal.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar Observations.*—Prominence observations were made and photographs of the sun were obtained on all the days during the month.

Sunspots.—A moderate sized spot of regular outline appeared at the east limb on the 7th and was visible until the 19th when it went round the west limb. Its heliographic position was latitude —12° and longitude 300°. On several days the C line was observed disturbed near the spot and on the 12th when the spot was crossing the central meridian D3 also appeared dark in the spot region.

Prominences.—63 large, 4 eruptive and 3 metallic prominences were observed during the month. The highest was recorded on the 17th at latitude + 44° east and was 150″ high.

Prominences projected on the disc in Ha light were practically non-existent during the month.

Magnetic disturbances.—Only small disturbances were recorded during the month. They occurred on the 6th, 8th, 21st, and 29th.

Seismological records.

TABLE 1.

No.	Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End.	Maximum amplitude.	Duration.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	mm.	h. m.	
9	March 11	11 23·1	...	...	12 19·0	...	0 55·9	Widening of line.
10	" 12	16 01·8	...	...	16 12·0	...	0 10·2	Do.
11	" 17	?	7 31·2	7 31·5	7 39·7	0·8=0·4	...	Beginning hidden by hour signal at 7h. 30·0m.
12	" 24	12 28·3	...	12 30·6 12 32·0	12 47·4	0·8=0·3 0·7=0·3	0 19·1	

J. EVERSHED,

Director,

Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of March, 1912 the traces showed 17 calm days and 14 days of small disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 2nd, 13th, 18th, 20th and 25th.

The following table represents the magnetic character of each day during the month :—

TABLE 2.

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

C = calm; S = small; M = moderate; G = great; V. G. = very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and the declination for the month are as follow :—

Easterly declination . . .	0° 52′ 8″
Horizontal force	0·36878 C.G.S. unit.
Vertical force	0·16341 " "
Inclination	23° 53′·9
Inclination (observed) . . .	23° 52′·7
Horizontal force range . .	0·00038 C.G.S. unit.
Horizontal force summed range .	0·00244 " "
Declination range . . .	2′·7
Declination summed range . .	9′·2

(NOTE.—Summed range means sum without regard to signs of all ordinates of the diurnal inequality.)

Seismic disturbances.

TABLE 3.

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	h. m.	h. m.	h. m.	mm.	h. m.
March 24	12 29·0	12 35·5	12 47·8	0·3	0 18·8

All times given above denote G. M. T.
Sensibility to tilt 1 mm. = 0″·40.

N. A. F. MOOS,

Director,

Bombay and Alibag Observatories.

CALCUTTA OBSERVATORY.

5. *List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maximum. G. M. T.	End. G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
March 8	15 23·5	...	...	15 31·6	0 8·1	...	Thickening of line.
„ 24	12 25·9	12 33·5	12 36·1	13 0·0	0 34·1	1·25	
„ 27	10 38·2	...	...	10 53·5	0 15·3	...	Thickening of line.
„ 23	10 42·2	...	...	11 13·7	0 31·5	...	Do.

Sensibility 1 mm. = 0·38″ of tilt.

C. W. PEAKE,
Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. *List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 5.

Date.	Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of maximum amplitude.	End approximately.	Duration.	Maximum displacement of style.*	REMARKS.
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
20th A	21 1·1	?	?	21 1·4	21 2·1	0 1·0	Small	Local.
24th A	15 8·6	?	?	15 8·7	15 8·9	0 0·3	„	„
„ B	15 8·6	?	?	?	15 10·7	0 2·1	?	Local. Pendulum resting against stops at time of shock.

Tremors were recorded on the 11th by instrument B from 11h. 4m. to 11h. 40m.: maximum amplitude (small) at 11h. 16·8m.; and on the 24th by instrument A from 12h. 19m. to 13h. 2m.: maximum amplitude (small) at 12h. 46·0 m.

All times are given in G. M. T.
A = E—W component.
B = N—S component.
Magnification of each instrument was 15.
* Displacements less than 0·2 mm, are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity Rossi-Forel scale.	No. of shocks.
		h. m.	sec.		
Drosh	2nd	21 17	4	6	3
„	6th	22 30	3	6	2
Borjuli	9th	6 35	1	7	1
Salonah	9th	6 39	20	6	4
„	11th	2 50	5	6	1
Chitral	11th	7 20	5	6	2
Drosh	20th	21 55	5	6	3
Borjuli	22nd	16 0	1	6	1
Drosh	30th	20 15	3	6	2
Chitral	30th	21 18	35	6	
Drosh	30th	21 25	5	6	3
Shillong	31st	3 57	3	7	1
„	31st	4 20	3	7	1

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·49
Minimum	1·28
Mean	1·43
Number of days of observation . . .	8

W. A. HARWOOD,
Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. Pressure was above normal at both Zanzibar and Seychelles, the excess being well marked at the former station. Rainfall was in moderate excess at Zanzibar, but very largely below normal at Seychelles. Wind velocity and direction showed no marked unusual features.

TABLE 7.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.		+·035	+·017
Actual mean wind direction .		S 13° E	N 41° W
Normal mean wind direction .		S 27° E	N 17° W
Actual mean wind velocity (miles per diem).		69	129
Normal mean wind velocity (miles per diem).		69	118
Rainfall departure from normal .		+1·33	−6·72

Depressions and cyclonic storms.

9. Cold weather disturbances enter India for the most part during January and February, and only in comparatively small numbers in March. During the first three weeks of the month under review weather was slightly unsettled in northern India from time to time, and between the 22nd and the 25th, a shallow disturbance of the winter type moved eastwards from Baluchistan to Assam. The disturbance caused precipitation only in the extreme north and the north-east, but it was followed by a second and much more rigorous disturbance. The latter entered India on the 25th and gave widespread precipitation in northeast Baluchistan, Kashmir, the Punjab, the United Provinces and northeast India before disappearing at the head of the Bay of Bengal on the 30th. The rainfall in northeast India was prolonged and in places heavy, and squally weather prevailed for some days at the head of the Bay.

Pressure.

10. In the plains pressure was almost everywhere higher than usual, and in the Himalayas lower than usual; but the departures from normal were not in general very marked.

TABLE 8.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
	"
Burma	+·010
Eastern Bengal and Assam	+·005
Bengal	+·002
United Provinces	+·008
Punjab	+·004
North-West Frontier Province	−·012
Sind	+·021
Rajputana	+·003
Bombay	+·010
Central India	+·007
Central Provinces	+·001
Hyderabad	+·002
Mysore	+·021
Madras	+·007

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B−A.
	"		"	"
Quetta . . .	+·027	Jacobabad . .	+·004	−·023
Leh	−·033	Lahore . . .	−·003	+·030
Murree . . .	−·013	Peshawar . .	−·009	+·004
Simla . . .	−·007	Ludhiana . .	+·008	+·015
Chakrata . . .	−·006	Roorkee . .	+·010	+·016
Darjiling . .	−·027	Dhubri . . .	+·017	+·044
Mount Abu . .	+·012	Deesa . . .	+·010	−·002
Pachmarhi . .	−·004	Khandwa . .	+·008	+·012
Kodaikanal . .	+·006	Madura . . .	+·012	+·006

Temperature.

11. In spite of the low maximum temperatures recorded during the passage of the cold wave which followed the disturbances of the last week, the mean maximum of northern India was nowhere far removed from the normal. The minimum however was below normal over practically the whole of northern and central India, the departure being more than 3° in Bihar, the United Provinces and Rajputana West.

Both night and day temperatures were higher than usual in the southern half of the Peninsula.

A spell of abnormally cool weather was experienced over the greater part of northern India from the 28th to 31st; the lowness of temperature was, as is ordinarily the case during periods of precipitation, greater in the day than in the night temperature, the maxima recorded on the afternoon of the 30th being as much as 20° to 26° below the normal at several stations in northeast India.

TABLE 10.

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	87·3	75·8	81·6	11·5	16·9	—2·6	—1·6	—1·0
2. Lower Burma	91·9	72·3	82·1	19·5	30·4	—0·3	+0·9	—1·2
3. Upper Burma	95·5	66·5	81·0	29·0	41·4	—0·2	+1·3	—1·5
4. Assam	82·4	59·9	71·1	22·5	34·5	—0·7	—1·6	+0·9
5. Eastern Bengal	88·5	63·7	76·1	24·8	39·4	+0·4	—1·3	+1·7
6. Bengal	92·9	68·1	80·5	24·8	43·4	+0·2	—0·3	+0·5
7. Orissa	93·2	71·4	82·3	21·8	38·1	+0·1	+0·6	—0·5
8. Chota Nagpur	92·1	62·2	77·2	29·9	48·7	+0·7	—0·7	+1·4
9. Bihar	89·9	60·1	75·0	29·9	45·9	—0·5	—3·3	+2·8
10. United Provinces, East	90·0	57·8	73·9	32·2	52·4	—1·3	—3·2	+1·9
11. Do. do., West	88·0	55·9	72·5	31·1	51·3	—1·3	—3·6	+2·3
12. Punjab, East and North	83·3	53·6	68·5	29·7	50·9	—0·7	—2·5	+1·8
13. Do., South-west	85·1	55·4	70·3	29·7	53·2	+0·8	—1·6	+2·4
14. Kashmir	57·0	34·6	45·8	22·4	41·1	+0·4	—1·5	+1·9
15. North-West Frontier Province	79·9	51·1	65·5	28·9	53·1	+0·1	—2·7	+2·8
16. Baluchistan	74·5	48·5	61·5	26·0	51·7	0	—2·5	+2·5
17. Sind	89·7	62·2	75·9	27·5	48·3	+1·0	—1·8	+2·8
18. Rajputana, West	89·5	60·1	74·8	29·3	52·6	—0·6	—3·9	+3·3
19. Do., East	89·3	60·4	74·9	28·9	50·8	—0·7	—2·7	+2·0
20. Gujarat	92·3	63·7	78·0	28·6	46·2	+0·5	—1·4	+1·9
21. Central India, West	91·7	59·1	75·4	32·5	56·7	—0·3	—1·8	+1·5
22. Do., East	90·3	58·1	74·1	32·1	54·3	—1·6	—2·9	+1·3
23. Berar	98·2	68·4	83·3	29·8	49·1	+1·4	0	+1·4
24. Central Provinces, West	94·6	62·7	78·6	31·9	52·6	—0·4	—1·3	+0·9
25. Do., East	94·9	65·7	80·3	29·1	45·7	—1·0	—1·0	0
26. Konkan	85·9	72·7	79·3	13·2	21·8	—1·5	—0·8	—0·7

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
27. Bombay Deccan	97·9	64·6	81·3	33·3	49·3	+1·3	—1·1	+2·4
28. Hyderabad, North	99·3	70·1	84·7	29·1	41·9	+2·5	—0·4	+2·9
29. Do., South	99·8	72·1	86·0	27·7	40·6	+1·5	+0·5	+1·0
30. Mysore	93·7	67·1	80·4	26·6	36·2	+1·3	+1·0	+0·3
31. Malabar	89·6	77·2	83·4	12·4	18·9	—0·2	+1·5	—1·7
32. Madras, South-east	95·7	74·8	85·3	20·9	30·8	+1·8	+2·0	—0·2
33. Do., Deccan	102·8	74·3	88·6	28·5	41·1	+1·9	+1·5	+0·4
34. Do. Coast, North	91·9	74·3	83·1	17·6	28·3	+0·9	+1·1	—0·2

TABLE 11.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	—0·3	+1·0	+0·4
Eastern Bengal and Assam	+0·1	—1·4	—0·7
Bengal	+0·1	—1·1	—0·5
United Provinces	—1·3	—3·4	—2·4
Punjab	—0·3	—2·3	—1·3
North-West Frontier Province	+0·1	—2·7	—1·3
Sind	+1·0	—1·8	—0·4

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Rajputana	—0·7	—3·3	—2·0
Bombay	+0·3	—1·2	—0·4
Central India	—0·9	—2·3	—1·7
Central Provinces	—0·2	—1·0	—0·6
Hyderabad	+1·7	+0·3	+1·0
Mysore	+1·3	+1·0	+1·1
Madras	+1·2	+1·7	+1·4

Winds.

12. Wind direction from day to day was unusually variable in Burma and unusually steady in Mysore. Many marked departures from the normal direction of the month occurred, but they were only local. The velocity was noticeably low in Eastern Bengal and Assam and Sind, and high in the Central Provinces.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	—0·2	—12
Eastern Bengal and Assam	—1·0	—4
Bengal	+0·1	—6
United Provinces	—0·4	+1

Division.	Departure from normal	
	Houlry wind velocity.	Wind steadiness.
Punjab	+0·1	+2
North-West Frontier Province	—0·5	—5
Sind	—0·8	+6
Rajputana	+0·3	+4
Bombay	—0·1	+5
Central India	—0·3	—2
Central Provinces	+0·6	+1
Hyderabad	—0·3	+9
Mysore	—0·1	+14
Madras	+0·3	+5

Humidity and cloud.

13. The air was unusually dry almost everywhere, and especially so in north-west India, the United Provinces and the Central Provinces. In these areas and also in Hyderabad the amount of cloud was in marked defect.

TABLE 13.

DIVISION.	HYGROMETRY, 8 HRS.				CLOUD.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	75	+ 1	·656	—·002	3·1	+0·9
Eastern Bengal and Assam	77	− 3	·556	—·047	3·0	—0·4
Bengal	59	− 3	·477	—·026	1·7	—0·4
United Provinces . .	46	− 7	·305	—·069	1·2	−0·7
Punjab	49	—12	·278	—·080	2·3	—0·6
North-West Frontier Province.	61	− 7	·302	—·059	3·0	—1·0
Sind	48	− 8	·373	—·045	1·6	—0·9
Rajputana . . .	29	—11	·206	—·085	1·7	−0·9
Bombay . . .	54	− 3	·468	—·041	1·1	—0·4
Central India . . .	39	− 3	·295	—·025	1·1	—0·4
Central Provinces . .	32	—11	·280	—·087	0·5	—1·3
Hyderabad . . .	43	− 5	·430	+·006	0·7	—0·8
Mysore	62	− 1	·532	—·008	1·3	—0·2
Madras	73	− 1	·772	+·016	2·4	0

Rainfall.

14. Although weather was more or less disturbed in north-west India during the greater part of the month, thunderstorms were comparatively few and precipitation, except in Kashmir, was very deficient. The deficiency extended over the United Provinces, the central parts of the country, the Peninsula and Burma where also the usual hot weather thunderstorms were much delayed. In north-east India the two cold weather disturbances during the last week gave prolonged and in parts heavy rain which served to bring the month's rainfall somewhat above normal there, but for the whole of India the total was 2 per cent. in defect.

TABLE 14.

SUB-DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	0	0·5	0	0·48	—0·48	—100
2. Lower Burma	0·3	0·4	0·10	0·26	−0·16	— 62
3. Upper Burma	0·7	0·7	0·19	0·26	—0·07	— 27
4. Assam	5·9	6·4	4·81	3·86	+0·95	+ 25
5. Eastern Bengal	4·4	2·5	3·18	1·73	+1·45	+ 84
6. Bengal	4·3	1·9	2·93	1·12	+1·81	+162
7. Orissa	1·2	1·9	1·09	1·09	0	
8. Chota Nagpur	1·7	1·5	0·82	0·71	+ 0·11	+ 15
9. Bihar	1·8	0·9	0·98	0·39	+ 0·59	+151
10. United Provinces, East	0·7	0·7	0·23	0·31	—0·08	— 26
11. Do., West	1·2	1·1	0·48	0·48	0	0

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
12. Punjab, East and North	1·2	1·5	0·43	0·72	—0·29	— 40
13. Do., South-west	0·4	1·3	0·16	0·50	—0·34	— 68
14. Kashmir	4·8	4·8	2·72	2·46	+0·26	+ 11
15. North-West Frontier Province	0·9	3·5	0·26	1·85	—1·59	— 86
16. Baluchistan	0·5	3·1	0·15	1·12	—0·97	— 87
17. Sind	0	0·4	0	0·16	—0·16	—100
18. Rajputana, West	0	0·2	0	0·07	—0·07	—100
19. Do., East	0·3	0·5	0·11	0·19	—0·08	— 42
20. Gujarat	0	0·1	0	0·02	—0·02	—100
21. Central India, West	0	0·2	0·02	0·08	—0·06	— 75
22. Do., East	0·1	0·7	0·05	0·31	—0·26	— 84
23. Berar	0	0·7	0·01	0·32	—0·31	— 97
24. Central Provinces, West	0	0·8	0	0·36	—0·36	—100
25. Do., East	0	1·3	0	0·64	—0·64	—100
26. Konkan	0	0·1	0	0·06	—0·06	—100
27. Bombay Deccan	0	0·4	0	0·19	—0·19	—100
28. Hyderabad, North	0	0·8	0	0·34	—0·34	—100
29. Do., South	0	0·8	0	0·49	—0·49	—100
30. Mysore	0·2	0·6	0·12	0·31	—0·19	— 61
31. Malabar	0·2	0·9	0·06	0·56	—0·50	— 89
32. Madras, South-east	0·2	0·8	0·10	0·52	—0·42	— 81
33. Do. Deccan	0	0·1	0·02	0·16	—0·14	— 87
34. Do. Coast, North	0·3	0·9	0·16	0·52	—0·36	— 69

TABLE 15.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	0·15	0·26	—0·11	— 42
Eastern Bengal and Assam	4·02	2·78	+1·24	+ 45
Bengal	1·65	0·77	+0·88	+ 114
United Provinces	0·35	0·39	—0·04	— 10
Punjab	0·38	0·67	—0·29	— 43
North-West Frontier Province	0·26	1·85	—1·59	— 86
Sind	0	0·16	—0·16	— 100

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Rajputana	0·08	0·15	—0·07	— 47
Bombay	0	0·11	—0·11	— 100
Central India	0·03	0·16	—0·13	— 81
Central Provinces	0·01	0·41	—0·40	— 98
Hyderabad	0	0·42	—0·42	— 100
Mysore	0·12	0·31	—0·19	— 61
Madras	0·10	0·48	—0·38	— 79
Mean of India	0·54	0·55	—0·01	— 2

Snowfall.

I.—AFGHANISTAN.

15. Snow fell on the mountains on the 5th and 10th. At the end of the month the accumulation on Hazara Jat was 2½ feet and on Koh Baba 3 feet.

II.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Wano.*—No snowfall was reported.

(*b*) *Kurram.*—Snow fell in the hills on the 10th, 11th, 12th, 16th and 23rd, and on the 12th a light fall occurred in Parachinar. No accurate information regarding the depth of snow accumulation was available.

(*c*) *Kohat.*—No snowfall was reported.

(*d*) *Chitral.*—Light snowfall occurred on four days in the surrounding hills, but none in the station. The total fall in the hills was estimated at about 1 foot and was reported to be generally much less than usual.

(*e*) *Drosh.*—No snow fell in Drosh and only a few inches in the surrounding hills. On the Lawari and neighbouring passes about 3 feet of snow remained unmelted.

(*f*) *Hazara.*—Snowfall was less than usual except in Kagan more especially during the latter half of the month and the snow-line did not descend below 4,000 feet. The following table gives the information received.

TABLE 16.

Place.	Depth of snow-fall.		Number of days on which snow fell.
	Ft.	In.	
Narang (Kagan Range)	4	3	8
Paluderan („)	8	6?	9
Kagan („)	2	5	8
Sundigalli (Siran Range)	4	2	5
Dungagali Range	1	0	6
Baronidigalli (Thandiani Range)	2	2	4

III.—KASHMIR.

Snow fell locally from time to time during the month, but no information was received relative to the accumulation of snow at the end of the month. The total fall was probably much less than usual.

IV.—PUNJAB.

(*a*) *Murree.*—No snow fell at Murree or on the hills adjacent to Kahuta during the month.

(*b*) *Kilba* (Simla Hills).—Nine light falls of snow occurred, but only on the 2nd and 6th of the month did they descend as low as 5,800 feet.

V.—UNITED PROVINCES.

(*a*) *Garhwal.*—Snow fell on the 26th, 27th and 28th, the snow-line descending to 11,000 feet. Weather was generally dry.

(*b*) *Almora.*—The following table shows the total snow-fall of the month according to reports received from the Patwaris :—

TABLE 17.

Place.	Amount of snow-fall.	
	feet.	inches.
Malla Darma	5	0
Malla Johar	4	0
Malla Danpur	3	10
Chaudas	11	11
Byans	10	0

It was considered to be much less than that of March last year.

The snow accumulations at the end of the month were as follows :—

TABLE 18.

Place.	DEPTH OF ACCUMULATION.		
	Actual.		Normal.
	Ft.	In.	Ft.
Nuwe pass	76	6	32
Binkaru pass	34	4	27½
Lipulekh „	33	10	22½
Lampia „	46	0	22½
Untadhura pass	21	0	16½
Ralamdhura „	16	0	13

SUMMARY.

16. According to the information received, snowfall appears to have been in general decidedly less than usual.

W. A. H.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 16 stations in India, etc., in March, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs. at 16

Number of subdivision.	Station.	Elevation 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 gravity, 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 previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
6	Calcutta	21	29·924	29·792	·132	29·852	−·004	29·818	91·8	70·4	21·4	98·9	60·2	38·7	82·9	89·3	80·2	+0·9	66·4	72·3	71·9	70·2
	IV.—United Provinces of Agra and Oudh.																					
10	Allahabad	309	·639	·511	·128	·566	+·018	·828	91·3	59·1	32·2	103·9	50·0	53·9	81·6	90·4	74·4	−2·4	51·1	60·1	61·9	57·7
	V.—Punjab.																					
12	Lahore	702	·220	·127	·093	·167	0	·848	84·1	53·8	30·3	98·0	45·3	50·7	72·8	82·2	68·3	−0·7	49·1	58·8	61·8	56·6
	VIII.—Rajputana.																					
19	Jaipur	1,431	28·517	28·408	·109	28·454	+·001	·834	89·1	57·6	31·5	100·2	46·5	53·7	80·2	86·9	72·9	−2·0	47·6	58·3	59·8	55·2
	IX.—Bombay.																					
26	Bombay	37	29·952	29·836	·116	29·890	+·013	·867	87·1	73·2	13·9	92·3	69·3	23·0	80·5	83·2	78·5	+0·5	68·2	72·3	73·7	71·4
	XIII.—Mysore.																					
30	Bangalore	3,021	27·016	26·881	·135	26·949	+·017	·734	92·1	66·5	25·6	97·3	60·5	36·8	81·7	90·5	76·3	+1·6	60·2	65·6	65·7	61·2
	XIV.—Madras.																					
32	Pudukkottai	318	29·665	29·506	·159	29·585		·830	97·9	75·4	22·5	101·0	71·4	29·6	88·0	94·9	86·7		73·3	77·5	78·1	76·3
	Madras	22	·964	·834	·130	·899	−·006	·852	91·7	74·3	17·4	94·9	68·3	26·6	87·5	87·2	81·4	+1·9	73·5	77·8	78·[illegible]	76·5
	Hill Stations, excluding Kashmir and Baluchistan.																					
	Simla	7,232	23·114	23·074	·040	23·087	−·011	23·049	56·1	42·5	13·6	66·6	33·1	33·5	50·6	52·5	49·0	−2·5	34·3	40·2	42·2	38·9
	Saraln		·168	·114	·054	·131		·093	55·2	34·3	20·9	67·5	27·9	39·6	49·3	52·0	45·1			40·1	42·2	
	Kalabagh							Observations not received.														
	Mukteswar	7,592	22·852	22·792	·059	22·816		22·773	60·7	40·8	19·9	71·6	29·4	42·2	52·6	56·2	51·1		32·5	41·6	44·3	39·5
	Katmandu	4,388	25·703	25·592	·111	25·644	+·038†	25·599	78·5	42·8	35·7	85·0	36·2	48·8	65·6	74·2	60·9	+0·1†	40·0	53·2§	54·2§	49·1
	Ootacamund	7,327	23·132	23·057	·075	23·089		23·025	72·0	48·7	23·3	76·1	45·1	31·0	66·6	67·3	60·7		45·5	52·9	55·2	51·2
	Kodaikanal	7,688	22·904	22·840	·064	22·872		22·807	69·7	52·2	17·5	75·8	45·3	30·5	64·4	63·7	60·9		44·9	52·9	56·4	51·4
	Dodabetta	8,539†	·152	·087	·065	·114		·056	64·7	49·1	15·6	68·7	43·2	25·5	60·7	61·2	56·9		42·9	49·8	52·4	48·4
	Extra India.																					
	Diego Garcia							Observations not received.														
	Seychelles	15	29·965	29·868	·097	29·922	+·017†	29·859	85·3	79·8	5·5	86·5	76·4	10·1	83·3	84·3	81·5	+2·6†	72·9	77·0	77·5	75·8
	Mauritius	181						Observations not received.														

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.

§ Mean of 30 days.

A.

tations in India, etc., in March, 1912.

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.	Number of subdivision.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·604	·662	·558	·648	+·005	80	59	42	65	−2	1·9	2·5	2·2	0	1	4	2	3	5	8	18	5	16	S 71° W	S 60° W	35	44	87*	118	4·09	1·95	Calcutta	6
																															IV.—United Provinces of Agra and Oudh.	
·274	·240	·177	·241	−·117	55	23	12	33	−9	1·2	1·2	1·2	−1·3	4	2	3	3	3	3	5	22	17	N 76° W	N 63° W	50	41	61	122	0·21	0·19	Allahabad	10
																															V.—Punjab.	
·294	·315	·284	·309	−·051	70	40	26	47	−7	2·0	3·4	2·7	−0·8	6	13	4	2	7	1	1	11	17	N 34° W	N 12° W	40	31	47	70	0·37	0·20	Lahore	12
																															VIII.—Rajputana.	
·212	·232	·180	·203	−·096	43	21	14	29	−10	1·7	3·3	2·5	−0·6		8	3	2	4	2	6	14	23	N 58° W	N 46° W	52	30	89*	108	0·66	0·66	Jaipur	19
																															IX.—Bombay.	
·624	·681	·705	·697	−·040	76	65	62	72	−3	1·5	0·8	1·1	−0·2		1	3	7	4	4	4	17	22	N 69° W	N 33° W	40	46	155*	262	0	0	Bombay	26
																															XIII.—Mysore.	
·450	·479	·346	·434	−·013	70	45	21	48	−2	1·2	1·4	1·3		1		3	15	14	8	13	6	2	S 24° E	S 36° E	42	46	111	118	0·56	0·56	Bangalore	30
																															XIV.—Madras.	
·793	·807	·745	·782		90	61	49	66		2·4	2·3	2·3		7		6	2	20	14	11	2		S 19° E		53		120		0·03	0·03	Pudukkottai	32
·814	·821	·841	·819	+·047	96	63	65	79	+1	1·8	1·0	1·4	−0·3				4	31	15	12			S 21° E	S 41° E	79	81	117*	149	0	0	Madras	
																															Hill Stations, excluding Kashmir and Baluchistan.	
·117	·142	·161	·165	−·069	45	40	43	44	−5	3·9	5·9	4·9	−0·1																1·87	1·08	Simla.	
	·157	·174				46	47			3·8	6·9	5·3		16	5	14	5	1	9	7	4	1	N 81° E		10		31		3·92	1·13	Sarain.	
									Observations not received.																						Kalabagh.	
·102	·151	·170	·139		43	40	40	42		3·9	5·8	4·9		14	1	2	8	1	3	5	27	1	S 73° W		35		126		1·54	0·78	Mukteswar.	
·217	·268§	·198§	·226	−·075	79	43§	26§	50	−11	2·3	3·9	3·1	−0·2	58							4		W	N 82° W	6	47	30*	32	0·79	0·31	Katmandu.	
·274	·260	·310	·282		80	41	48	57		3·6	5·1	4·3		5	1	11	27	11	4		1	2	S 88° E		61		56		1·13	0·82	Ootacamund.	
·234	·290	·383	·3.2		60	50	66	58		3·3	6·2	4·7			10	10	16	21	3			1	S 1° E		60		198*		1·14	0·48	Kodaikanal.‡	
·215	·247	·303	·255		61	47	57	55		4·1	5·6	4·9			6	25	18	11	2				N 72° E		74		253		0·65	0·28	Dodabetta.	
																															Extra India.	
									Observations not received.																						Diego Garcia.	
·720	·847	·852	·833	−·028	71	74	72	77	−6	4·7	5·7	5·2	−1·5†	4	8	2					6	42	N 41° W	N 17° W	84	39	129*	118	3·19	0·55	Seychelles.	
									Observations not received.																						Mauritius.	

* Uncorrected for scale error. † Departure from old normal. ‡ Wind variable I.

Table B.—Abstract of observations taken at 8 hrs. at 236 stations in India, etc., in March, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at p. 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

	Pressure departure from normal.	Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
		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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·010	93·4	−0·3	70·0	+1·0	81·7	+0·4	23·4	35·0	−0·2	−12	75	+ 1	·656	−·002	3·1	+0·9	0·15	0·26	−0·11
Eastern Bengal and Assam	+·005	86·8	+0·1	62·6	−1·4	74·7	−0·7	24·2	38·1	−1·0	− 4	77	− 3	·556	−·047	3·0	−0·4	4·02	2·78	+1·24
Bengal	+·002	91·6	+0·1	64·5	−1·1	78·1	−0·5	27·1	44·3	+0·1	− 6	59	− 3	·477	−·026	1·7	−0·4	1·65	0·77	+0·88
United Provinces of Agra and Oudh.	+·008	89·1	−1·3	57·4	−3·4	73·2	−2·4	31·7	51·9	−0·4	+ 1	46	− 7	·305	−·069	1·2	−0·7	0·35	0·39	−0·04
Punjab	+·004	83·8	−0·3	54·1	−2·3	68·9	−1·3	29·7	51·5	+0·1	+ 2	49	−12	·278	−·080	2·3	−0·6	0·38	0·67	−0·29
North-West Frontier Province	−·012	79·9	+0·1	51·1	−2·7	65·5	−1·3	28·9	53·1	−0·5	− 5	61	− 7	·302	−·059	3·0	−1·0	0·26	1·85	−1·59
Sind	+·021	89·7	+1·0	62·2	−1·8	75·9	−0·4	27·5	48·3	−0·8	+ 6	48	− 8	·373	−·045	1·6	−0·9	0	0·16	−0·16
Rajputana	+·003	89·4	−0·7	60·3	−3·3	74·9	−2·0	29·1	51·5	+0·3	+ 4	29	−11	·206	−·085	1·7	−0·9	0·08	0·15	−0·07
Bombay	+·010	92·4	+0·3	66·4	−1·2	79·4	−0·4	26·0	40·8	−0·1	+ 5	54	− 3	·468	−·041	1·1	−0·4	0	0·11	−0·11
Central India	+·007	91·0	−0·9	58·6	−2·3	74·8	−1·7	32·3	55·5	−0·3	− 2	39	− 3	·295	−·025	1·1	−0·4	0·03	0·16	−0·13
Central Provinces	+·001	95·5	−0·2	64·9	−1·0	80·2	−0·6	30·6	49·6	+0·6	+ 1	32	−11	·280	−·087	0·5	−1·3	0·01	0·41	−0·40
Hyderabad	+·002	99·6	+1·7	71·5	+0·3	85·5	+1·0	28·2	41·1	−0·3	+ 9	43	− 5	·430	+·006	0·7	−0·8	0	0·42	−0·42
Mysore	+·021	93·7	+1·3	67·1	+1·0	80·4	+1·1	26·6	36·2	−0·1	+14	62	− 1	·532	−·008	1·3	−0·2	0·12	0·31	−0·19
Madras	+·007	94·6	+1·2	75·0	+1·7	84·8	+1·4	19·6	29·5	+0·3	+ 5	73	− 1	·772	+·016	2·4	0	0·10	0·48	−0·38

Table

(2) Abstract of observations taken at 8 hrs. at 236

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	150	29·822		29·906	29·870	20th	29·740	13th	·130	80·0	91·4		76·1		83·8		15·3	96·7	18th	71·2	3rd	25·5
	Mergui	65	29·906	+·005	29·902	29·953	19th	29·821	13th	·129	79·0	91·5	+0·3	71·6	−0·3	81·5	0	19·9	96·0	28th & 29th.	64·8	1st & 2nd.	31·2
	Tavoy	19	29·960	+·006	29·912	30·018	19th	29·866	13th	·152	74·8	93·1	−0·2	70·8	+0·6	81·9	+0·2	22·3	97·5	31st	58·3	1st	39·2
	Moulmein	94	29·851	+·021	29·913	29·957	19th	29·779	13th	·178	76·5	93·8	−0·3	72·8	+0·1	83·2	−0·1	21·0	99·5	31st	63·3	1st	36·2
	Rangoon	18	29·943	0	29·899	30·024	19th	29·838	12th	·186	75·2	94·7	−1·9	72·3	+1·2	83·5	−0·3	22·4	99·1	10th & 12th.	67·1	1st	31·7
	Bassein	27?	29·934	+·012	29·898	30·017	19th	29·823	13th	·194	78·4	95·1	+0·7	72·4	+1·9	83·7	+1·3	22·7	99·2	10th & 11th.	63·4	2nd	35·8
	Diamond Island	41	29·931	+·007	29·908	30·011	19th	29·832	13th	·179	80·4	81·9	−0·7	74·0	−1·0	79·4	−0·9	10·9	86·9	31st	71·2	1st	17·7
	Toungoo	164	29·790	+·017	29·898	29·872	19th	29·676	12th	·196	76·0	96·7	−1·1	70·1‡	+1·6‡	83·6‡	+0·3	26·6	100·5	29th & 30th.	62·9	1st	37·6
	Kyaukpyu	18	29·903		29·891	29·989	20th	29·820	13th	·169	77·0	87·4		71·3		79·4		16·1	92·0	31st	67·4	17th	24·6
	Akyab	20	29·916	+·001	29·907	30·015	20th	29·837	13th	·178	75·8	88·6	−0·6	71·1	+2·2	79·9	+0·9	17·5	90·9	11th, 12th & 14th.	66·5	11th, 12th & 17th.	24·4
3	Thayetmyo	121	29·816	+·009	29·879	29·867	9th	29·720	13th	·167	78·9	95·9	+0·1	68·6	+2·1	84·3	+1·1	31·3	104·4	16th	59·9	3rd	44·5
	Minbu	*165*	29·702	+·008	29·872	29·842	9th	29·656	11th	·186	76·5	90·5	+0·2	70·6	+1·3	85·1	+0·7	28·9	105·8	16th	64·0	12th	41·8
	Yamethin	657	29·250	−·006	29·832	29·327	19th	29·148	13th	·179	76·8	95·8	−0·3	73·4	+2·3	84·6	+1·0	28·4	102·8	29th. 28th	63·0	8th	39·8
	Mandalay†	250	29·667	+·006	29·868	29·771	9th	29·551	14th	·220	76·4	100·5	+2·8?	69·0	+1·1	84·7	+1·9?	31·5	105·7	15th & 29th.	62·1	1st, 8th & 13th.	43·6
	Monywa	*280*	29·661		29·894	29·748	9th	29·526	11th	·220	76·0	97·8		67·1		82·5		30·7	106·3	29th	62·1	13th & 18th.	44·2
	Lashio	*2,820*	27·150	+·015	29·934	27·237	9th	27·045	13th	·192	62·1	80·5§	−2·6§	55·7	0	67·2§	−1·3	24·8	95·8	11th	49·0	1st & 8th	36·8
	Bhamo	*381*	29·571	+·038	29·922	29·631	9th	29·420	14th	·201	65·5	83·2	−0·8	59·4	−0·7	73·8	−0·7	23·8	95·9	15th	54·1	8th	41·8
	Myitkyina	*458*	29·475		29·903	29·581	9th	29·324	14th	·257	64·2	83·6		60·7		72·2		23·1	91·2	15th	57·0	8th	34·2
	II.—Eastern Bengal and Assam.																						
4	Dibrugarh	353	29·595		29·923	29·724	9th	29·406	14th	·318	63·3	77·6		60·1		68·9		17·5	85·4	15th	55·1	2nd	30·3
	Sibsagar	333	29·621	−·005	29·926	29·738	9th	29·418	14th	·320	64·0	77·8	−1·3	59·3	−0·7	68·6	−1·0	18·5	83·6	15th	53·0	3rd	30·6
	Tezpur	252	29·695		29·916	29·829	9th	29·491	14th	·338	65·1	83·0		60·4		71·7		22·6	89·1	22nd	54·3	16th	34·8
	Gauhati	195	29·754		29·912	29·902	31st	29·569	14th	·333	65·9	84·1		56·9		70·5		27·2	89·8	5 days	50·1	6th	39·7
	Dhubri	115	29·817	+·017	29·890	29·936	9th	29·650	14th	·288	67·0	87·0	+0·5	60·0	−2·8	73·8	−1·1	26·4	92·0	14th & 20th.	54·1	6th & 7th.	37·9
	Silchar	104	29·854	−·003	29·913	29·954	10th	29·723	14th	·231	68·0	84·8	−1·2	61·9	−1·3	73·4	−1·3	22·9	89·8	21st	56·3	7th & 16th.	33·5
5	Cox's Bazar	36	29·916		29·898	29·969	19th & 20th.	29·821	14th	·168	76·4	87·3		68·9		78·1		18·4	92·7	11th	61·2	17th	31·5
	Chittagong	87	29·864	−·001	29·898	29·957	10th	29·752	14th	·205	73·6	85·6	−1·1	67·7	+0·1	76·7	−0·5	17·9	90·0	10th, 14th, & 19th.	60·0	31st	30·0
	Noakhali	43	29·904		29·894	30·004	29th	29·782	14th	·226	74·1	86·4		63·5		77·4		17·9	91·3	15th	58·4	31st	32·9
	Barisal	12	29·924	+·007	29·883	30·033	10th	29·817	14th	·216	73·0	89·2	−0·1	68·7	−0·5	79·0	−0·3	20·5	95·3	14th	59·1	31st	36·2
	Comilla	36	29·905		29·890	30·003	9th	29·784	28th	·219	73·3	89·0		67·9		78·5		21·1	94·3	14th	58·3	31st	36·0
	Narayanganj	26	29·895	−·006	29·870	30·005	19th	29·773	13th	·232	73·8	90·2	+0·2	67·4	−0·8	73·8	−0·3	22·8	95·5	13th & 14th.	58·8	31st	36·7
	Faridpur	46	29·885		29·881	30·003	10th	29·763	13th	·235	73·1	90·7		65·2		78·0		25·5	97·3	14th & 27th.	54·9	6th	42·4
	Sirajganj	49	29·874		29·874	29·990	10th	29·754	13th	·230	70·0	90·7†		63·3		77·1†		27·4	99·4	27th	55·3	6th	44·1
	Mymensingh	63	29·877	+·012	29·894	29·988	10th	29·756	14th	·232	67·2	87·8	+0·9	63·5	−0·9	75·6	0	24·3	95·1	27th	55·6	2nd	39·5
	Bogra	75	29·848	+·019	29·877	29·971	10th	29·716	27th	·255	69·4	92·1	+1·9	61·3	−2·6	76·8	−0·3	30·8	100·2	27th	53·7	6th	46·5
	Rampur Boalia	70	29·863		29·884	29·992	9th	29·711	27th	·281	71·6	91·3		62·6		77·0		28·7	100·6	27th	54·1	6th	46·5
	Malda	72	29·841†		29·867†	29·980	9th & 10th.	29·704	27th	·276	70·0	89·2†		59·5		74·2†		29·7	99·3	27th	51·5	6th	47·8
	Dinajpur	123	29·781	+·010	29·866	29·914	30th	29·634	14th	·280	65·8	89·6	+0·5	58·4	−2·9	74·0	−1·2	31·2	95·8	14th, 29th & 27th.	51·0	6th	44·8
	Rangpur	123	29·809		29·891	29·936	9th	29·644	14th	·292	67·9	87·2		57·6		72·5		29·4	93·6	27th	51·0	6th	42·6

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 1,200 feet.

† Mean of 30 days.
‡ " " 28 "
§ " " 11 "

B.

stations in India, etc., in March, 1912.

Wind direction. Number of winds from Calm	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 31st March 1912.	Normal rainfall for period, 1st Dec to 31st March.	Departure from normal of period, 1st Dec., 1911 to 31st March, 1912.	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	56	57
																																I.—Burma.
2	3	21	3	2					N 49° E		5·0*			79		81		·801		4·7		0			0·08			2·24			0·04	Victoria Point.
31									(a)	N 27° W	2·5	1·6	+0·9			83	+ 2	·825	—·010	2·6	—0·8	2	4·70	—2·70	0·42	3·05	—2·63	2·73	6·56	— 3·83	0·25	Mergui.
30	1								N	N 34° W	1·3*	1·2	+0·1	3	—15	85	0	·741	—·030	2·9	+0·5	1	1·60	—0·60	0·75	1·61	—0·86	1·13	2·56	—1·43	0·70	Tavoy.
10		4	15	1	1				N 87° E	S 58° E	2·7	2·4	+0·3	62	— 3	80	0	·748	—·038	1·5	—0·4	0	0·60	—0·60	0	0·43	—0·43	2·13	0·94	+1·19	0	Moulmein.
17	3	2	1		2	1	2	3	N 33° W	S 64° W	1·9	3·3	—1·4	17	—51	84	— 1	·710	+·004	6·6	+4·6	0	0·50	—0·50	0	0·37	—0·37	5·55	0·89	+4·66	0	Rangoon.
19	4					3	5		N 41° W	N 55° W	4·6	4·1	+0·5	33	—35	83	— 1	·804	+·026	0·7	—1·3	0	0	0	0	0·19	—0·19	1·40	0·94	+0·46	0	Bassein.
	5	2				9	15		N 47° W	N 30° W	9·6	6·8	+2·8	79	+ 6	75	— 1	·781	+·021	3·0	+0·2	0	0	0	0	0·23	—0·23	1·57	1·36	+0·21	0	Diamond Island.
15	1	1	1	6	5	2			S 27° E	S 51° E	1·6	2·3	—0·7	33	—10	73	— 1	·650	—·027	5·2	+3·1	0	0·30	—0·30	0	0·36	—0·36	3·59	0·95	+2·64	0	Toungoo.
6	2	10	3	7	2	1			N 84° E		3·1*			46		83		·780		3·6		0			0·01			0·17			0·01	Kyaukpyu.
3	9	8	4	1	3	1		2	N 35° E	N 32° E	3·2	2·7	+0·5	49	—26	84	+ 2	·741	+·039	3·8	+1·4	1	0·30	+0·40	0·10	0·58	—0·48	1·25	1·50	—0·25	0·10	Akyab.
16	1	3		1	7	3			S 6° E	S 66° W	2·7*	3·5	—0·8	23	—16	71	+12	·703	+·152?	1·4	+0·8	0	0·10	—0·10	0	0·18	—0·18	0·02	0·53	—0·51	0	Thayetmyo.
	3		2	10		9		7	S 22° W	S 63° E	2·8	5·4	—2·6	20	— 3	62	+ 4	·560	+·033	2·5	+2·0	0	0·10	—0·10	0·09	0·44	—0·35	0·46	1·03	—0·57	0·09	Minbu.
8	1			18	2			2	S 43° E	S 38° E	2·5	3·4	—0·9	53	+ 2	61	+ 2	·559	+·023	0·6	—0·1	0	0·30	—0·30	0	0·49	—0·49	0·32	1·25	—0·93	0	Yamethin.
7	1	2		9	5	5		1	S 17° E	S 8° W	2·9	3·1	—0·2	40	+14	53	— 1	·477	—·031	0·9	—0·4	0	0·40	—0·40	0·08	0·20	—0·12	0·37	0·61	—0·27	0·08	Mandalay.
5	7	1	2	1	1		1	9	N 17° W		2·5			43		57		·516		2·0		0	0·50	—0·50	0	0·40	—0·40	0	0·80	—0·80	0	Monywa.
23		4	1		1			2	N 36° E		2·4*			13		66†	— 4	·376†	—·014	6·0	+1·3	1			0·48	0·62	—0·14	3·18	1·30	+1·28	0·41	Lashio.
21	2	5	1			1		1	N 30° E	N 3° W	1·4	2·4	—1·0	20	— 9	84	+ 5	·525	+·005	3·5	+1·3	1	1·90	—0·90	0·35	0·67	—0·32	0·96	2·30	—1·34	0·12	Bhamo.
25		3	1		1	1			N 80° E		1·3			8		81		·488		4·3		3			1·25	0·85	+0·40	1·96	2·50	—0·54	0·43	Myitkyina.
																																II.—Eastern Bengal and Assam.
30			1						E		0·8			3		94		·547		4·9		5	10·00	—5·00	3·01	4·33	—1·32	8·47	8·39	+0·08	0·95	Dibrugarh.
8	2	15	2	1		2		1	N 45° E	N 51° E	2·0	2·2	—0·2	49	— 1	87	— 6	·516	—·040	4·7	—1·5	7	9·80	—2·80	3·30	4·91	—1·61	8·07	8·59	—0·52	1·22	Sibsagar.
	2	17	12						N 60° E		3·7			89		75		·452		2·4		4	5·50	—1·50	3·69	1·95	+1·74	5·38	3·53	+1·85	2·44	Tezpur.
25		1	3	1	1				S 77° E		1·6			13		77		·491		2·4		6	5·40	+0·60	2·67	2·32	+0·29	4·77	3·77	+1·00	1·22	Gauhati.
4	1	11	11	1	1	2			N 73° E	N 72° E	4·5	4·6	—0·1	62	+15	67	— 8	·444	— 080	1·9	—0·7	3	2·40	+0·60	2·69	1·99	+0·70	2·91	3·07	—0·16	1·74	Dhubri
21		6	3	1					N 65° E	S 83° E	1·5	2·2	—0·7	27	+11	79	— 3	·548	—·039	2·0	—2·9	8	10·80	—2·80	11·22	7·84	+3·38	16·35	11·14	+5·21	4·10	Silchar.
	1	4	7	14	2		2	1	S 67° E		4·3*			59		80		·730		4·2		4			3·12			3·18			1·45	Cox's Bazar.
8		7	13	2		1			N 82° E	N 87° E	1·7	4·0	—2·3	62	+ 8	81	— 2	·672	—·019	3·8	+0·6	6	2·77	+3·23	6·88	2·68	+4·20	7·55	4·79	+2·76	4·23	Chittagong.
5	1	3	1	2	8	7	3	1	S 20° W		3·5			39		85		·715		3·4		8	3·26	+4·74	2·48	2·80	—0·32	2·54	4·59	—2·05	0·68	Noakhali.
23		1		1	4	2			S	S 13° W	0·6	2·7	—2·1	17	+ 4	80	— 5	·713	—·041	2·9	—1·0	9	3·03	+5·97	3·62	2·08	+1·54	4·36	4·12	+0·24	0·94	Barisal.
19			10	2					S 33° E		1·2			36		85		·703		3·1		8	3·93	+4·07	5·88	2·76	+3·12	8·25	4·28	+3·97	1·41	Comilla.
10	1	1	2	4	5	3	3	2	S 8° W	S 13° W	3·0	3·7	—0·7	23	—16	77	— 6	·649	—·048	4·5	+0·3	4	3·18	+0·82	2·21	2·57	—0·36	2·94	4·40	—1·46	0·80	Narayanganj
9	7			2	9	2	2		S 22° W		2·6			19		76		·623		3·9		4	3·50	+0·50	2·36	1·91	+0·45	3·18	3·72	—0·54	1·03	Faridpur.
2		2	3	5	4	9	2	4	S 17° W		2·6			32		75		·555		3·9		3	2·20	+0·80	1·19	1·37	—0·18	1·77	2·63	—0·86	0·72	Sirajganj.
20	1	2	4	3				1	N 82° E	S 76° E	1·7	2·3	—0·6	23	—38	79	— 2	·536	—·074	4·8	+1·2	6	3·52	+2·48	3·54	2·28	+1·26	4·01	3·77	+0·24	0·92	Mymensingh
17	1		4	2	4	1		2	S 42° E	S 53° E	1·6	2·6	—1·0	17	— 7	70	— 4	·516	—·046	3·5	+1·1	4	1·74	+2·26	1·46	1·34	+0·12	1·61	2·72	—1·11	0·65	Bogra.
12	1	3	1		2	6	5	1	S 74° W		2·6			23		65		·503		2·9		1	1·68	—0·68	0·41	1·12	—0·71	0·46	2·16	—1·70	0·37	Rampur Boalia.
6	1	5	1	4	8	6			S 15° E		3·6*			36		66†		·487†		1·0		2	1·10	+0·90	1·78	0·75	+1·03	2·31	2·42	—0·11	1·38	Malda.
1	1	6	5	1	2	2	10	3	N 48° W	S 14° W	2·7	3·6	—0·9	17	+14	69	+ 3	·443	—·033	2·2	+0·3	3	1·19	+1·81	2·17	0·81	+1·36	2·49	1·76	+0·73	1·32	Dinajpur.
5		9	6	2	5	3	1		S 80° E		2·2			36		70		·473		1·6		4	1·68	+2·32	2·24	1·33	+0·91	2·31	2·38	—0·07	0·87	Rangpur.

* Uncorrected for scale error.

(a) Indeterminate.

Table

(2) *Abstract of observations taken at 8 hrs. at 236 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	II.—Eastern Bengal and Assam—*concld.*																						
5	Jalpaiguri	283	29·629	+·004	29·882	29·757	9th & 31st.	29·448	14th	·309	63·7	85·3	+0·5	58·3	−1·4	71·8	−0·5	27·0	90·4	22nd	52·4	5th	38·0
	Cooch Behar	156	29·772		29·880	29·904	31st	29·581	14th	·323	64·5	83·8		59·5		71·7		24·3	88·8	20th	53·6	4 days	35·2
	III.—Bengal.																						
6	Saugor Island	25	29·897	−·005	29·867	30·031	10th	29·769	27th	·262	78·3	87·2	0	75·2	+0·2	81·2	+0·1	12·0	93·7	15th	62·7	31st	31·0
	Midnapore	149	29·765		29·864	29·907	10th	29·628	27th	·279	76·0	95·2		69·0		82·1		26·2	106·3	26th	60·2	31st	46·1
	Calcutta	21	29·903	−·002	29·872	30·039	10th	29·773	27th	·266	74·4	92·1	+1·3	70·1	+0·5	81·1	+0·9	22·0	99·1	14th	60·0	31st	39·1
	Jessore	33	29·898	+·007	29·878	30·018	10th	29·783	27th	·235	74·4	91·3	−1·1	67·6	−0·6	79·4	−0·9	23·7	98·5	26th	56·2	15th	42·3
	Krishnagar	47	29·867		29·884	30·073	30th	29·734	27th	·339	73·1	93·3		65·8		79·5		27·5	102·4	26th	56·5	2nd & 6th	45·9
	Burdwan	99	29·817	−·003	29·865	29·964	10th	29·654	27th	·310	72·9	94·6	+0·9	67·9	−0·5	81·3	+0·2	26·7	105·9	26th	58·8	31st	47·1
	Bankura	313	29·602		29·873	29·745	10th	29·443	27th	·302	75·2	95·2		67·6		81·4		27·6	106·1	26th	53·7	31st	47·4
	Raniganj	334	29·587		29·888	29·730	10th	29·434	27th	·296	70·9	95·0		65·5		80·2		29·5	105·5	26th & 27th.	53·5	31st	47·0
	Berhampore	67	29·856	+·009	29·874	29·997	9th	29·707	27th	·290	70·4	92·5	−0·2	64·4	−1·3	78·4	−0·7	28·1	101·6	26th & 27th.	57·2	2nd & 5th	44·4
7	Balasore	50	29·873	+·001	29·869	30·023	10th	29·726	27th	·297	75·9	92·6	−0·1	69·9	+0·3	81·3	+0·1	22·7	103·4	26th	62·6	31st	40·8
	False Point	21	29·905	−·011	29·869	30·018	10th	29·802	27th	·246	79·8	87·5	+0·2	73·4	+1·2	80·5	+0·7	14·1	99·2	14th	62·6	15th & 16th.	36·6
	Cuttack	80	29·842	−·010	29·864	29·974	10th	29·736	27th	·238	77·3	98·0	+1·0	73·6	+1·1	85·8	+1·1	24·4	106·4	26th	69·2	11th & 15th.	37·2
	Puri	24	29·899		29·862	30·035	10th	29·812	14th	·223	79·3	87·1		75·8		81·5		11·3	93·6	16th	69·6	30th	24·0
	Angul	155	29·466		29·889	29·616	10th	29·343	27th	·273	76·1	97·9		68·6		83·2		29·3	107·1	28th	62·0	5th	45·1
	Sambalpur	486	29·442	0	29·884	29·581	10th	29·315	27th	·266	75·8	96·1	−0·6	67·1	−0·2	81·6	−0·4	29·0	103·6	26th	58·6	5th	45·0
8	Chaibasa	*733*	29·167	−·004	29·870	29·318	10th	29·021	27th	·297	71·1	95·1	+0·8	64·8	−1·4	80·0	−0·3	30·3	105·1	27th	57·8	5th	47·3
	Ranchi	2,128	27·794	+·018	29·866	27·925	10th	27·670	27th	·255	70·6	88·6	+1·0	61·0	+0·7	76·3	+0·9	24·6	98·2	27th	54·9	5th	43·3
	Purulia	*816*	29·102¶		29·888¶	29·236	9th	28·937	27th	·299	70·4	94·5		61·5		78·0		33·0	103·5	28th	53·1	10th	50·4
	Hazaribagh	2,007	27·912	+·017	29·872	28·040	9th & 10th.	27·777	27th	·263	72·4	88·8	+0·2	62·5	−1·3	75·6	−0·5	26·3	100·6	27th	54·0	6th	46·6
	Daltonganj	*730*	29·180‖		29·893‖	29·305	10th	29·028	27th	277	63·8‡	93·7‡		58·4‡		76·1‡		35·3	105·1	27th	49·0	5th	56·1
9	Purnea	134	29·766	+·017	29·879	29·928	10th	29·623	27th	·305	68·5	88·3	−1·6	57·0	−3·4	72·7	−2·5	31·3	96·6	25th & 27th.	49·7	2nd	46·9
	Bhagalpur	160	29·749		29·827?	29·889	10th	29·572	27th	·317	69·6	90·8		61·3		76·1		29·5	99·2	25th & 27th.	54·3	7th	44·9
	Monghyr	155	29·762		29·873	29·912	9th	29·574	27th	·338	72·8	89·3		62·8		76·0		26·5	99·2	28th	53·9	5th	45·3
	Darbhanga	165	29·736	+·003	29·862	29·895	31st	29·567	27th	·328	67·3	88·5	+0·6	56·7	−6·2	72·6	−2·8	31·8	95·6	27th	48·7	5th	46·9
	Pusa	188	29·702		29·852	29·852	31st	29·529	27th	·323	67·2	90·3		56·8		73·6		33·5	98·0	25th	49·3	5th & 7th	48·7
	Muzaffarpur	177	29·737		29·878	29·892	31st	29·628	26th	·264	69·2	88·5		57·4		72·9		31·1	95·2	25th	50·0	5th	45·2
	Motihari	221	29·676		29·866	29·815	31st	29·520	27th	·295	64·7	87·7		56·6		72·1		31·1	94·1	25th, 27th & 28th.	48·8	7th	45·3
	Chapra‡	181	29·722		29·865	29·873	10th	29·532	27th	·341	67·6	90·7		59·9		75·3		30·8	98·8	25th & 27th.	53·3	5th & 6th	45·5
	Patna	183	29·719	−·005	29·862	29·871	31st	29·534	27th	·337	71·1	88·1	−2·8	62·1	−1·9	75·1	−2·3	26·0	98·0	27th & 28th.	54·2	5th	43·8
	Arrah§	190	29·729		29·792?	29·862	10th	29·621	3rd & 13th.	·241	67·2	89·4		58·3		73·8		31·1	95·1	13th & 14th.	53·3	6th	41·8
	Buxar	235	29·662		29·866	29·812	10th	29·465	27th	·347	68·0	90·9		61·8		76·3		29·1	102·5	27th	53·1	5th	49·4
	Delhi¶	351	29·583		29·901?	29·709	10th	29·463	3rd	·246	69·8	90·8		63·6		77·2		27·2	95·3	13th & 14th.	57·0	5th & 6th.	38·3
	Gaya	372	29·538	−·004	29·870	29·691	10th	29·331	27th	·360	72·6	93·2	−0·1	63·6	−2·5	78·4	−1·3	29·6	104·9	27th	52·2	31st	52·7
	Naya Dumka	489	29·423	+·014	29·877	29·576	10th	29·279	27th	·291	71·6	92·8	+1·4	63·0	−2·6	77·9	−0·6	29·8	103·4	26th	55·0	6th	48·4
	IV.—United Provinces of Agra and Oudh.																						
10	Gorakhpur	257	29·632	+·005	29·856	29·776	31st	29·463	27th	·313	67·4	88·9	−1·6	57·2	−5·3	73·0	−3·5	31·7	98·1	25th	48·8	6th	49·3
	Benares	267	29·650	+·007	29·878	29·803	9th	29·451	27th	·352	71·9	91·8	−1·0	58·2	−3·6	75·0	−2·3	33·6	103·6	25th & 27th.	49·1	6th	54·5
	Allahabad	409	29·614	+·009	29·828	29·769	10th	29·415	27th	·354	70·2	91·3	−1·7	59·1	−3·0	75·2	−2·3	32·2	104·1	25th	50·0	6th	54·1

‡ Mean of 27 days.
§ „ 23 „
‖ „ 17 „
¶ „ 21 „

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.

B—*continued.*

in India, etc., in March, 1912—continued.

Wind direction. Number of winds from Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 31st Mar., 1912.	Normal rainfall for period, 1st Dec. to 31st Mar.	Departure from normal of period, 1st Dec., 1911 to 31st Mar., 1912.	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	56	57
																																II.—Eastern Bengal and Assam—*concld.*
23		2	1	3				2	N 77° E	N 75° E	1·6			10	−31	74	−1	·448	−·055	0·8	−1·1	5	2·10	+2·90	6·33	1·25	+5·08	6·51	2·28	+4·23	2·29	Jalpaiguri.
8		2	16	3	1	1			S 84° E		1·7			61		76		·466		2·5		3	2·41	+0·59	3·60	1·99	+1·61	4·22	2·86	+1·36	2·27	Cooch Behar.
																																III.—Bengal.
	5	3		1	11	8	2	1	S 30° W	S 49° W	11·0	9·6	+1·4	33	−6	85	+2	·819	+·008	3·7	−0·6	5	1·81	+3·19	2·27	1·44	+0·83	4·52	3·25	+1·27	1·08	Saugor Island.
3	7	8	2	2	4	3		2	N 36° E		2·3			29		70		·621		2·2		6	2·59	+3·41	4·25	1·33	+2·92	6·51	3·28	+3·23	1·36	Midnapore.
3	2	2	2	2	2	13		5	S 54° W	S 42° W	3·7*	3·6	+0·1	33	−14	81	0	·702	−·004	2·6	−0·3	7	2·00	+5·00	4·09	1·25	+2·84	4·83	3·02	+1·81	1·95	Calcutta.
18			1	2	4	3	1	2	S 19° W	S 32° W	2·6	2·1	+0·5	20	−9	78	−2	·667	−·034	3·2	−0·6	7	3·13	+3·87	5·27	1·95	+3·32	5·53	3·94	+1·59	1·63	Jessore.
23	1	1		3	2				S 56° E		1·0			10		71		·584		2·8		3	1·97	+1·03	2·39	1·52	+0·87	3·14	3·30	−0·16	1·34	Krishnagar.
12	4	1		1		6	2	5	N 68° W	S 58° W	1·7	2·3	−0·6	27	−10	65	+1	·542	−·011	2·7	−0·1	4	2·16	+1·84	1·30	1·45	−0·15	1·81	3·16	−1·35	0·54	Burdwan.
28	1			1			1		N 45° W		2·7			3		43		·371		1·0		2	1·76	+0·24	2·07	1·08	+0·99	2·71	2·67	+0·04	1·80	Bankura.
25		1	1				2	2	N 45° W		1·2			10		56		·427		1·1		4	1·48	+2·52	1·65	1·07	+0·58	2·05	2·63	−0·58	0·90	Raniganj.
13	3	1	3	2	3	4	2		S 6° E	S 42° W	1·6	2·4	−0·8	11	−32	63	−9	·487	−·079	2·8	+0·1	3	1·73	+1·27	0·91	1·06	−0·15	1·00	2·53	−1·53	0·41	Berhampore.
6	5	1	2		3	10		4	S 78° W	S 61° W	2·9	4·2	−1·3	23	−13	71	−8	·628	−·082	3·0	−0·6	4	2·87	+1·13	5·86	1·97	+3·89	9·65	4·14	+5·51	2·65	Balasore.
1			1		2	17	8	2	S 58° W	S 70° W	8·2	7·9	+0·3	79	+25	81	−5	·812	−·016	5·0	+0·8	1	1·48	−0·48	5·79	1·01	+4·78	8·54	3·30	+5·24	5·75	False Point.
16		2	1		3	6	3		S 40° W	S 50° W	2·3*	2·4	−0·1	27	−2	79	+1	·747	+·033	3·1	+0·2	1	1·77	−0·77	0·28	1·03	−0·75	1·82	2·23	−0·41	0·23	Cuttack.
	3	1			1	41	4	1	S 60° W		10·1			68		85		·845		3·4		1	1·05	−0·05	0·17	0·63	−0·46	1·00	2·18	−1·18	0·17	Puri.
1	4	4		2		1	5	14	N 36° W		4·7			61		62		·566		1·6		0			0	1·34	−1·34	3·61	3·54	+0·07	0	Angul.
1	3	4	1	3	6	9	2	2	S 28° W	N 46° E	3·2	2·3	+0·9	30	−16	51	−4	·459	−·023	1·7	−0·1	0	1·80	−1·80	0·03	0·96	−0·93	3·47	2·36	+1·11	0·02	Sambalpur.
13	1	1	3		1	11	1		S 36° W	S 69° W	2·6	1·2	+1·4	30	−21	55	−8	·422	−·039	1·2	−0·7	3	2·19	+0·81	1·23	0·95	+0·28	2·64	3·56	−0·72	0·60	Chaibasa.
6	3			1	1	2	8	10	N 66° W	N 86° W	5·1†	4·7	+0·7	56	+13	37	−8	·268	−·048	1·2	−0·4	1	2·58	−1·58	0·22	1·30	−1·08	2·35	3·85	−1·50	0·12	Ranchi.
25		1	2				2	1	N		2·2			6		52		·382		0·7		3	2·17	+0·83	1·07	0·96	+0·11	1·74	3·62	−1·88	0·62	Purulia.
11	1		1	2	2	2	7	5	S 88° W	S 86° W	4·7	5·9	−1·2	31	−21	32	−9	·250	−·064	0·6	−1·7	1	1·81	−0·81	0·20	1·01	−0·81	0·81	3·07	−2·26	0·13	Hazaribagh.
22	1		5	2		1			S 81° E		2·5			19		57‡		·367‡		0·5		0	1·67	−1·67	0·15	0·58	−0·43	0·77	2·93	−2·16	0·08	Daltonganj.
10		5	1		1	6	7	1	S 82° W	N 45° E	3·1	2·9	+0·2	23	+19	62†	−7	·414†	−·058	1·1	−0·3	3	0·83	+2·17	2·33	0·54	+1·79	2·42	1·69	+0·73	0·98	Purnea.
29		1				1			(a)		2·9					56		·395		1·1		3	0·84	+2·16	0·93	0·56	+0·37	1·29	1·97	−0·68	0·58	Bhagalpur.
4			5	2	1	5	13	1	S 65° W		4·5			39		51		·407		0·9		2			1·14			1·97			0·89	Monghyr.
14			6	1	1	1	6	2	S 52° W	S 82° W	2·3	3·3	−1·0	3	−21	64	+3	·433	−·006	0·7	−0·6	2	0·83	+1·17	0·96	0·48	+0·48	1·37	1·58	−0·21	0·49	Darbhanga.
4		2	2	8	4	6	3	2	S 2° E		3·7			36		61		·405		0·9		2			0·80			1·04			0·55	Pusa.
15		1	2	2	1	5	5		S 39° W		6·5*			23		63		·426		0·5		2	0·97	+1·03	0·45	0·48	−0·03	1·12	1·66	−0·54	0·31	Muzaffarpur.
9	1	3	3	2	1	2	7	3	N 76° W		1·9			13		62		·380		1·2		2	0·77	+1·23	0·54	0·45	+0·09	1·44	1·65	−0·21	0·40	Motihari.
?	?	?	?	?	?	?	?	?	?		?			?		56		·341		0·4		3	0·71	+2·29	0·58	0·35	+0·23	0·84	1·74	−0·90	0·29	Chapra.
5			6	1	2	7	10		S 47° W	S 63° E	4·3	2·8	+1·5	37	+8	52	+2	·395	−·002	1·0	−0·8	2	0·74	+1·26	0·92	0·46	+0·46	1·17	1·87	−0·70	0·50	Patna.
4	1			1	1	9	6	1	S 63° W		2·2			57		42		·276		0·6		1	0·81	+0·19	0·77	0·45	+0·32	1·35	2·07	−0·72	0·64	Arrah.
1		1	2	1	6	14	5	1	S 39° W		5·3			61		46		·321		1·5		1	0·87	+0·13	0·82	0·33	+0·49	0·99	1·98	−0·99	0·75	Buxar.
	1				9	8	2	1	S 32° W		3·4			71		39		·270		0·4		1	1·00	0	0·37	0·48	−0·11	0·84	2·10	−1·26	0·30	Dehri.
14				1	8	3	5		S 31° W	S 37° W	2·8	3·1	−0·3	43	+3	55	+2	·443	+·005	1·2	−0·9	0	1·03	−1·03	0·07	0·46	−0·39	0·51	2·15	−1·64	0·07	Gaya.
26			1	3				1	S 18° W		1·7			5		44	−7	·346		1·1		1	1·41	−0·41	1·68	0·81	+0·87	1·78	2·30	−0·52	1·60	Naya Dumka.
																																IV.—United Provinces of Agra and Oudh.
11	2	2				3	2	8	N 50° W	N 72° W	1·4	2·3	−0·9	33	−3	53	−4	·356	−·056	0·4	−1·2	1	0·70	+0·30	0·78	0·36	+0·42	2·36	1·80	+0·56	0·78	Gorakhpur.
			1	3	1	8	6	4	S 62° W	S 54° W	2·6	3·4	−0·8	43	−4	43	−15	·335	−·087	0·8	−1·2	0	0·80	−0·80	0·09	0·28	−0·19	0·09	1·95	−1·86	0·07	Benares.
8	1	1	1	1		7	10	2	S 80° W	S 85° W	2·8	3·7	−0·9	46	+7	38	−9	·277	−·092	1·4	−0·6	1	0·60	+0·40	0·21	0·22	−0·01	0·29	1·81	−1·52	0·19	Allahabad.

* Uncorrected for scale error.

† Mean of 30 days.

(a) Indeterminate.

Table

(2) *Abstract of observations taken at 8 hrs. at 236 stations*

Number of subdivision.	Station.	Elevation of barometer 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	IV.—United Provinces of Agra and Oudh—*concld.*																						
10	Cawnpore	416	29·489	+·011	29·875	29·643	9th	29·324	26th	·319	68·0	90·7	−0·1	57·9	−2·5	74·3	−1·3	32·8	103·2	25th	49·4	6th	53·8
	Lucknow	368	29·545	+·016	29·883	29·701	9th	29·387	26th	314	69·4	89·8	−1·7	58·0	−2·3	73·9	−2·0	31·8	102·0	25th	48·6	6th	53·4
	Bahraich	401	29·493	+·017	29·870	29·649	9th	29·341	27th	·308	65·1	87·5	−1·5	56·3	−2·5	71·9	−2·0	31·2	98·1	25th	49·0	6th	49·1
11	Jhansi	824	29·111	−·001	29·912	29·265	10th	28·931	26th	·334	71·1	91·5	−1·6	65·6†	−5·7†	76·0†	−3·7	30·9	103·0	24th & 25th.	50·5	4th	52·5
	Agra	556	29·362	−·001	29·895	29·538	9th	29·162	27th	·376	66·9	88·9	−2·2	59·6	−3·1	74·2	−2·7	29·3	102·0	24th	51·0	4th & 5th	51·0
	Mainpuri	516	29·393	+·017	29·888	29·561	9th	29·214	26th	·347	64·8	85·5	−0·2	56·0	−2·7	72·8	−1·5	33·5	102·3	25th	49·1	5th	53·2
	Bareilly	568	29·312	−·002	29·865	29·477	9th	29·103	26th	·374	64·0	87·1	−0·4	56·4	−2·6	71·7	−1·5	30·7	99·3	25th	50·5	4th & 5th	48·8
	Roorkee	899	28·988	+·010	29·894	29·155	9th	28·816	26th	·345	61·1	83·2	−2·2	52·1	−4·0	67·7	−3·1	31·1	95·0	25th	43·9	1st	51·1
	V.—Punjab.																						
12	Delhi	718	29·183	+·003	29·894	29·348	9th	28·967	26th	·381	64·4	84·7	−2·7	58·8	−3·4	71·7	−3·1	25·9	95·0	24th & 25th.	49·8	4th	45·2
	Sirsa	662	29·239	−·001	29·897	29·444	9th	29·034	27th	·410	62·9	86·7	−1·9	54·3	−2·9	70·5	−2·4	32·4	100·8	24th	44·0	4th & 5th	56·8
	Patiala	*818*	29·037		29·856	29·222	10th	28·853	26th	·369	62·7	83·9		52·2‡		68·1‡		31·7	96·2	25th	44·4	4th	51·8
	Ambala	892	28·977	−·004	29·874	29·157	9th	28·786	26th	·371	62·9	86·1	+2·2	55·1	−2·0	70·6	+0·1	31·0	97·5	25th	47·9	5th	49·6
	Ludhiana	812	29·083	+·008	29·898	29·274	9th	28·900	27th	·374	62·8	84·2	−0·2	55·6	−1·9	69·9	−1·1	28·6	97·5	24th	46·0	5th	51·5
	Lahore	702	29·194	−·003	29·901	29·336	9th	28·994	27th	·402	61·3	84·1	−1·0	53·6	−0·6	68·8	−0·8	30·5	95·9	24th	45·2	5th	50·7
	Sialkot	830	29·077	+·016	29·919	29·275	9th	28·870	27th	·405	60·7	80·9	−0·8	51·3	−4·3	66·1	−2·5	29·6	93·0	24th	41·5	5th	51·5
	Rawalpindi	1,674	28·235	+·018	29·852	28·422	8th	27·994	27th	·428	56·9	75·9	−0·6	48·0	−2·7	61·9	−1·7	27·9	87·4	22nd	37·4	4th	50·0
13	Khushab	612	29·312	+·022?	29·920	29·519	9th	29·087	27th	·432	65·9	83·2	+2·6	55·2	−1·6	69·2	+0·5	28·0	95·4	22nd	42·4	4th	53·0
	Montgomery	558	29·348	+·003	29·899	29·559	9th	29·111	27th	·448	64·2	84·9	−0·8	54·1	−1·8	69·5	−1·3	30·8	98·4	23rd	43·0	4th	55·4
	Multan	420	29·512	+·004	29·915	29·717	8th	29·264	27th	·453	65·3	87·2	+0·7	57·0	−1·4	72·1	−0·3	30·2	96·3	22nd, 23rd & 31st.	45·0	4th	51·3
	VI.—North-West Frontier Province.																						
15	Peshawar	1,113	28·833	−·009	29·983	29·010	9th	28·540	27th	·470	55·9	77·1	+1·0	49·6	−2·3	63·3	−0·7	27·5	89·2	22nd	37·9	4th	51·3
	D. I. Khan	590	29·342	−·015	29·934	29·532	8th	29·105	27th	·427	60·6	82·8	−0·7	52·5	−3·0	67·6	−1·9	30·3	93·9	22nd	39·1	4th	54·8
	VII.—Sind.																						
17	Jacobabad	186	29·744	+·004	29·896	29·957	8th	29·535	27th	·422	69·8	92·7	+1·6	53·3	−1·3	75·5	+0·1	34·4	104·1	31st	45·8	7th	58·3
	Hyderabad	96	29·863	+·016	29·913	30·059	8th	29·661	27th	·398	70·3	92·4	−0·7	61·7	−2·5	77·0	−1·6	30·7	102·5	22nd	49·0	13th	53·5
	Karachi	13	29·978	+·042	29·943	30·149	8th	29·788	27th	·361	71·3	84·0	+2·0	66·5	−1·5	75·2	+0·3	17·5	92·5	28th	59·5	7th, 10th & 14th.	33·0
	VIII.—Rajputana.																						
18	Bikaner	*771*	29·138	+·006	29·897	29·337	9th	28·871	27th	·466	67·3	88·0	−1·3	59·9	−4·6	73·9	−3·1	28·1	101·0	23rd	50·0	5th	51·0
	Jodhpur	780	29·157	+·010	29·918	29·342	8th	28·913	27th	·429	69·4	91·0	+0·1	60·4	−2·9	75·7	−1·4	30·6	100·5	23rd	46·3	4th	54·2
19	Jaipur	1,431	28·498	+·004	29·917	28·673	9th	28·260	27th	·413	69·0	88·9	−0·8	57·7	−3·1	73·3	−1·9	31·2	100·2	24th	46·6	4th	53·6
	Ajmer	1,611	28·329	+·001	29·937	28·488	9th	28·089	27th	·399	64·6	87·0	−2·1	59·3	−0·4?	73·2	−1·3?	27·7	97·4	23rd	47·2	5th	50·2
	Kotah	819?	29·095	−·008	29·885?	29·245	10th	28·888	27th	·357	74·3	92·1	−0·7	64·2	−2·2	78·2	−1·5	27·9	103·1	24th	54·6	4th	48·5
	IX.—Bombay.																						
20	Deesa	466	29·490	+·010	29·921	29·624	8th	29·320	27th	·314	72·9	97·6	+1·5	61·9	−1·9	79·8	−0·2	35·7	104·8	21st, 22nd & 23rd.	49·4	5th	55·4
	Bhuj	395	29·576	+·022	29·931	29·687	8th	29·407	27th	·280	72·6	93·3	−0·6	63·6	−1·8	78·4	−1·2	29·7	102·0	31st	56·0	8th	46·0

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 30 days.

B—*continued.*

in India, etc., in March, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911, to 31st March, 1912.	Normal rainfall for period, 1st Dec. to 31st March.	Departure from normal of period, 1st Dec., 1911, to 31st March, 1912.	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	56	57
																																IV.—United Provinces of Agra and Oudh—*concld.*
7	3	1		3	1	8	7	1	S 67° W	S 89° W	2·9	3·1	−0·2	40	+ 4	43	− 3	·296	−·059	0·2	−1·1	1	0·70	+0·30	0·12	0·23	− 0·11	0·96	1·69	− 0·73	0·12	Cawnpore.
14	1	1	1				12	2	N 75° W	N 80° W	2·9	2·8	+0·1	40	− 3	42	−11	·299	−·087	1·2	−0·9	2	0·90	+1·10	0·91	0·29	+ 0·62	1·77	2·05	− 0·28	0·55	Lucknow.
4	2		1	2		5	8	9	N 77° W	N 51° W	2·7	2·6	+0·1	49	+21	54	− 8	·335	−·100	1·2	−0·8	2	1·00	+1·00	0·44	0·36	+ 0·08	3·26	2·56	+0·70	0·21	Bahraich.
5		2		2	1	15	2	4	S 55° W	S 84° W	3·0	2·2	+0·8	53	+21	25	−13	·193	−·121	3·0	+1·7	0	0·50	−0·50	0·01	0·27	− 0·26	0·16	1·67	−1·51	0·01	Jhansi.
5		1	1	2	2	9	8	3	S 63° W	N 66° W	3·3	3·5	−0·2	46	+ 3	40	− 8	·283	−·059	1·1	−1·1	1	0·80	+0·20	0·55	0·26	+ 0·29	2·20	1·50	+0·70	0·55	Agra.
1	4	1	4	2	2	4	6	7	N 65° W	N 63° W	1·7	1·8	−0·1	27	− 5	46	− 5	·288	−·064	0	−2·5	1	0·50	+0·50	0·28	0·12	+ 0·16	1·79	1·96	−0·17	0·23	Mainpuri.
28							3		W	N 43° W	0·6	2·7	−2·1	10	−26	59	+ 1	·358	−·015	2·3	+0·1	2	1·82	+0·18	1·01	0·62	+ 0·39	1·66	2·82	−1·16	0·71	Bareilly.
22		2		4				3	N 72° E	N 41° W	2·1	2·2	−0·1	7	− 8	63	+ 1	·335	−·017	1·8	−0·6	2	1·90	+0·10	0·67	0·72	+ 0·15	3·75	4·43	−0·68	0·53	Roorkee.
																																V.—Punjab.
3			2	6	1	2	9	8	S 84° W	N 87° W	3·2	2·8	+0·4	33	−17	51	+ 2	·303	−·020	1·3	−1·7	0	1·50	−1·50	0·15	0·47	− 0·32	2·81	2·68	+0·13	0·09	Delhi.
9	1	4	1	3	1	5	7		S 58° W	N 24° W	3·4	3·4	0	20	+16	43	−14	·248	−·106	1·2	−2·0	1	1·10	−0·10	0·38	0·35	+ 0·03	3·07	1·67	+1·40	0·38	Sirsa.
2	5		2	5	1	1	4	11	N 45° W		5·4†			32		51		·291		1·6		2			0·32	1·01	− 0·69	1·97	4·16	−2·19	0·20	Patiala.
	15		3	6		1		6	N 9° E	N 37° W	4·2	2·3	+1·9	46	+22	47	−16	·267	−·120	1·7	−0·3	2	1·40	+0·60	0·33	0·81	− 0·48	2·27	5·15	−2·88	0·20	Ambala.
24	1	1	1	3	1				S 69° E	N 31° W	0·7	1·6	−0·9	13	− 9	48	−15	·275	−·096	1·9	−1·9	1	1·70	−0·70	0·28	0·97	− 0·69	2·21	4·82	−2·61	0·22	Ludhiana.
11	8	2	1	2	1	2		4	N 3° W	N 10° W	1·7	2·1	−0·4	27	+ 9	57	− 8	·311	−·063	2·3	−1·1	2	1·70	+0·30	0·37	0·76	− 0·39	2·61	3·21	−0·60	0·20	Lahore.
14	6	1	4	1			2	3	N 9° E	N 7° E	0·9	1·5	−0·6	27	− 2	64	− 3	·341	−·042	2·5	−0·3	2	2·90	−0·90	2·15	1·35	+ 0·80	5·48	6·05	−0·57	1·52	Sialkot.
16	8	2			1	1	3		N 17° W	N 39° W	2·3	2·1	+0·2	27	+ 1	59	−13	·277	−·062	4·2	+0·1	2	4·20	−2·20	0·62	2·06	− 1·44	4·33	7·99	−3·66	0·32	Rawalpindi.
12	1	4	4	1	5	2	1	1	S 59° E	N 22° E	4·8	3·7	+1·1	17	− 5	37	−21	·243	−·094	4·1	+1·3	1	1·70	−0·70	0·26	1·03	− 0·77	1·71	2·12	−1·41	0·16	Khushab.
4	6	4	3	5	3	1		5	N 45° E	N 53° E	4·1	3·9	+0·2	27	+ 5	36	−16	·217	−·110	1·9	−0·5	0	1·20	−1·20	0·09	0·46	− 0·37	1·65	1·89	−0·24	0·09	Montgomery.
21	5	4		1					N 26° E	N 50° E	0·9	1·4	−0·5	27	+ 2	46	−13	·286	−·083	2·1	+0·3	0	1·20	−1·20	0	0·38	− 0·38	2·45	1·42	+1·03	0	Multan.
																																VI.—North-West Frontier Province.
16	2	1			2	5	3	2	S 79° W	S 27° W	2·0	2·6	−0·6	23	− 2	60	−12	·274	−·085	3·6	−1·2	1	3·90	−2·90	0·10	2·13	−2·03	4·22	5·57	−1·35	0·10	Peshawar.
18	3	4		3				3	N 26° E	N 13° W	1·1	1·5	−0·4	23	− 9	62	− 3	·330	−·032	2·4	−0·8	0	2·50	−2·50	0	0·98	−0·98	1·43	2·42	−0·99	0	D. I. Khan.
																																VII.—Sind.
20	2	3	2		1	1		2	N 28° E	N 83° E	2·5	2·8	−0·3	17	− 8	34	− 7	·251	−·042	0·8	−2·0	0	0·70	−0·70	0	0·23	−0·23	0·20	1·01	−0·81	0	Jacobabad.
7	8	1			3	7	1	4	N 65° W	S 83° W	3·8	6·1	−2·3	30	+ 2	47	− 2	·360	−·023	1·6	−0·8	0	0·30	−0·30	0	0·18	−0·18	0·66	0·75	−0·09	0	Hyderabad.
1	7	5	1			2	6	9	N 31° W	N 32° W	8·6	8·3	+0·3	59	+23	64	−15	·509	−·071	2·3	0	0	0·50	−0·50	0	0·22	−0·22	0	1·38	−1·38	0	Karachi.
																																VIII.—Rajputana.
6		2	4	6	5	2	4	2	S 20° E	S 46° W	4·0	3·9	+0·1	27	+16	27	−13	·184	−·105	2·2	−0·8	0	0·50	−0·50	0·04	0·22	− 0·18	1·50	1·02	+0·48	0·02	Bikaner.
4		16	1		1	6	3		N 40° E		3·1			27		18	−17	·135		2·2		0	0·20	−0·20	0	0·06	− 0·06	0	0·59	−0·59	0	Jodhpur.
7	6	5	3			1	4	5	N 8° W	N 29° W	3·8*	3·3	+0·5	40	0	33	−11	·239	−·088	1·9	−0·7	1	0·70	+0·30	0·66	0·32	+ 0·34	2·43	1·29	+1·14	0·66	Jaipur.
22		2		2		4		1	S 18° W	S 63° W	3·2	3·0	+0·2	7	− 4	42	− 6	·274	−·063	1·0	−1·1	0	0·60	−0·60	0·05	0·18	− 0·13	0·28	1·13	−0·85	0·03	Ajmer.
22	1			1		1	3	3	N 72° W		1·5			17		23	−10	·200		1·3		0	0·40	−0·40	0	0·08	− 0·08	0·15	0·84	−0·69	0	Kotah.
																																IX.—Bombay.
1	5	11	7		1	2	2	2	N 40° E	N 7° W	7·2	6·3	+0·9	53	+21	29	− 8	·239	−·073	2·1	0	0	0·18	−0·18	0	0·04	− 0·04	0	0·39	−0·39	0	Deesa.
4	2		1	1			15	8	N 69° W	N 60° W	5·5	6·4	−0·9	66	+ 1	50	− 7	·393	−·087	1·1	−0·9	0	0·10	−0·10	0	0·07	− 0·07	0	0·35	−0·35	0	Bhuj.

* Uncorrected for scale error.

† Mean of 29 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 236 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	IX.—Bombay—*concld.*																						
2	Jamnagar	61	29·931		29·939	30·075	8th	29·783	27th	·292	75·5	91·6		60·9		76·2		30·7	99·5	21st	54·1	9th	45·4
	Dwarka	37?	29·962	+·005?	29·945	30·092	8th	29·816	27th	·276	74·3	83·0	+1·5	70·9	+1·1	76·9	+1·3	12·1	97·3	20th	63·2	7th	34·1
	Rajkot	429	29·537	+·009	29·924	29·679	8th	29·387	27th	·292	72·2	95·2	−0·4	59·1	−3·3	77·1	−1·9	36·1	102·6	21st	50·0	8th	52·6
	Veraval	*18*	29·959	+·024	29·920	30·080	7th	29·871	27th	·209	72·7	84·7	−1·6	63·9†	−1·0†	74·3†	−1·3	20·8	93·1	10th & 13th.	56·0	8th & 9th	37·1
	Bhavnagar Para	55	29·925	−·001	29·927	30·050	8th	29·789	27th	·261	73·6	96·1	+2·4	63·8	−3·0	73·9	−0·3	32·3	105·0	27th	54·5	4th	50·5
	Surat	39	29·932	0	29·914	30·033	8th	29·838	27th	·195	75·3	97·1	+0·5	65·8	−0·2	81·4	+0·1	31·3	107·4	20th	58·6	5th	48·8
	Ahmadabad	163	29·788	−·003	29·903	29·932	8th	29·647	27th	·285	73·8	93·5	+1·5	59·3‡	−6·0? ‡	76·0‡	−2·3?	39·2	105·1	21st, 23rd & 25th.	52·7	5th	52·4
26	Bombay	37	29·938	+·007	29·915	30·036	7th	29·873	24th	·163	76·8	86·9	+1·2	73·2	−0·2	80·1	+0·5	13·7	92·5	31st	69·5	8th	23·0
	Ratnagiri	110	29·853	+·013	29·902	29·925	7th	29·791	27th	·134	77·7	86·3	−1·5	71·6	−0·8	78·9	−1·1	14·7	88·8	27th	66·4	5th	22·4
	Goa	199	?	?	?	?	?	?	?	?	76·3	83·6	−3·7	73·8‖	−0·4 ‖	78·6‖	−2·1	9·8	87·1	25th	70·1	4th, 7th & 8th.	17·0
	Marmagao	*60*	29·915	+·026	29·909	29·973	8th	29·816	28th	·127	78·9	86·9	0?	73·8	−1·7	80·4	−0·9?	13·1	91·0	25th	68·7	7th	22·3
	Karwar	44	29·936	+·021	29·914	29·987	8th	29·886	28th	·101	74·7	85·8	−2·0	71·3	−1·7	78·5	−1·9	14·5	88·7	25th & 26th.	64·5	7th	24·2
27	Malegaon	1,430	28·520	0	29·906	28·603	8th	28·434	27th	·169	75·6	99·7	+2·4	62·1	−1·5	80·9	+0·5	37·6	105·9	21st & 24th.	50·1	5th	55·8
	Ahmednagar	2,154	27·813	+·022	29·887	27·880	8th	27·733	27th	·142	75·4	96·9	+3·1	62·1	−0·4	79·5	+1·3	34·8	103·1	25th	51·0	6th	52·1
	Poona	1,846	28·111	−·002	29·922	28·181	7th	28·041	28th	·140	67·8	97·2	−0·5	61·9	−2·0	79·5	−1·3	35·3	104·0	24th & 25th.	54·3	4 days	49·7
	Sholapur	1,590	28·356	+·006	29·877	28·434	7th	28·292	27th	·142	78·5	100·1	−0·3	69·4	+0·1	81·7	−0·1	30·7	104·8	25th	60·1	5th	44·7
	Bijapur	*1,948*	28·000	+·013	29·863	28·065	8th	27·937	28th	·128	78·3	99·6	+3·2	70·4	−0·2	85·0	+1·5	29·2	104·2	24th	59·3	6th	44·9
	Belgaum	2,539	27·420	+·004	29·858	27·480	11th	27·351	28th	·129	74·7	94·1	+0·2	61·6	−2·6	77·9	−1·2	32·5	99·3	24th	51·0	7th	48·3
	X.—Central India.																						
21	Neemuch	1,624	28·318	+·007	29·915	28·440	9th	28·125	27th	·315	70·2	90·9	−0·5	58·8	−2·7	74·8	−1·6	32·1	100·9	26th	43·0	4th	57·9
	Indore	1,823	28·122	+·011	29·897	28·222	8th	28·015	27th	·207	74·3	92·5	0	59·5	−0·9	76·0	−0·5	33·0	100·6	26th	45·1	5th	55·5
22	Nowgong	754	29·178	+·009	29·915	29·336	9th	29·014	27th	·322	68·1	90·0	−2·4	56·8	−4·0	73·4	−3·2	33·2	101·0	25th	46·0	5th	55·0
	Satna	1,041	28·874	−·001	29·893	29·025	9th	28·692	27th	·333	69·3	90·5	−0·8	59·4	−1·8	74·9	−1·3	31·1	102·3	25th	48·7	5th	53·6
	XI.—Central Provinces.																						
23	Buldana	2,132	27·711		29·751?	27·798	10th	27·629	27th	·169	77·9	94·4		70·0		82·2		24·4	101·4	25th	59·8	3rd	41·6
	Akola	930	29·007	+·007	29·894	29·093	8th	28·910	27th	·183	77·4	100·8	+1·6	65·4	−0·6	83·1	+0·5	35·4	108·7	26th	50·1	5th	58·6
	Amraoti	1,215	28·704	−·003	29·816?	28·810	10th	28·608	27th	·202	77·0	99·3	+1·2	69·8	+0·6	84·5	+0·9	29·5	106·8	26th	59·8	6th	47·0
24	Khandwa	1,044	28·898	+·008	29·905	28·994	8th	28·786	27th	·208	75·4	98·3	+0·7	63·9	−1·0	81·1	−0·1	34·4	106·2	26th	46·1	5th	60·1
	Hoshangabad	1,006	28·938	+·006	29·915	29·041	9th	28·802	27th	·239	70·9	95·4	−0·3	62·7	−1·9	79·0	−1·1	32·7	103·6	25th & 26th.	47·4	6th	56·2
	Saugor	1,807	28·111	−·007	29·875	28·230	9th	27·955	27th	·275	73·1	90·6	−1·5	63·6	−0·9	77·1	−1·2	27·0	99·3	24th, 25th & 26th.	55·1	6th	44·2
	Jubbulpore	1,327	28·577	−·018	29·852	28·688	10th	28·428	27th	·260	68·6	91·7	−1·1	59·1	−1·7	75·4	−1·4	32·6	100·8	26th	45·3	5th	55·5
	Seoni	2,033	27·908	+·006	29·884	28·007	10th	27·799	27th	·208	74·0	93·2	0	60·1	−3·4?	76·7	−1·7?	33·1	101·6	26th	53·0	6th & 14th.	48·6
	Nagpur	1,01	28·911	+·007	29·884	29·022	10th	28·813	27th	·209	76·8	98·3	0	66·6	−1·2	82·4	−0·6	31·7	106·6	26th	55·8	5th	50·8
25	Pendra	2,123	27·893		29·860	28·017	10th	27·769	27th	·248	73·2	89·2		62·6		75·9		26·6	97·8	26th & 27th.	52·2	5th	45·6
	Raipur	970	28·952	+·002	29·883	29·065	10th	28·835	28th	·230	74·4	95·4	−1·1	68·3	−0·3	81·8	−0·7	27·1	102·7	26th	59·6	5th	43·1
	Chanda	*634*	29·288	0	29·874	29·391	10th	29·210	27th & 28th.	·181	77·8	98·8	−0·9	65·3	−1·7	82·1	−1·3	33·5	105·5	26th	55·0	5th & 7th	50·5
	Jagdalpur	1,813	28·137		29·883	28·240	10th	28·053	28th	·187	76·9	96·2		66·8		81·5		29·4	102·2	26th	58·6	31st	43·6
	XII.—Hyderabad.																						
23	Aurangabad	1,905	28·062	−·007	29·893	28·135	8th	27·980	27th	·155	78·0	100·1 ††	−1·8 ††	66·7	+1·3	84·7 ††	+1·5	33·4	102·9	26th	50·2	5th	52·7
	Nizamabad	1,218	28·681		29·871	28·752	10th	28·605	27th	·147	78·4	100·1	+2·5	67·9	−0·4	84·0	+1·1	32·2	106·4	26th & 27th.	57·7	5th	48·7

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 11 days.
‖ " " 28 "
†† " " 15 "

B—*continued.*

in India, etc., in March, 1912—continued.

Wind direction. Number of winds from: Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec., 1911 to 31st March, 1912. (53)	Normal rainfall for period, 1st Dec. to 31st March. (54)	Departure from normal of period, 1st Dec., 1911 to 31st March, 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																IX.—Bombay—*concld.*
1	2	7	3		1	2	8	7	N 34° W		7·2			37		52		·481		0·2		0			0	0·17	−0·17	0	0·42	−0·42	0	Jamnagar.
	9	1	1		1	2	6	11	N 42° W		9·0			66		70	−6	·600		1·5		0			0·08	0·06	+0·02	0·10	0·68	−0·58	0·08	Dwarka.
2	3	4	2		1	2	9	8	N 51° W	N 25° W	6·5	5·6	+0·9	46	−8	48	−16	·364	−·150	1·4	−0·7	0	0	0	0·01	0·05	−0·04	0·01	0·27	−0·26	0·01	Rajkot.
17	9						3	2	N 23° W	N 13° W	6·6	5·6	+1·0	37	−28	60	−2	·484	−·028	1·0	−0·8	0	0	0	0	0·03	−0·03	0	0·19	−0·19	0	Veraval.
5	5	2	1			1	7	10	N 46° W	N 85° W	2·9	6·3	−3·4	60	−5	44	−16	·375	−·123	0·7	−0·6	0	0·10	−0·10	0	0·11	−0·11	0·02	0·37	−0·35	0	Bhavnagar Para.
3	6	5	1	4	4	4	2	2	N 41° E	N 46° W	3·3	4·5	−1·2	3	−33	64	+1	·569	+·013?	0·5	−0·7	0	0	0	0	0·02	−0·02	0	0·22	−0·22	0	Surat.
5	3	8	3		1	2		9	N 4° E	N 1° E	3·9	3·4	+0·5	43	+9	42	−1	·356	−·020	0·4	−1·6	0	0	0	0	0·06	−0·06	0	0·24	−0·24	0	Ahmadabad.
	4	11	7	6	2			1	N 71° E	N 40° E	6·6	8·0	−1·4	62	+8	72	−3	·609	−·033	1·1	−0·7	0	0	0	0	0·02	−0·02	0	0·21	−0·21	0	Bombay.
3	1	8	4	7	2				S 89° E§	N 22° E	6·6	6·1	+0·5	58	+36	71	+2	·572	−·006	1·7	+0·3	0	0·10	−0·10	0	0·05	−0·05	0	0·28	−0·28	0	Ratnagiri.
	2	8	21						N 74° E	N 58° E	4·8	4·6	+0·2	92	+42	82	+6	·738	−·027	2·9	+0·9	0			0	0	0	0	0·32	−0·32	0	Goa.
3	6	9	8		2			3	N 45° E	N 72° E	5·9*	6·6	−0·7	56	+31	80	+1	·784	−·017	3·8	+1·6	0			0	0	0	0	0·23	−0·23	0	Marmagao.
18	6	6			1				N 25° E	N 43° E	2·8	3·4	−0·6	33	−28	85	+3	·731	+·005	1·8	+0·3	0	0	0	0	0	0	0·15	0·26	−0·11	0	Karwar.
3			1			8	18	1	S 79° W	N 66° W	6·5	5·6	+0·9	76	+11	28	−25	·218	−·219?	0	−1·7	0	0·10	−0·10	0	0·04	−0·04	0·47	0·46	+0·01	0	Malegaon.
	4				1		5	21	N 49° W	N 1° W	4·5	6·6	−2·1	89	+39	26	−28	·235	−·276?	0·3	−0·8	0	0·30	−0·30	0	0·18	−0·18	0·04	0·95	−0·91	0	Ahmadnagar.
20					5	4	2		S 76° W	S 87° W	6·4	6·2	+0·2	30	−3	52	+11	·344	+·007	0·1	−1·1	0	0·30	−0·30	0	0·04	−0·04	0·08	0·34	−0·26	0	Poona.
1	1	5		10	1		1	12	N 13° E	N 14° E	8·4	5·8	+2·6	17	−5	35	+1	·340	−·007	0·9	−0·4	0	0·60	−0·60	0	0·20	−0·20	2·08	0·82	+1·26	0	Sholapur.
4	6	1		3	3	2	3	9	N 51° W	N 84° W	5·5	3·6	+1·9	33	−7	41	−14	·385	−·148?	0·6	−0·5	0	0·70	−0·70	0	0·31	−0·31	0·26	0·66	−0·40	0	Bijapur.
22		3	4	1			1		N 76° E	N 8° E	6·6	8·2	−1·6	20	+9	47	−1	·379	−·017	0·6	−0·3	0	0·90	−0·90	0	0·34	−0·34	0·64	0·81	−0·17	0	Belgaum.
																																X.—Central India.
7	1	7	9			4	2	1	N 65° E	S 34° E	5·8	5·7	+0·1	30	+5	36†	−1	·270†	−·026	1·3	−0·5	0	0·10	−0·10	0	0·08	−0·08	0·17	0·65	−0·48	0	Neemuch.
6	3	9	4		1		5	3	N 17° E	N 7° W	2·8	2·5	+0·3	23	+4	32	−8	·271	−·049	0·2	−1·1	0	0·10	−0·10	0	0·04	−0·04	0·22	0·60	−0·38	0	Indore.
3	3		4	1	11	4	4	1	S 15° W	S 80° W	1·8	1·8	0	37	−6	44	−6	·307	−·053	1·5	0	0	0·70	−0·70	0	0·27	−0·27	0·45	1·97	−1·52	0	Nowgong.
11	2				1	10	5	2	S 71° W	N 54° W	2·1	3·9	−1·8	46	−11	45	+5	·331	+·027	1·4	+0·1	0	1·00	−1·00	0·06	0·39	−0·33	0·57	2·50	−1·93	0·06	Sutna.
																																XI.—Central Provinces.
	3	2	2	1	2	1	10	10	N 60° W		5·0	5·4	−0·4	52		21		·196		0·3		0			0	0·19	−0·19	0·03	1·28	−1·25	0	Buldana.
7		4	3	2	4		4	7	N 15° W	N 45° W	4·0	3·5	+0·5	20	+9	23	−12	·216	−·092	0·1	−1·6	0	0·90	−0·90	0	0·35	−0·35	0·89	1·61	−0·72	0	Akola.
5	1	5	6	2	1	1	6	4	N 19° E	N 72° E	5·6	3·5	+2·1	13	−9	30¶	−9	·270¶	−·098	0·1	−1·3	0	0·80	−0·80	0	0·30	−0·30	0·43	1·53	−1·10	0	Amraoti.
6	1	9	1		1	2	7	4	N 28° W	N 40° W	5·0	3·7	+1·3	30	+1	24	−11	·212	−·078	0·2	−0·9	0	0·30	−0·30	0	0·12	−0·12	0·02	0·77	−0·75	0	Khandwa.
8		7	6	3		3	3	1	N 79° E	N 63° E	2·8	1·9	+0·9	23	−2	32	−14	·244	−·094	0·2	−1·5	0	0·40	−0·40	0	0·20	−0·20	0·50	1·32	−0·82	0	Hoshangabad.
1	3	4	7	5	1	3	6	1	S 89° E	S 69° E	5·6	3·1	+2·5	15	−3	23	−16	·188	−·119	0·8	−0·7	0	0·60	−0·60	0	0·31	−0·31	0·76	1·85	−1·09	0	Saugor.
10	2	2	2	6	5		2	2	S 44° E	S 23° E	1·3	2·0	−0·7	20	−9	45	−3	·320	−·037	0·8	−1·0	0	1·20	−1·20	0	0·41	−0·41	2·65	2·16	+0·49	0	Jubbulpore.
2	5	8	5	2	2	2	1	4	N 38° E	N 37° E	3·9	2·3	+1·6	37	+10	27	−20	·231	−·151	0·5	−1·4	0	1·70	−1·70	0	0·60	−0·60	3·01	2·52	+0·49	0	Seoni.
1	3	7	5	1				3	N 43° E**	N 14° E	3·3	3·6	−0·3	65	+33	29	−12	·269	−·110	0·6	−1·3	0	1·10	−1·10	0	0·50	−0·50	4·58	1·83	+2·75	0	Nagpur.
6	7	5	1	1	1	2	1	7	N 10° W		4·2			40		31		·254		1·1		0			0·01	1·44	−1·43	5·10	4·19	+0·91	0·01	Pendra.
15	2	1		1		8	1	3	S 78° W	N 59° W	2·9	3·6	−0·7	23	+12	40	−2	·339	−·030	0·1	−2·1	0	1·80	−1·80	0	0·65	−0·65	3·05	1·77	+1·28	0	Raipur.
14		1	4	3	1	1	3	4	S 45° E	N 46° E	1·8	2·2	−0·3	1	−31	39	−8	·376	−·058	0·4	−1·1	0	1·40	−1·40	0	0·99	−0·99	3·97	2·01	+1·96	0	Chanda.
8	2		2	6	3	3	7		S 22° W					27		58		·523		0·7		0			0			2·26			0	Jagdalpur.
																																X.—Hyderabad.
4	3	4	6	3	1	3	4	3	N 45° E		8·4			13		26	−7?	·242		1·2		0	0·50	−0·50	0	0·24	−0·24	0	0·97	−0·97	0	Aurangabad.
18				1	2		6	4	N 89° W		2·7			26		37	−16	·357		0·6		0	0·80	−0·80	0	0·56	−0·56	3·56	1·22	+2·34	0	Nizamabad.

** Mean of 20 days. * Uncorrected for scale error. § Mean of 25 days. † Mean of 30 days. ¶ ,, 21 ,,

Table

(2) Abstract of observations taken at 8 hrs. at 236 stations

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XII.—Hyderabad—*concld.*																						
28	Bidar	*2,165*									81·1	98·4		72·3		85·3		26·1	102·5	22nd & 26th.	67·4	4th & 6th.	35·1
29	Gulbarga	1,503	28·443	+·014	29·875	28·515	11th	28·382	28th	·133	79·8	101·1	+1·9	70·4	−0·3	85·7	+0·8	30·7	106·0	22nd	59·8	7th	46·2
	Raichur	*1,311*	28·637	+·031?	29·879	28·713	11th	28·561	28th	·152	81·8	100·2	+1·4	74·1	+0·1	87·2	+0·7	26·1	104·5	28th	65·1	6th	39·4
	Hyderabad (Deccan)	1,690	28·246	+·008	29·864	28·337	11th	28·175	28th	·162	77·4	98·7	+0·8	71·3	+1·7	85·0	+1·3	27·4	103·3	23rd & 28th	65·7	7th	37·6
	Hanamkonda	877	29·060	−·006	29·884	29·159	10th	28·986	27th	·173	79·6	99·2	+1·7	72·7	+0·5	86·0	+1·1	26·5	105·5	27th	66·2	7th	39·3
	XIII.—Mysore.																						
30	Chitaldrug	2,405	27·574	+·018	29·866	27·627	7th	27·521	30th	·106	77·9	95·9	+1·5	70·3	+0·1	83·1	+0·8	25·6	98·6	23rd & 24th	63·3	6th	35·3
	Hassan	3,149	26·879	+·028	29·883	26·932	11th	26·839	14th	·093	72·4	92·1	+1·1	63·4	+1·2	77·8	+1·1	28·7	94·9	25th	57·9	6th	37·0
	Bangalore	3,021	27·003	+·017	29·881	27·057	11th	26·950	28th	·107	74·3	92·2	+1·5	66·4	+1·7	79·3	+1·6	25·8	97·3	29th	59·8	11th	37·5
	Mysore	2,518	27·482	+·019	29·895	27·532	11th	27·439	28th	·093	74·9	94·4	+0·9	68·2	+1·0	81·3	+0·9	26·2	98·0	29th	63·0	2nd	35·0
	XIV.—Madras.																						
31	Mangalore	65	29·908	+·007	29·904	29·962	6th	29·849	28th	·113	81·4	89·5	−1·1	75·9	+1·1	82·7	0	13·6	92·3	28th	71·4	5th	20·9
	Calicut	27	29·941	+·006	29·897	29·994	11th	29·882	29th	·112	80·6	88·8	−1·5	76·5	+0·4	82·7	−0·5	12·3	91·8	24th	70·1	12th	21·7
	Cochin	9	29·958	+·006	29·894	29·999	6th	29·911	29th	·088	82·5	91·6	+0·4	78·6	+1·6	85·1	+1·0	13·0	93·7	26th & 31st	76·7	6 days	17·0
	Trivandrum	198	29·764	+·027	29·892	29·810	10th	29·700	16th	·110	81·1	88·4	+1·3	77·7	+3·0	83·1	+2·1	10·7	90·0	27th, 30th & 31st.	74·0	10th	16·0
32	Tinnevelly	168	29·804	+·020	29·901	29·872	10th	29·730	28th	·142	83·0	98·3	+1·8	76·9	+1·3	87·6	+1·5	21·4	103·2	3rd	71·9	2nd & 27th.	31·3
	Pamban	37	29·925	+·009	29·890	30·003	9th	29·858	29th	·145	83·0	91·7	+2·9	76·4	+0·3	84·0	+1·6	15·3	93·2	28th	75·0	26th	18·2
	Madura	447	29·530	+·012	29·808	29·594	10th	29·466	28th	·128	83·0	98·3	+1·6	75·5	+2·7	86·9	+2·1	22·8	103·5	15th	70·1	12th	33·4
	Pudukkottai	318	29·657		29·907	29·726	10th	29·539	28th	·137	82·2	97·7		75·4		86·6		22·2	101·0	31st	71·4	17th	29·6
	Negapatam	31	29·934	−·004	29·894	29·988	10th	29·859	29th	·129	82·7	90·9	+2·2	78·0	+2·5	84·4	+2·3	12·9	93·5	31st	70·0	17th	23·5
	Trichinopoly	255	29·728	+·009	29·915	29·790	10th	29·661	29th	·129	82·9	99·5	+1·6	75·0	+2·2	87·2	+1·9	24·5	103·6	30th	69·3	17th	34·3
	Coimbatore	1,341	28·621	−·008	29·896	28·687	10th	28·552	29th	·135	77·8	97·3	+1·1	70·9	+1·1	84·1	+1·1	26·4	100·5	27th	64·8	11th	35·7
	Salem	940	29·065	+·011	29·936	29·130	11th	28·999	28th	·131	81·6	100·7	+2·1	74·5	+3·7	87·6	+2·9	26·2	104·0	30th	65·8	17th	38·2
	Cuddalore	37	29·941	+·025?	29·908	30·017	10th	29·865	29th	·152	80·9	90·5	+1·2	74·4	+2·2	82·4	+1·7	16·1	95·3	30th	67·2	17th	28·1
	Vellore	707	29·257		29·902	29·345	10th	29·192	28th	·153	78·1	96·6		71·4		84·0		25·2	101·2	30th	61·5	17th	39·7
	Madras	22	29·949	−·003	29·903	30·035	10th	29·882	29th	·153	81·5	91·6	+1·6	74·4	+2·2	83·0	+1·9	17·2	95·0	23rd	68·5	17th	26·5
33	Cuddapah	433	29·506	+·009	29·874	29·602	11th	29·410	29th	·192	81·6	103·9	+2·2	76·7	+1·7	90·3	+1·9	27·2	109·2	30th	66·1	18th	43·1
	Bellary	1,475	28·464	+·004	29·867	28·527	11th	28·403	29th	·124	80·6	102·4	+2·1	73·3	+1·2	87·9	+1·7	29·1	105·0	22nd, 23rd & 28th.	66·3	6th	39·7
	Kurnool	923	29·002	+·002	29·865	29·078	11th	28·923	27th	·155	79·9	102·2	+1·3	73·0	+1·5	87·6	+1·4	29·2	106·7	23rd	66·1	6th	40·6
34	Nellore	66	29·880	+·008	29·881	29·996	10th	29·778	29th	·218	80·1	95·9	−0·3	74·2	+1·8	85·0	+0·7	21·7	100·6	30th	69·1	17th	31·5
	Masulipatam	15	29·951	+·004	29·901	30·054	10th	29·870	29th	·184	82·1	92·8	+1·4	73·6	+1·3	83·2	+1·3	19·2	97·3	27th	67·7	13th	29·6
	Cocanada	26	29·949	+·015	29·912	30·049	10th	29·875	28th	·174	80·8	94·1	+2·4	74·9	+1·4	84·5	+1·9	19·2	98·2	15th	69·1	20th	29·1
	Waltair (Vizag.)	*226*	29·733	+·002	29·901	29·843	10th	29·664	29th	·179	81·5	89·1		75·9		82·5		13·2	96·6	15th	69·9	31st	26·7
	Calingapatam	19	29·934		29·859	30·055	10th	29·858	29th	·197	79·4	92·5		73·9		83·2		18·6	98·3	14th & 15th	67·8	13th	30·5
	Gopalpur	33	29·892	+·001	29·867	30·037	10th	29·799	28th	·238	76·8	86·9	+0·3	73·2	0	80·0	+0·1	13·7	91·2	14th & 16th	69·0	12th	22·2

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 3,000 feet.

B—*continued.*

in India, etc., in March, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 31st March, 1912.	Normal rainfall for period, 1st Dec. to 31st March.	Departure from normal of period, 1st Dec., 1911 to 31st March, 1912.	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	56	57
																																XII.—Hyderabad—*contd.*
1	3	3		6		10	2	6	S 74° W		5·0			23		32		·312		1·0		0	1·40	− 1·40	0	0·44	− 0·44	1·86	1·20	+ 0·66	0	Bidar.
1	4	5	8	5	3	2		3	N 82° E	N 79° E	6·1	5·8	+0·3	37	+16	49	+ 6	·516	+·075	0	−1·0	0	0·80	− 0·80	0	0·39	− 0·39	1·53	0·38	+ 0·65	0	Gulbarga.
	1	1		5	8	7	4	5	S 36° W	S 3° W	5·4	5·3	+0·1	46	+18	47	− 2	·507	−·003	1·0	−0·4	0	0·70	− 0·70	0	0·27	− 0·27	0·83	0·75	+ 0·08	0	Raichur.
26		2		1			1	1	N 18° E	S 47° E	1·7	3·1	−1·4	5	− 7	50	− 7	·467	−·055	0·2	−1·0	0			0	0·64	− 0·64	2·35	1·28	+ 1·07	0	Hyderabad (Deccan).
6	1		1	15	7			1	S 34° E		5·4			62		57	− 8	·577		1·2		0	0·70	− 0·70	0	0·18	− 0·18	3·42	1·05	+ 2·37	0	Hanamkonda.
																																XIII.—Mysore.
7			1	2	1	6	13	1	S 69° W	S 56° W	3·1	4·7	−1·6	53	+16	46	− 5	·436	−·054	0·8	−0·3	0	0·50	− 0·50	0	0·21	− 0·21	0·90	0·84	+ 0·06	0	Chitaldrug.
13	2	1	2	1		4	3	5	N 63° W	S 37° E	3·6	2·2	+1·4	23	0	67	0	·527	−·021	1·5	−0·5	0	0·90	− 0·90	0	0·24	− 0·24	0·50	1·25	− 0·75	0	Hassan.
			1	5	6	13	5	1	S 30° W	S 12° E	4·5	3·6	+0·9	69	+19	65	− 1	·551	+·008	1·0	−0·6	1	1·00	0	1·56	0·46	+ 1·10	2·36	1·40	+ 0·96	1·56	Bangalore.
6				3	6	10	5	1	S 36° W	S 39° W	4·8	5·8	−1·0	59	+21	71	+ 3	·614	+·036	2·1	+0·5	1	1·00	0	0·40	0·20	+ 0·20	0·96	0·94	+ 0·02	0·40	Mysore.
																																XIV.—Madras.
2	4	7	16	2					N 71° E	N 70° E	4·5	2·2	+2·3	76	+36	71	− 7	·765	−·043	1·5	−0·9	0	0·20	− 0·20	0	0·10	− 0·10	1·03	0·68	+ 0·35	0	Mangalore.
18	1	4	4	1				3	N 46° E	N 42° E	4·7	7·7	−3·0	27	−20	80	+ 4	·834	+·022	2·1	+0·1	0	0·90	− 0·90	0	0·57	− 0·57	0·73	2·25	− 1·52	0	Calicut.
	5	25	1						N 39° E	N 31° E	6·3*	5·0	+1·3	99	+24	75	− 2	·829	−·019	2·6	+0·5	2	2·60	− 0·60	1·08	2·07	− 0·99	6·23	5·07	+ 1·16	0·95	Cochin.
10	11					1	1	8	N 25° W	N 24° E	3·3*	4·0	−0·7	59	+12	75	− 2	·794	−·001	2·8	+0·4	1	2·60	− 1·60	0·31	1·70	− 1·39	6·82	5·17	+ 1·65	0·23	Trivandrum.
9	8	2	1	1			3	7	N 20° W	N 25° W	3·0	3·4	−0·4	49	−11	67	− 6	·757	−·008	2·2	−0·1	1	2·30	− 1·30	0·25	1·06	− 0·81	5·95	6·72	− 0·77	0·25	Tinnevelly.
10		2	7	4	6	2			S 48° E	S 87° E	3·6	5·4	−1·8	46	−23	73	− 4	·816		2·6		2	0·90	+ 1·10	0·90	0·54	+ 0·36	12·49	11·04	+ 1·45	0·58	Pamban.
6	2	7	8	3	2		1	2	N 72° E	N 28° E	4·0	2·8	+1·2	45	− 4	73	0	·821	+·055	5·2	+3·0	0	1·00	− 1·00	0	0·54	− 0·54	4·50	3·28	+ 1·22	0	Madura.
8	1	8	1	1	4	6		2	S 63° E		5·0			6		77		·844		2·5		0			0·03	0·44	− 0·41	7·85	3·38	+ 4·47	0·03	Pudukkottai.
1		2		7	1	10	1	9	S 57° W	S 85° E	3·9	4·6	−0·7	30	− 6	74	− 3	·823	−·004	4·4	+0·2	0	0·50	− 0·50	0	0·38	− 0·38	31·70	14·14	+17·56	0	Negapatam.
7	5	3	7	1	8				S 80° E	N 31° E	2·2*	2·8	−0·6	33	+11	70	− 3	·790	+·043	2·4	−0·4	0	0·50	− 0·50	0	0·45	− 0·45	4·34	4·40	− 0·06	0	Trichinopoly.
15	3	12	1						N 39° E	N 84° E	3·1	2·1	+1·0	46	+ 6	86	+ 6	·821	+·091	2·5	0	0	1·10	− 1·10	0	0·44	− 0·44	2·75	2·56	+ 0·19	0	Coimbatore.
8	2	1	11	1	2	1	5		S 84° E	N 66° E	3·8	3·9	−0·1	23	−17	74	+ 3	·797	+·086	3·2	+1·5	0	1·20	− 1·20	0	0·52	− 0·52	0·69	2·28	− 1·59	0	Salem.
3	1				9	6	7	5	S 59° W	N 86° W	6·1	1·8	+4·3	56	+ 6	78	− 7	·825	−·010?	2·6	−0·6	0	0·40	− 0·40	0	0·20	− 0·20	12·96	9·70	+ 3·26	0	Cuddalore.
27	1						1	2	N 45° W		2·0			10		74		·707		1·0		0	0·30	−0·30	0	0·15	− 0·15	5·38	5·75	− 0·37	0	Vellore.
	1				9	18	3		S 38° W	S 25° W	4·9*	4·5	+0·4	86	+32	81	+ 3	·877	+·067	1·7	−0·8	0	0·80	− 0·80	0	0·18	− 0·18	9·20	7·66	+ 1·54	0	Madras.
	1	7	6	8	1	3	3	2	S 82° E	S 72° E				33	−24	54	− 4	·654	0	1·8	+0·6	0	0·20	− 0·20	0	0·05	− 0·05	0·38	1·59	− 1·21	0	Cuddapah.
5	3	1		2	4	2	6	8	N 77° W	S 45° W	3·3	3·4	−0·1	37	+26	48	− 2	·499	−·030	0·5	−0·9	0	0·50	− 0·50	0	0·19	− 0·19	0·31	0·50	− 0·19	0	Bellary.
8			6	2	4	5	2	4	S 9° W	E	4·4*			20	+ 9	47	− 6	·479	−·067	0·6	−0·6	0	0·60	− 0·60	0	0·28	− 0·28	0·24	0·85	− 0·61	0	Kurnool.
3					27	1			S 1° W	S 32° E	5·4*	4·7	+0·7	92	+24	80	− 1	·820	−·003	1·0	−1·6	0	0·30	− 0·30	0	0·11	− 0·11	3·94	4·77	− 0·83	0	Nellore.
2	1	1	1	5	14	5		2	S 1° E	S 20° E	5·3	4·0	+1·3	58	+15	80	− 3	·865	+·008?	2·5	−0·2	0	0·40	− 0·40	0	0·22	− 0·22	0·87	1·89	− 1·02	0	Masulipatam.
13	1	1		1	3	3	5	4	S 81° W	N 52° W	3·8	4·7	−0·9	30	−13	78	+ 3	·826	+·075	7·1	+4·6?	0	0·70	− 0·70	0·03	0·54	− 0·51	1·46	2·17	− 0·71	0·03	Cocanada.
						28	2	1	S 50° W	S 88° W	8·6			96	+21	67	− 5	·711	−·031	3·4	+0·7	1	0·60	+ 0·40	1·45	0·35	+ 1·10	2·76	3·13	− 0·37	1·44	Waltair. (Vizag.).
	1		1		2	10	12	5	S 77° W		9·1			71		78		·783		1·3		0			0	0·17	− 0·17	1·12	3·51	− 2·39	0	Calingapatam.
1	5	1			7	11		6	S 67° W	S 89° W	11·8	10·1	+1·7	40	− 2	86†	+ 8	·793†	+·053	1·0	−1·5	1	1·00	0	0·34	0·57	− 0·23	3·17	2·24	+ 0·93	0·94	Gopalpur.

* Uncorrected for scale error. † Mean of 26 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 236 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Bay Islands.																						
1	P. V. Fraser	8	29·941†		29·867†	30·090	10th	29·840	13th & 27th.	·250	80·3												
	Port Blair	58	29·919	+·035?	29·907	29·962	20th	29·847	12th	·115	78·6	88·5	−2·6	75·8	−1·6	81·8	−2·1	13·5	91·2	22nd & 31th.	72·0	27th	19·2
	Slipper Island	90	29·881		29·906	29·931	19th	29·798	13th	·133	79·7	86·2		76·6		81·4		9·5	88·1	22nd	73·6	1st	14·5
	Kashmir.																						
14	Muzaffarabad	2,475	27·576		30·118	27·689	17th	27·290	27th	·399	53·5	73·3		42·8		58·1		30·5	84·1	25th	38·3	3rd	45·8
	Srinagar	5,204	24·926	−·004	24·897	25·081	10th	24·599	27th	·482	39·7	55·2	−0·2	35·7	−1·4	45·5	−0·8	19·5	68·1	22nd	28·6	4th	39·5
	Dras	*10,059*	20·799	+·022	20·767	21·039	19th	20·450	27th	·589	10·4‡	33·9‖		0·2¶		22·5¶		33·7	40·9	25th	−17·5	3rd	58·4
	Leh	11,503	19·659	−·033	19·627	19·904	19th	19·356	27th	·548	26·2	45·9	+2·8	19·2	−1·9	32·6	+0·5	26·7	58·4	23rd	10·0	4th	48·4
	Skardu	*7,505*	22·909	+·024	22·879	23·168	19th	22·517	27th	·651	36·5	48·3	−1·5	31·8	−0·7	40·1	−1·1	16·5	58·5	26th	22·1	4th	36·4
	Gilgit	4,890	25·133		25·106	25·395	18th	24·640	27th	·755	47·0	62·1	+0·4	43·3	−2·0	52·7	−0·8	18·8	71·7	26th	36·2	3rd & 6th	35·5
	Baluchistan.																						
16	Quetta	5,502	24·680	+·027	24·640	24·770	11th	24·534	27th	·236	48·2	64·1	−0·4	36·7	−3·3	50·4	−1·9	27·4	79·1	31st	26·2	7th	52·9
	Chaman	4,311	25·749	+·033	25·711	25·877	11th	25·586	31st	·291	51·3	66·7	+0·4	44·3	−1·6	55·5	−0·6	22·4	83·3	31st	31·3	6th	52·0
	Kalat	6,630	23·842		23·804	23·949	11th	23·739	5th	·210	34·8	60·4		?		?			75·5	31st	?	?	?
	Dalbandin	2,779	27·216		30·007	27·411	11th	27·018	31st	·393	53·6	79·7		46·8		63·3		32·9	94·8	30th	35·8	6th & 13th.	59·0
	Pasni		29·989		29·949	30·148	11th	29·860	27th	·288	67·4	84·7		63·4		74·1		21·3	94·5	29th	56·0	13th	38·5
	Panjgur		26·813		26·771	26·971	11th	26·712	31st	·259	53·0	75·9		49·4		62·7		26·5	91·8	31st	36·0	7th	53·8
	Robat		26·916		26·874	27·109	12th	26·650	30th	·459	55·5	75·6		50·5		63·0		25·1	92·5	31st	38·8	6th	53·7
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*									43·8	59·7		38·3		49·0		21·4	70·3	21st	32·2	6th & 7th	38·1
	Para Chinar	6,000	24·458		24·434	24·597	10th	24·260	27th	·337	45·5	59·9		37·8		48·8		22·1	72·2	22nd	28·1	4th	44·1
	Cherat	*4,956*	25·737	+·023	25·705	25·896	9th	25·483	27th	·413	52·0	62·3	+0·8	47·3	−0·3	54·8	+0·1	15·0	74·2	22nd	36·4	3rd	37·8
	Murree	8,333	23·834	−·013	23·802	23·987	10th	23·605	27th	·382	46·8	56·0	−2·3	44·0	+0·7	50·0	−0·8	12·0	65·6	21st	34·7	3rd	30·9
	Simla	7,232	23·091	−·007	23·053	23·229	10th	22·900	27th	·329	48·2	56·0	−0·4	42·4	−3·6	49·2	−2·0	13·6	66·6	25th	33·1	3rd	33·5
	Sarain		23·145		23·107	23·287	10th	22·997	27th	·290	38·5	55·1		34·0		44·5		21·1	67·5	23rd	27·9	3rd	39·6
	Kalabagh										Observations not received.												
	Chakrata	7,022	23·287	−·006	23·247	23·410	9th & 10th.	23·134	27th	·276	47·5	64·1	+2·4	41·4	−2·9	52·7	−0·3	22·7	72·7	22nd & 23rd.	31·7	3rd	41·0
	Mukteswar	7,592	22·622	−·028	22·781	22·945	10th	22·693	28th	·252	48·8	60·8	+0·8	40·8	−1·7	50·8	−0·5	20·0	71·5	23rd	29·5	29th	42·0
	Darjiling	7,376	22·978	−·027	22·933	23·086	20th	22·853	14th	·233	49·2	57·2	+0·7	42·0	−0·3	49·6	+0·2	15·2	65·3	28th	36·2	6th & 31st.	29·1
	Shillong	4,920	25·138		25·090	25·255	9th	25·033	13th	·222	58·8	70·9		50·5		60·7		20·4	77·9	14th	37·7	6th	40·2
	Cherrapunji	4,309	25·719		25·670	25·829	9th	25·608	14th	·221	60·2	68·2		52·9		60·5		15·3	75·7	27th	33·1	27th	42·6
	Mamyo	3,545	26·460	−·016	26·405	26·545	19th	26·371	13th	·174	62·3	82·2	+0·8	52·3	+2·7	67·3	+1·7	29·9	89·0	17th	44·6	8th	44·4
	Pachmarhi	3,528	26·491	−·004	26·438	26·585	10th	26·395	27th	·190	70·5	84·5	+0·1	58·5	−1·9	71·5	−0·9	26·0	93·5	26th	42·1	5th	51·4
	Mount Abu	3,945	26·104	+·012	26·054	26·199	8th	25·931	27th	·268	66·9	76·3	−1·4	60·4	−1·1	68·4	−1·3	15·9	84·2	23rd	50·9	8th	33·3
	Mercara	3,781	26·249	−·017	26·182	26·294	8th & 20th.	26·212	27th	·082	70·0	85·8	+1·2	61·8	0	73·8	+0·6	24·0	90·5	17th	59·0	30th	31·5
	Ootacamund	*7,397*	23·119		23·055	23·158	25th	23·084	14th	·074	60·1	72·1		48·7		60·4		23·4	76·0	27th	45·2	6 days	30·8
	Kodaikanal	7,688	22·882	+·006	22·817	22·921	21st	22·842	15th	·079	58·4	69·5	+0·8	52·2	+1·3	60·8	+1·1	17·3	76·0	29th	45·5	11th	30·5

† Mean of 25 days.
‡ " " 29 "
‖ " " 10 "
¶ " " 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.

B—*continued.*

in India, etc., in March, 1912—continued.

Wind direction. Number of winds from Calm. (25)	N. (26)	N. E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure, from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st Dec., 1911 to 31st March, 1912. (53)	Normal rainfall for period, 1st Dec. to 31st March. (54)	Departure from normal of period, 1st Dec., 1911 to 31st March, 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																Bay Islands.
	2	2			3	18	5	1	S 55° W					65		86		·888		2·7		3			3·11			3·73			1·95	P. V. Fraser.
15	8	3						5	N 6° W	N 22° W	3·7	3·1	+0·6	46	+ 6	84	+ 1	·829	—·034	3·2	+0·4	0			0	0·77	—0·77	32·74	9·60	+23·14	0	Port Blair.
4	12	3		1			3	8	N 17° W		4·5			66		79		·793		2·3		0			0	0·19	—0·19	16·05	2·36	+13·69	0	Slipper Island.
																																Kashmir.
		1	7	13	6	3	1		S 39° E		0·5			68		62		·259		5·1		4			1·36			12·94			0·53	Muzaffarabad.
10	2		1	10	4		1	3	S 36° E	S 3° W	2·0	3·5	—1·5	30	+22	85	— 4	·209	—·028	5·7	—0·2	7	6·60	+0·40	3·71	3·52	+0·19	8·61	10·70	—2·09	0·70	Srinagar.
31									(a)		0·3					90‡	— 1	·072‡		4·0		13	10·90	+2·20	4·22	3·82	+0·40	11·89	10·65	+1·24	1·14	Dras.
26	1		1		3				S 27° E	S 63° W	2·3	1·5	+0·8	7	—13	62	+12	·092	+·015	4·5	—1·6	1	1·00	0	0·37	0·30	+0·07	1·06	1·18	—0·12	0·28	Leh.
17			1	1	3	7	2		S 31° W		4·1			33		62	—19	·136		6·2		3	2·70	+0·30	0·46	0·87	—0·41	3·92	2·60	+1·32	0·19	Skardu.
23					1	1	6		S 75° W		2·0			23		45	— 6	·144	—·035	5·7	—0·5	1	1·40	—0·40	0·12	0·49	—0·37	1·07	1·02	+0·05	0·12	Gilgit.
																																Baluchistan.
19	1	1	1	1	1	6		1	S 36° W	S 12° W	2·7	2·9	—0·2	13	+ 2	43	—19	·150	—·061	2·3	—0·7	1	4·00	—3·00	0·38	1·93	—1·55	5·35	6·78	—0·83	0·38	Quetta.
6	1		3	8	4	9			S 9° E	S 31° E	4·8	7·2	—2·4	49	— 2	50	— 9	·211	—·048	2·8	—0·9	1	4·70	—3·70	0·22	1·56	—1·34	5·46	5·61	—0·15	0·11	Chaman.
15				2	6	7		1	S 20° W		5·9*			43	—17	54		·119		0·8		0	2·60	—2·60	0·05	0·94	—0·89	3·38	4·62	—1·24	0·05	Kalat.
3		3	13	4	1	4	1	2	S 76° E		5·5*			43		34		·174		2·3		0			0			2·43			0	Dalbandin.
1	5	1	1				2	1	N 9° W		3·6			20		74		·494		2·0		0			0			1·29			0	Pasni.
3	4	10	13	1					N 64° E		6·0			76		62		·263		1·0		0			0·05			1·77			0·05	Panjgur.
5	1	5	3	1	5	3	5	2	S 34° W§		5·4			7		58		·259		2·8		0			0·16			2·25			0·09	Robat.
																																Hill Stations excluding Kashmir and Baluchistan.
2	1	1	2		2		1	2	N 15° E		2·6			3		63		·171		5·5		4			1·08	3·31	— 2·73	5·64	7·02	—1·38	0·58	Chitral.
9	4	2	2		1	3	5	5	N 47° W		3·5			33		55		·167		3·3		3	9·00	—6·00	1·49	4·37	— 2·88	8·85	9·77	—0·92	0·88	Para Chinar.
8	18	1			1	1		8	N 14° W	N 10° W	9·5	10·4	—0·9	79	+23	37	—19	·138	—·079	3·9	—1·0	1			0·39	3·89	— 3·50	6·74	11·19	—4·45	0·12	Cherat.
9	2	1	3	15	2			2	S 56° E	S 83° E	4·0	6·6	—2·6	49	+17	51§	— 3	·165§	—·012	4·7	—0·2	6	4·90	+1·10	1·45	4·37	— 2·92	7·64	14·18	—6·54	0·42	Murree.
																36	— 8	·118	—·028	3·5	—0·3	3	4·30	—1·30	1·87	2·44	— 0·57	7·44	9·63	—2·19	1·08	Simla.
				9	1				S 6° W		1·3			32		71		·167		3·7		6			3·92	4·01	— 0·09	13·23	21·10	—7·87	1·18	Sarain.
																										Observations not received						**Kalabagh.**
19	2			1			2		N	N 13° E	4·5	5·2	—0·7	67	+28	55	+ 4	·178	+·002	2·7	—0·1	3	4·50	—1·50	1·72	2·63	— 0·91	10·00	12·80	—2·80	1·15	Chakrata.
1	6	10				4	1		N 58° E		5·4			37		43	— 6	·140		3·7		3			1·54	1·55	— 0·01	5·29	7·30	—2·01	0·78	Mukteswar.
	3	2	1	1	3	3			S 11° W	S 37° E	2·7	5·5	—2·8	5	— 6	63	—12	·218	—·033	2·6	—1·1	4	3·35	+0·65	1·42	1·77	— 0·35	2·79	3·62	—0·83	0·73	Darjiling.
	1		1	4	15				S 32° W		3·2			59		48		·236		1·8		6	4·40	+1·60	4·20	2·13	+ 2·07	5·25	3·93	+1·32	1·48	Shillong.
					14	5	1		S 60° W		5·1			56		60		·311		3·6		8	9·00	—1·00	18·91	8·60	+10·31	23·93	11·91	+12·02	9·63	Cherrapunji.
				1	10	1			S 45° W		2·3			37		73	+ 4	·410		1·2		0	0·90	—0·90	0·06	0·49	— 0·43	0·81	1·18	—0·37	0·05	Maymyo.
3	4	2	3		3	6	2		N 41° W	N 3° W	1·8	3·7	—1·9	13	+ 9	35§	0	·216§	—·030	0	—2·1	0	0·90	—0·90	0	0·38	— 0·38	1·00	2·12	—1·12	0	Pachmarhi.
9	7			1	4	5	2		N 20° W	N 23° W	5·8	5·3	+0·5	40	+11	30	— 5	·194	—·038	1·7	—0·3	0	0·50	—0·50	0	0·14	— 0·14	0	0·93	—0·93	0	Mount Abu.
1	2	1	1				3		N 15° E	N 22° E	2·1	2·7	—0·6	13	—9	71	+ 3	·502	+·009	3·0	+0·1	1	2·00	—1·00	0·18	0·72	— 0·54	0·32	1·93	—1·61	0·18	Mercara.
	3	11	5	2					S 78° E		2·3			56		55		·283		2·8		2	1·80	+0·20	1·43	0·85	+ 0·58	5·21	5·91	—0·70	0·82	Ootacamund.
9	6	8	3	2			3		N 47° E		8·5*			53		55	+ 8	·263		2·1		3	3·20	—0·20	1·14	2·15	— 1·01	8·97	11·20	—2·23	0·46	Kodaikanal.

incorrect equator scale error.

§ Mean of 30 days.

(a) Indeterminate.

Tabl

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

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India.																						
	Singapore (*a*)	10	29·954		29·885	30·013	20th	29·893	13th	·120	85·3	91·7		74·4		83·1		17·3	93·0	3rd & 6th	71·0	17th	22·
	Penang (*a*)	20	29·885		29·830	29·962	20th	29·788	9th	·174	84·0	92·5		73·9		83·2		18·6	94·0	10 days	70·0	10th	24·
	Trincomalee	99	?	?	?	?	?	?	?	?	77·9	92·1	+4·1	75·0	−1·0	83·6	+1·5	17·1	96·5	31st	71·5	8th	25·
	Colombo	24	29·933	−·009	29·883	29·993	9th	29·880	29th	·113	74·6	92·2	+2·8	73·7	−1·2	82·9	+0·8	18·5	97·0	10th	69·5	9th	27·
	Minicoy	7	29·985			30·036	8th	29·941	14th	·095													
	Amini Divi	*13*	29·980	+·025	29·921	30·042	8th	29·931	29th	·111	83·4	90·1	+2·1	78·0	−0·2	84·0	+0·9	12·1	94·0	25th	74·3	18th & 19th.	19·
	Gyantse	13,120	17·011		16·972	17·086	20th	16·935	2nd	·151	30·9	52·7		16·7		34·7		36·0	60·5	16th	8·0	5th	52·
	Phariyong	14,400									25·9	40·7		8·1		24·3		32·6	53·8	30th	1·3	5th	52·
	Gangtok	5,660?									53·5	67·2		47·1		57·1		20·1	74·3	20th	42·1	30th	32·
	Gartok (*c*)	14,140	17·559			17·630	17th & 24th.	17·450	4th & 30th.	·180	13·4	37·7		−6·5		15·6		44·2	52·9	23rd	−18·9	4th	71·
	Kashgar (*c*)	4,255	25·582			25·830	15th	25·400	1st	·430	40·3	58·5	+2·3	34·5	−1·7	46·5	+0·3	24·0	78·9	21st	27·1	4th	51·
	Kabul ¶		24·294		24·263	24·429	25th	24·168	6th	·252	37·8	59·4	+3·6	33·6	−1·0	46·5	+1·3	25·8	70·7	21st	23·6	6th	46·
	Meshed	3,104	26·835		30·058	27·079	11th	26·555	29th	·524	42·5	58·6		37·3	−1·1	48·0	−0·5	21·3	79·9	29th	29·1	3rd & 12th	50·
	Jask	13	29·996	+·008	29·953	30·170	11th	29·856	31st	·314	68·5	81·5	+2·8	66·2	+0·1	73·9	+1·5	15·3	90·8	28th	61·8	10th	29·
	Muscat	20	30·017	+·046	29·986	30·179	11th	29·887	30th	·292	75·2	84·0	+7·4	71·8	−0·2	77·9	+3·6	12·2	88·3	28th	67·1	1st, 6th & 7th.	21·
	Bahrein	18	30·066		30·038	30·192	11th	29·847	29th	·345	68·2	72·5		64·3		68·4		8·2	80·1	30th	55·3	7th	24·
	Bushire	14	30·019	+·032	29·996	30·163	11th	29·878	29th	·285	63·2	73·4	+1·1	59·5	+0·7	66·5	+0·9	13·9	88·8	29th	53·5	4 days	35·
	Busrah	25	30·051		30·046	30·243	4th	29·812	20th	·431	64·3	73·5		57·7		65·6		15·8	82·5	28th	50·5	5th & 6th	32
	Kerman		24·768			24·920	3rd & 8th	24·620	3rd, 4th & 24th.	·300	47·4	69·0		36·1		52·6		32·9	78·3	18th	23·5	7th	54
	Ispahan (*b*) (*e*)	*5,817*	24·292			24·530	11th	24·120	21st	·410	42·7	63·4	+2·3	37·8	+1·6	50·6	+1·9	25·6	73·4	27th & 28th.	29·2	5th & 11th.	44
	Tehran (*b*) (*e*)	*4,009*	25·786			25·995	11th	25·610	17th	·385	45·5	60·7	+3·5	40·9 †	+2·5 †	50·8 †	+3·0	19·8	70·4	28th	30·2	4th	40
	Bagdad	127	29·933	−·002	30·042	30·138	4th	29·606	28th	·532	56·1	76·0	+3·6	51·3	+3·1	63·6	+3·3	24·7	89·0	28th	43·5	4th	4
	Beirut (*d*)	111			30·022						60·9	66·2		53·5		59·9		12·7	82·8	14th	45·0	30th	3
	Aden	94	29·932	+·035	29·959	30·011	10th	29·831	28th	·180	78·1	83·7	−0·7	75·3	+0·1	79·5	−0·3	8·4	92·6	10th	69·9	4th	2
	Zanzibar	72	29·941	+·035	29·939	29·987	21st	29·849	13th	·138	81·5	86·4	+0·1	76·7	−0·6	82·6	−0·3	7·7	90·2	24th	73·6	2nd	1

N.B.—The 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 3,000 feet.

(*a*) 9 hrs. observations.
(*b*) Aneroid uncorrected.
(*c*) „ corrected.
(*d*) 8½ hrs. observations.
(*e*) 7 „ „

† Mean of 30 days.
¶ „ „ 25 „

B—*concluded.*

at 236 stations in India, etc., in March, 1912—concluded.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 31st March, 1912.	Normal rainfall for period, 1st Dec. to 31st March.	Departure from normal of period, 1st Dec., 1911 to 31st March, 1912.	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	56	57
																																Extra India.
9	5	15	1	1					N 39° E		6·4*			61						4·5		5			1·18	7·55	−6·37	31·96	36·80	−4·84	0·45	Singapore.
	1	28		2					N 48° E		12·2*			90								5			2·21	4·30	−2·09	7·24	21·17	−13·93	0·57	Penang.
7		1		2	2	19			S 35° W	S 37° W	3·9*	4·1	−0·2	62	+39	85	+ 4	·817	−·061	3·6	+1·2	2			0·57	1·49	−0·82	26·08	23·34	+ 2·74	0·55	Trincomalee.
27	1	1	1					1	N 23° E	S 58° E	2·7*	3·9	−1·2	7	−25	95	+21	·814	−·031	6·3	+3·4	5			1·36	4·20	−2·84	12·05	15·42	− 3·37	0·36	Colombo.
	24	2					1	4	N 4° W	N 20° W	2·3	3·9	−1·6	90	+14					2·4	−0·6	1			0·32	0·95	−0·63	9·61	6·59	+ 3·02	0·32	Minicoy.
1	25	3						2	N 2° E		5·0			94		68	−6	·778	−·094	2·3	−0·7	0			0	0·05	−0·05	1·36	1·56	− 0·20	0	Amini Divi.
28		2	1						N 63° E		?			6		81		·137		0·4		3			0·60‡			0·80‡			0·25‡	Gyantse.
15	1	1		1	2	5		6	N 87° W		11·5			20		91		·131		2·0		5			3·22			4·35			1·05	Pharijong.
26		1	1	1	1	1			S 45° E		2·1			10		73		·299		0·7		7			2·46	5·12	−2·66	5·90	9·55	− 3·65	0·64	Gangtok.
23				6	2				S 34° E		8·4			23						4·2		0			0			0			0	Gartok.
31									(a)	N 1° W	0·4	1·8	−1·4			73		·181		3·7	−2·1	1			0·74	0·37	+0·37	2·44	0·73	+ 1·71	0·74	Kashgar.
			6	3	4	2	10		S 23° W	N 80° W				26	+ 9	69		·158				2			2·00	4·05	−2·05	2·40§	7·49	− 5·09	1·00	Kabul.
25	1	1	1	1	1			1	N 63° E		1·5			6		75		·203		3·9	−1·6	6			1·26	2·32	−1·06	1·73	4·81	− 3·08	0·24	Meshed.
3	9	7	3	1			1	7	N 8° E	N 23° E	5·2	8·0	−2·8	59	+23	66	− 8	·467	−·099	1·9	−0·4	0			0	0·77	−0·77	2·69	3·69	− 1·00	0	Jask.
9	2		2	1			1	16	N 38° W	N 72° W	4·9	3·4	+1·5	53	+23	62	− 6	·547	−·029	2·2	0	0			0	0·76	−0·76	3·07	3·24	− 0·17	0	Muscat.
	7	1	2	2		2	7	10	N 43° W		5·1			52		73		·502		3·4		1			0·26	0·38	−0·12	1·73	2·15	− 0·42	0·20	Bahrein.
8	1	9	2		1		1	9	N 4° E	N 41° E	7·3	6·2	+1·1	43	+ 3	81	+11	·477	+·045	3·7	+0·8	1			0·24	0·91	−0·67	5·88	8·90	− 3·02	0·11	Bushire.
		1	2	4	5	2	12	5	S 65° W		3·0*			39		62		·379		3·2		4			1·53	1·09	+0·44	7·01	4·13	+ 2·91	0·50	Busrah.
21				1	2	5	1	1	S 45° W		3·0†			26		52		·173		0·7		0			0·17			2·42‖			0·08	Kerman.
27						3	1		S 56° W	S 82° W	2·9	4·6	−1·7	10	−34	64	−12	·182	−·056	2·5	−1·1	1			0·27	1·13	−0·86	3·78	2·99	+ 0·79	0·27	Ispahan.
14	6	9	1					1	N 25° E	N 14° E	1·9	2·8	−0·9	55	+33	62	+ 6	·187	−·007	2·5	−1·6	4	2·80	+1·20	1·06	1·93	−0·87	3·73	5·94	− 2·21	0·44	Tehran.
15	5			3	1	1		6	N 31° W	N 11° W	5·7	2·9	+2·9	19	− 5	68	− 2	·310	−·029	2·7	+0·4	3			0·74	1·41	−0·67	3·75	4·99	− 1·24	0·28	Bagdad.
5		1	1	4	10	6	2	2	S 11° W					48		68		·358		5·6		5			2·89			28·55			1·25	Beirut.
5		24	2						N 49° E	N 82° E	11·7	11·5	+0·2	82	+ 3	76	0	·724	−·002	3·9	−1·3	0			0	0·65	−0·65	0·55	1·64	− 1·09	0	Aden.
8	2	2	1	7	3	7		1	S 13° E	S 27° E	2·8	3·9	−1·1	29	+ 7	84	+ 1	·902	+·008	6·6	+1·1	12			7·34	6·01	+1·33	18·86	17·33	+ 1·53	1·66	Zanzibar.

* Uncorrected for scale error.
(a) Indeterminate.

‡ Snow water.

§ December, 1911, rainfall wanting.
‖ February 1912, " "

Table C.—Abstract of observations taken at 8 hrs. at 44 fourth and fifth class stations in India, etc., in March, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Eastern Bengal and Assam.																								
4	Bishnath	64·9	83·5	...	57·6	...	70·5	...	25·9	90·3	19th	50·7	6th	39·6	...	...	..	...	...	...	...	...	...	...	...
	Borjuli	67·4	83·9	...	56·6	...	70·3	...	27·3	88·7	20th	48·7	6th	40·0	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	66·4	87·0	...	57·5	...	72·3	...	29·5	93·1	14th	49·3	16th	43·8	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	59·4	78·1	...	56·7	...	67·4	...	21·4	87·8	15th	51·7	7th	36·1	...	...	...	...	...	...	...	...	...	...	...
	Dikom	62·6	78·8	...	57·3	...	68·1	...	21·5	86·8	24th	50·6	3rd	36·2	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	65·9	66·4	...	57·5	...	61·9	...	8·9	71·5	21st	51·6	1st & 7th.	19·9	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	...	...	...	...	...	...		Observations not received.				...	...	...	...	...	...	...	...	...	...	...	...	...
	Jorehat	65·0	79·9	...	58·1	...	69·0	...	21·8	85·9	15th	51·0	6th	35·9	...	...	...	...	...	...	...	...	...	...	...
	Messa	72·4	88·0	...	53·1	...	70·5	...	34·9	94·1	25th	46·0	7th	48·1	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	60·7	82·9	...	53·3	...	68·1	...	29·6	89·1	22nd	40·2	6th	48·9	...	...	...	...	...	...	...	..	...	...	...
	Srimangal	71·4	89·6	...	61·2	...	75·4	...	28·4	95·9	14th	51·9	11th	44·0	...	...	...	...	...	...	...	...	...	...	...
5	Brahmanbaria	75·1	89·2	...	65·5	...	77·3	...	23·7	93·8	19th	57·3	16th	36·5	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	64·6	88·7	...	51·3	...	70·0	...	37·4	92·1	22nd	44·0	7th	48·1	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	77·4	93·2	...	62·4	...	77·8	...	30·8	101·2	26th	51·5	15th	49·7	..	...	...	...	...	...	...	...	...	...	...
	Kalchini	69·8	84·1	...	51·6	...	67·9	...	32·5	89·6	22nd	44·9	5th, 6th & 7th.	44·7	...	...	..	...	...	...	...	...	...	...	...
	Nagrakata	70·4	85·0	...	56·9	...	70·9	...	28·1	89·1	22nd & 27th.	51·0	1st & 5th.	38·1	...	...	...	...	...	...	...	...	...	...	...
	Pabna	73·7	92·1	...	61·6	...	76·9	...	30·5	101·0	27th	53·2	6th	47·8	...	...	...	...	...	...	...	...	...	...	...
	IV.—United Provinces of Agra and Oudh.																								
10	Ballia	69·4	91·3	...	59·0	...	75·1	...	32·3	102·6	27th	51·0	5th	51·6	...	...	...	...	...	...	...	...	...	...	...
11	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	VIII.—Rajputana.																								
19	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XI.—Central Provinces.																								
2	Chhindwara	71·3	92·4	...	61·0	...	76·7	...	31·4	101·0	26th	48·8	5th	52·2	...	2	6	3	3	...	4	8	5	N 45° W	...
	XIV.—Madras.																								
3	Anantapur	81·1	101·6	...	71·5	...	86·6	...	30·1	106·0	28th	62·9	18th	43·1	...	...	...	...	...	...	...	...	...	...	...
	Guntur	80·1	98·1	...	73·8	...	86·0	...	24·3	104·2	6th	65·6	17th	38·6	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C.

at 44 fourth and fifth class stations in India, etc., in March, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911 to 31st March, 1912.	Normal rainfall for period, 1st December to 31st March.	Departure from normal of period, 1st December, 1911 to 31st March, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Eastern Bengal and Assam.
...	...	...	...	...	80	...	·492	...	...	...	6	...	...	2·51	2·61	−0·10	3·57	4·96	−1·39	0·97	Bishnath.
...	...	...	...	...	68	...	·458	...	...	...	5	...	...	2·32	1·85	+0·47	4·27	3·33	+0·94	1·25	Borjuli.
...	...	...	...	...	85	...	·557	...	...	...	5	...	...	5·46	2·64	+2·82	9·27	5·67	+3·60	1·96	Chandkhira.
...	...	...	...	...	92	...	·466	...	...	...	6	...	...	3·55	5·59	−2·04	10·30	10·04	+0·26	1·71	Doom Dooma.
...	...	...	...	...	88	...	·501	...	...	...	4	...	...	2·69	5·03	−2·34	9·34	8·98	+0·36	1·10	Dikom.
...	...	...	...	...	83	...	·535	...	...	...	6	...	...	3·61	2·45	+1·16	5·49	4·94	+0·55	1·05	Golaghat.
...	...	...	...	...	...	...	...	...	...	Observations not received.					...	...	...	...	...	...	Hailakandi.
...	...	...	...	...	81	...	·496	...	...	...	7	...	...	3·71	3·07	+0·64	7·15	5·30	+1·85	1·06	Jorehat.
...	...	...	...	...	70	...	·548	...	...	...	5	...	...	3·63	2·00	+1·63	5·79	3·57	+2·22	2·50	Messa.
...	...	...	...	...	90	...	·478	...	...	...	3	...	...	2·69	3·10	−0·41	4·45	4·57	−0·12	1·52	Panerihat.
...	...	...	...	...	84	...	·646	...	...	...	8	...	...	6·34	2·73	+3·61	9·12	5·10	+4·02	1·75	Srimangal.
...	...	...	...	...	77	...	·655	...	...	...	6	...	...	8·10	2·52	+5·58	10·11	4·15	+5·96	3·79	Brahmanbaria.
...	...	...	...	...	77	...	·468	...	...	...	3	...	...	3·16	1·70	+1·46	3·65	3·27	+0·38	1·90	Dam Dim.
...	...	...	...	...	62	...	·577	...	...	...	3	...	...	1·48	1·88	−0·40	2·14	3·42	−1·28	0·63	Goalundo.
...	...	...	...	...	62	...	·457	...	...	...	2	...	...	2·74	1·60	+1·14	3·04	3·32	−0·28	2·13	Kalchini.
...	...	...	...	...	51	...	·378	...	...	...	3	...	...	3·53	2·13	+1·40	3·75	4·50	−0·75	2·80	Nagrakata.
...	...	...	...	...	69	...	·557	...	...	...	4	...	...	2·57	1·23	+1·34	2·61	2·93	−0·32	1·36	Pabna.
																					IV.—United Provinces of Agra and Oudh.
...	...	...	...	...	49	...	·354	...	...	...	...	No rain gauge.			...	...	...	...	...	...	Ballia.
...	...	...	...	...	...		...	...	...		3	1·40	+1·60	0·77	0·55	+0·22	3·56	3·14	+0·42	0·36	Meerut.
...	...	...	...	...	...	...	...	...	...	...	2	2·60	−0·60	0·81	0·98	−0·17	3·49	6·45	−2·96	0·47	Dehra Dun.
																					VIII.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	0	0·30	−0·30	0	0·07	−0·07	0·09	0·42	−0·33	0	Udaipur.
																					XI.—Central Provinces.
2·3	...	...	26	...	40	...	·307	...	0·3	...	0	...	...	0	...	...	3·65	...	...	0	Chhindwara.
																					XIV.—Madras.
...	...	...	...	...	63	...	·677	...	2·8	...	0	...	...	0	...	...	1·61	...	...	0	Anantapur.
...	...	...	...	...	87	...	·897	...	6·4	...	0	...	...	0	...	...	0	...	...	0	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	0·32	1·65	−1·33	7·25	13·72	−6·47	0·12	Car Nicobar.

Table

Abstract of observations taken at 8 hrs.

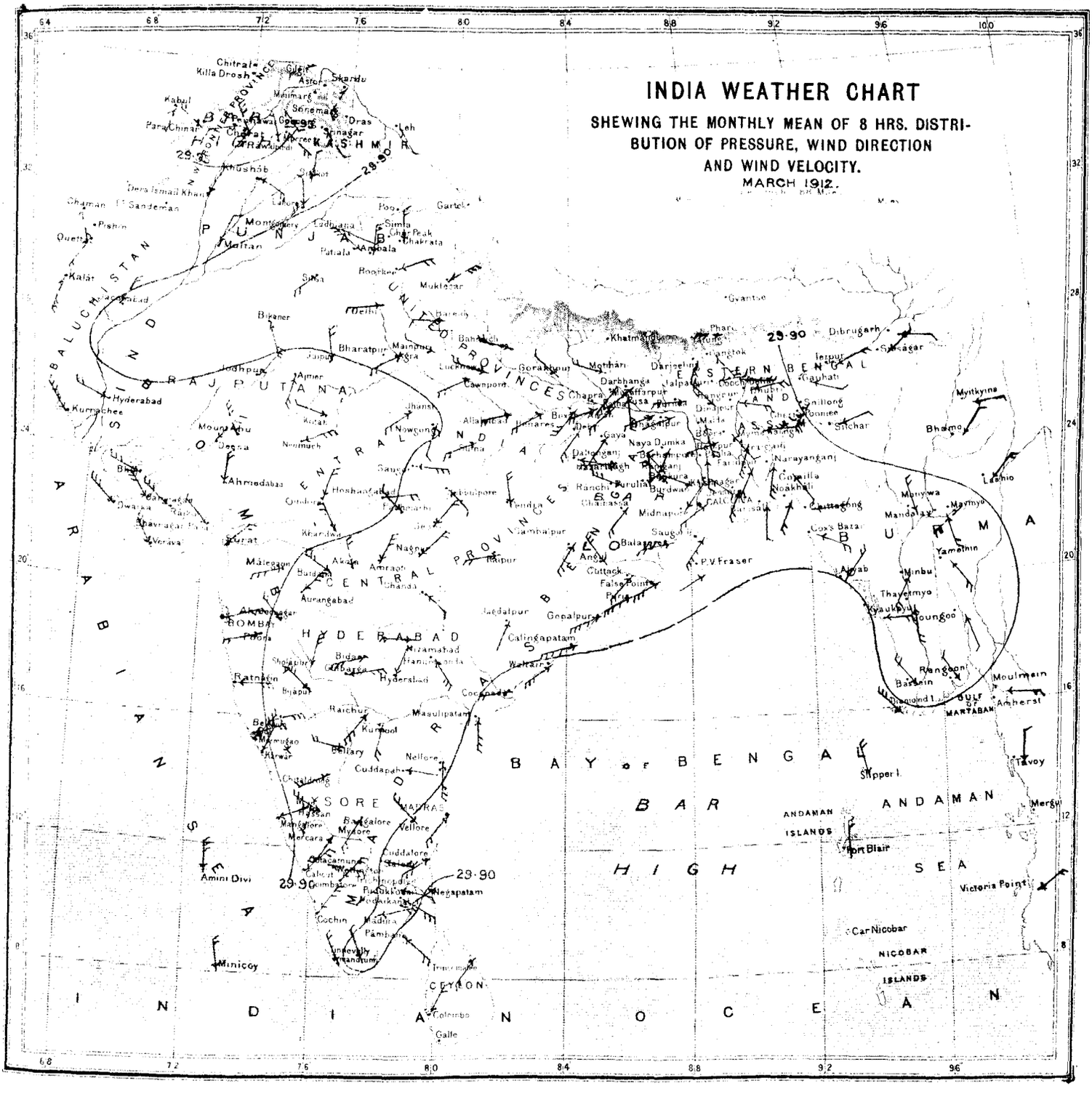
Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Kashmir.																								
14	Jammu	66·6	79·2	...	54·6	...	66·9	...	24·6	92·6	24th	41·5	13th	51·1	...	5	23	1	...	...	...	2	...	N 54° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	22·5	39·5	...	15·7	...	27·6	...	23·8	52·7	24th	—5·0	4th	57·7	...	1	22	8	...	...	...	...	...	N 55° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	67·8	83·9	...	61·4	...	72·7	...	22·5	89·4	28th	53·6	5th	35·8	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	58·4	67·2	...	53·0	...	60·1	...	14·2	75·1	28th	41·9	30th	33·2	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	51·8	...	33·0	...	42·4	...	18·8	63·0	22nd	23·7	4th	39·3	8	...	1	10	1	1	...	9	1	E	...
	Kailang	...	...	...	...	...	...	...	...	...		Rainfall data not received.									...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drosh	43·2	60·0	...	39·6	...	49·8	...	20·4	72·7	27th	34·5	7th & 12th.	38·2	5	2	6	11	2	3	2	...	...	N 88° E	...
	Pishin	...	65·4	...	35·8	...	50·6	...	29·6	80·3	31st	25·0	4th & 14th.	55·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	75·2	...	58·3	...	66·7	...	16·9	85·8	28th	50·0	5th	35·8	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	35·7	54·2	...	29·1	...	41·6	...	25·1	62·6	16th & 23rd.	17·8	31st	44·8	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	43·5	57·7	...	34·9	...	46·3	...	22·8	68·2	28th & 29th.	26·8	5th	41·4	...	...	...	...	...	...	...	...	...	...	...
	Koweit	...	74·8	...	59·7	...	67·3	...	15·1	87·6	29th	51·2	13th	36·4	2	1	1	3	...	...	1	7	16	N 51° W	...
	Maidan	...	74·0	...	53·1	...	63·5	...	20·9	86·7	28th	45·2	5th & 6th	41·5	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	76·2	...	58·4	...	67·3	...	17·8	82·8	26th	51·8	5th	31·0	...	...	...	...	12	1	2	...	12	S 27° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...		Rainfall data not received.				...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	73·2	...	47·2	...	60·2	...	26·1	91·0	30th	34·0	7th	57·0	3	10	4	1	2	...	...	2	9	N 9° W	...

C—*concluded.*

at 44 fourth and fifth class stations in India, etc., in March, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911 to 31st March, 1912.	Normal rainfall for period, 1st December to 31st March.	Departure from normal of period, 1st December, 1911 to 31st March, 1912.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Kashmir.
...	...	...	84	...	41	...	·266	...	1·8	...	2	...	...	1·35	...	...	7·85	...	...	0·82	Jammu.
...	...	...	...	...	...	...	...	...	...	...	15	...	...	8·91	16·75	−7·84	40·45	43·60	−3·15	1·60	Sonamarg.
...	...	...	94	...	37	...	·053	...	5·5	...	1	...	...	1·36	...	...	7·17	...	...	1·00	Kargil.
...	...	...	...	...	...	...	...	...	...	...	4	...	...	1·10	2·72	−1·62	20·79	6·25	+14·54	0·34	Astor.
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	48	...	·323	...	...	...	3	...	...	2·47	1·95	+0·52	2·56	3·51	−0·95	1·38	Panighatta.
...	...	...	...	...	54	...	·265	...	...	...	3	...	...	2·47	2·35	+0·12	3·31	4·69	−1·38	1·31	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	6	...	...	6·64	...	...	11·07	...	...	2·13	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	4	...	...	3·59	...	...	6·66	...	...	1·50	Lachung.
...	...	...	6	...	...	...	...	...	5·3	...	5	...	...	1·39	3·49	−2·10	4·41	8·58	−4·17	0·47	Poo.
...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.						...	...	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	2·18	...	...	12·79	...	...	1·21	Bakloh.
...	...	...	48	...	66	...	·183	...	0·3	...	5	...	...	1·85	3·12	−1·27	4·84	5·94	−1·10	0·67	Drosh.
...	...	...	...	...	...	...	...	...	2·4	...	1	...	...	0·11	2·17	−2·06	6·52	6·79	−0·27	0·11	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	2·9	...	3	...	...	1·55	...	...	6·70	...	...	0·73	Ahwaz.
...	...	...	...	...	72	...	·151	...	2·0	...	6	...	...	2·34*	...	...	5·50	...	...	0·56	Chumbi.
...	...	...	...	...	69	...	·198	...	...	...	6	...	...	2·10	...	...	14·92	...	...	0·81	Kirmanshah.
...	...	...	61	...	...	...	...	...	2·8	...	1	...	...	0·28	...	...	3·67	...	...	0·19	Koweit.
...	...	...	...	...	...	...	...	...	...	...	5	...	...	3·41	...	...	17·54	...	...	1·88	Maidan.
...	...	...	6	...	...	...	...	...	...	...	3	...	...	1·03	...	...	5·92	...	...	0·43	Muhammerah.†
...	...	...	...	...	...	...	...	...	...	...	7	...	...	2·94	5·44	−2·50	12·90	17·49	−4·59	1·66	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.					...	...	...	...	Prison Island.
9·7	...	...	58	...	...	...	...	...	...	...	0	...	...	0	...	...	0·16‡	...	...	0	Seistan.

* Snow water and rain. † Wind variable 4. ‡ Total rainfall since 1st February, 1912.

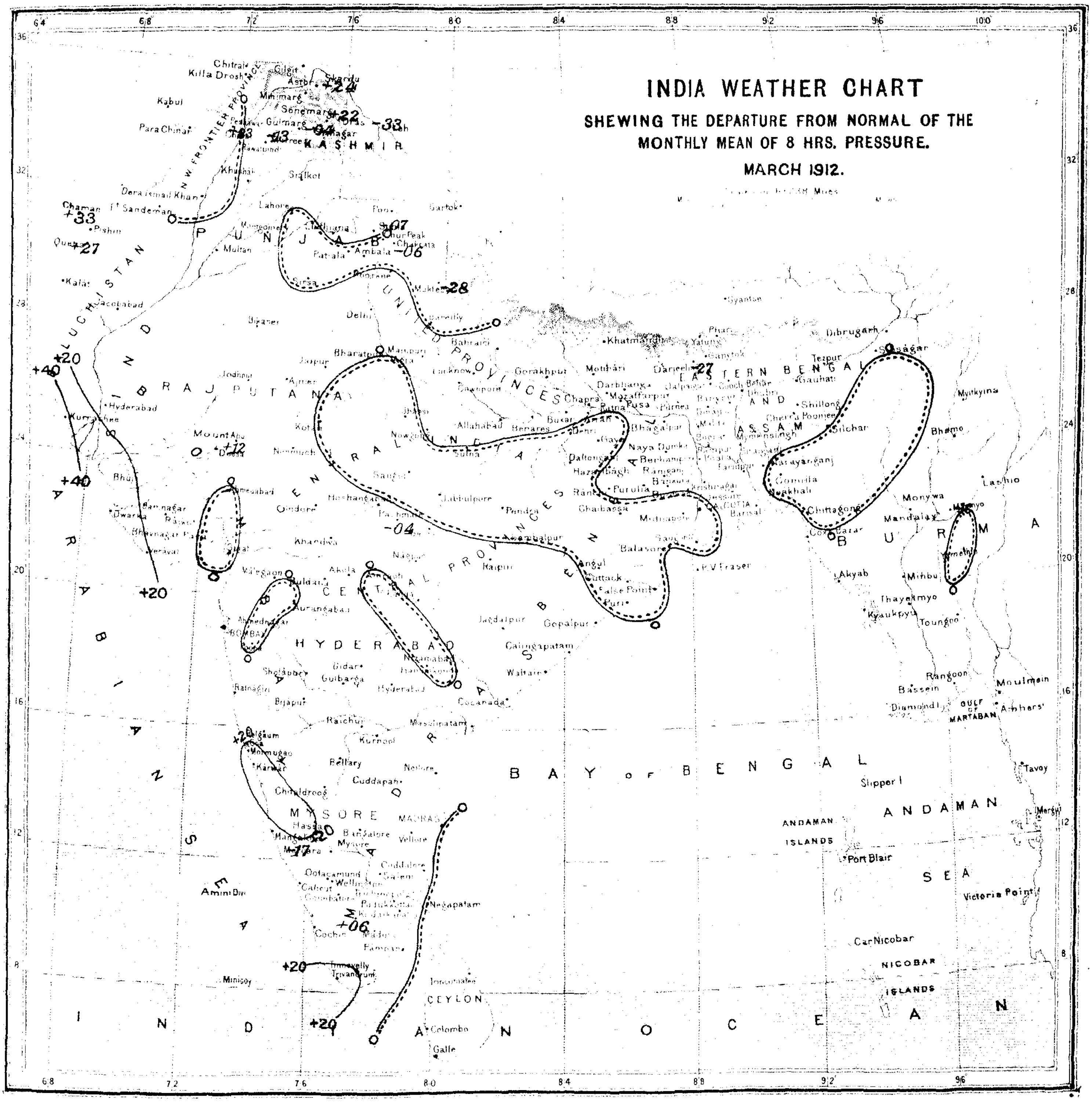


The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate up to December 1911 inclusive.



LITHO. BY S.S. MUNDLE.

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

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

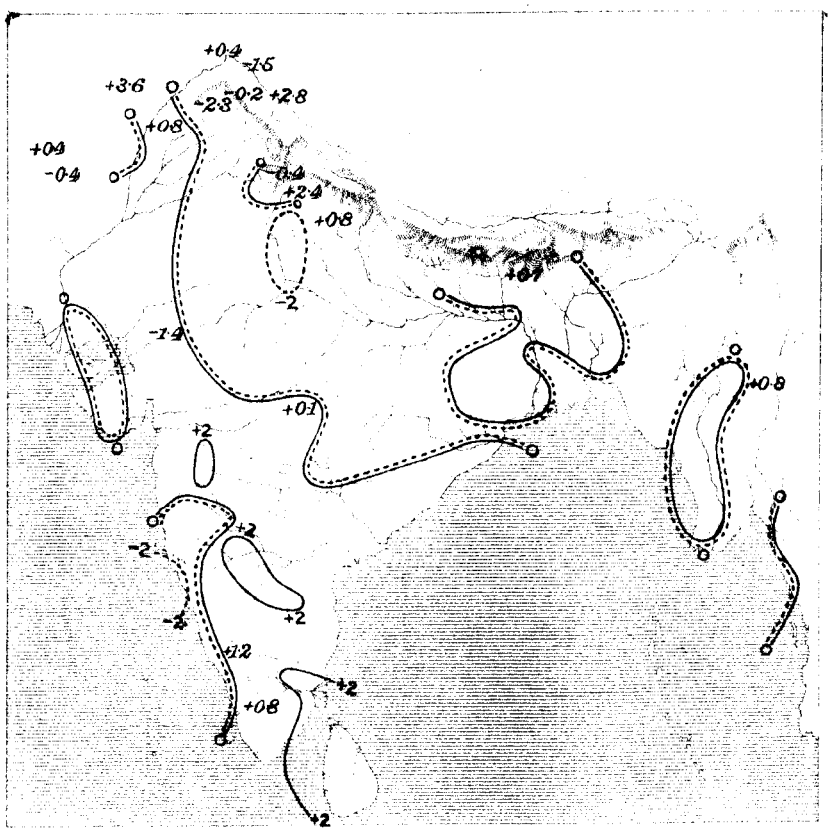
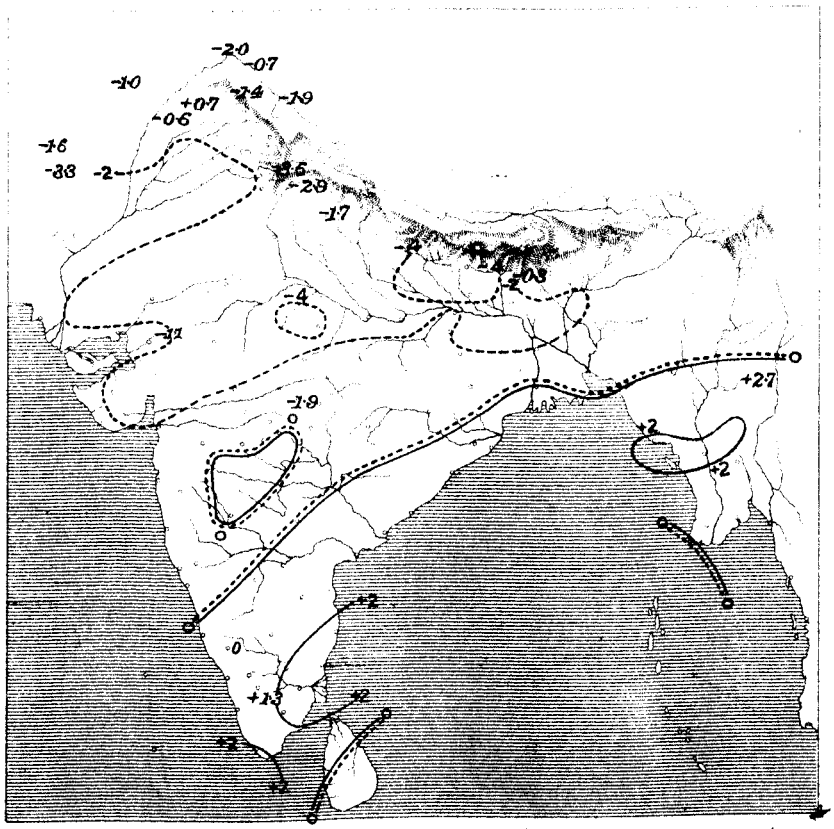


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S.G.M.

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

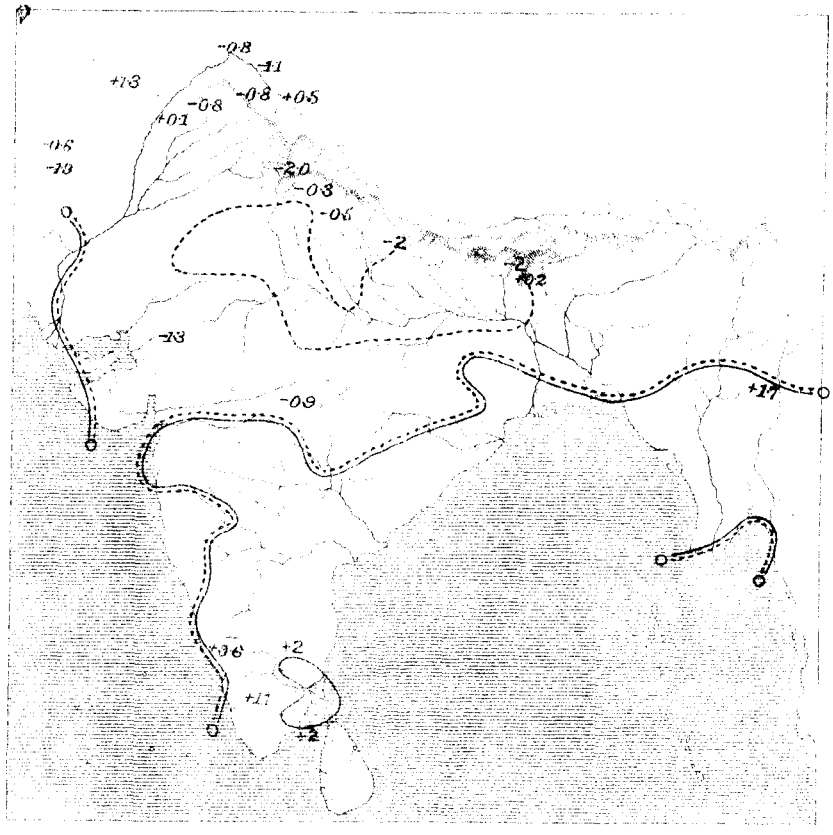
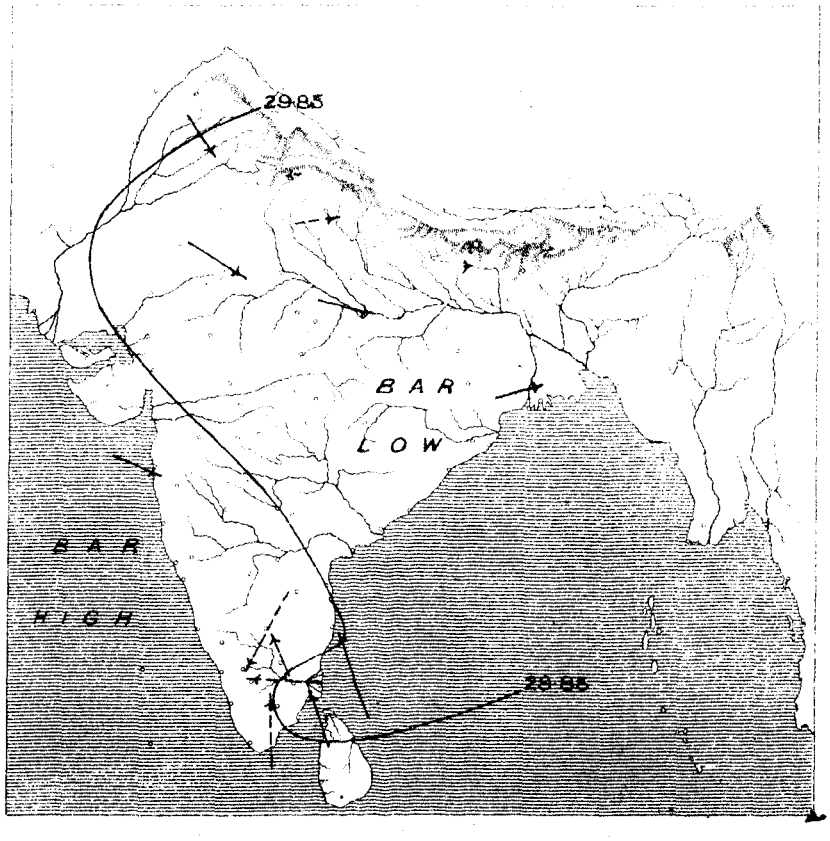


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S.S.I.

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

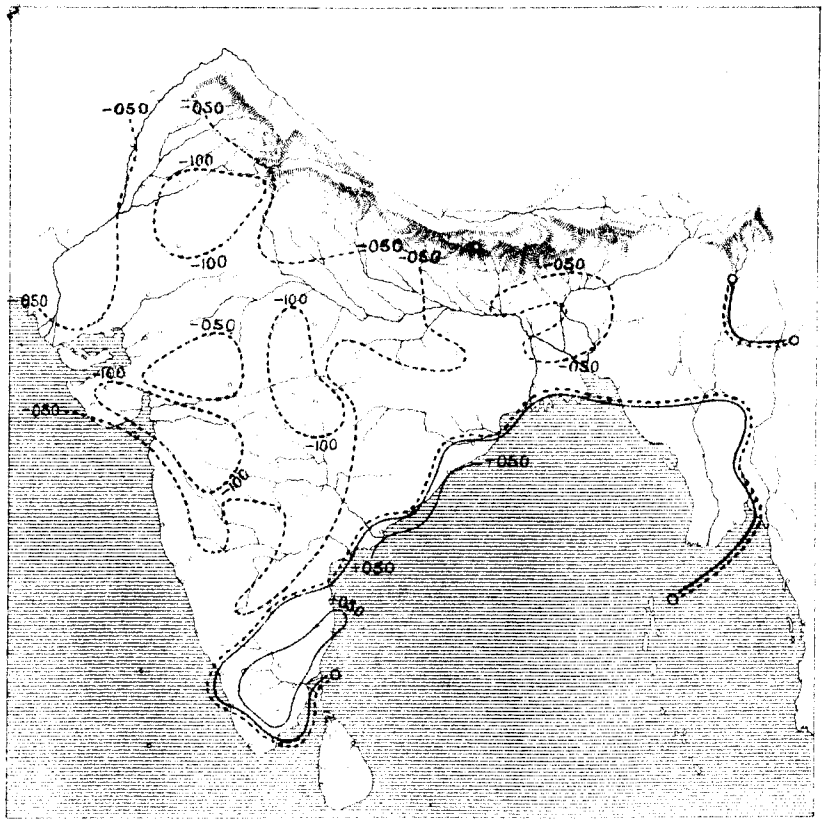


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.

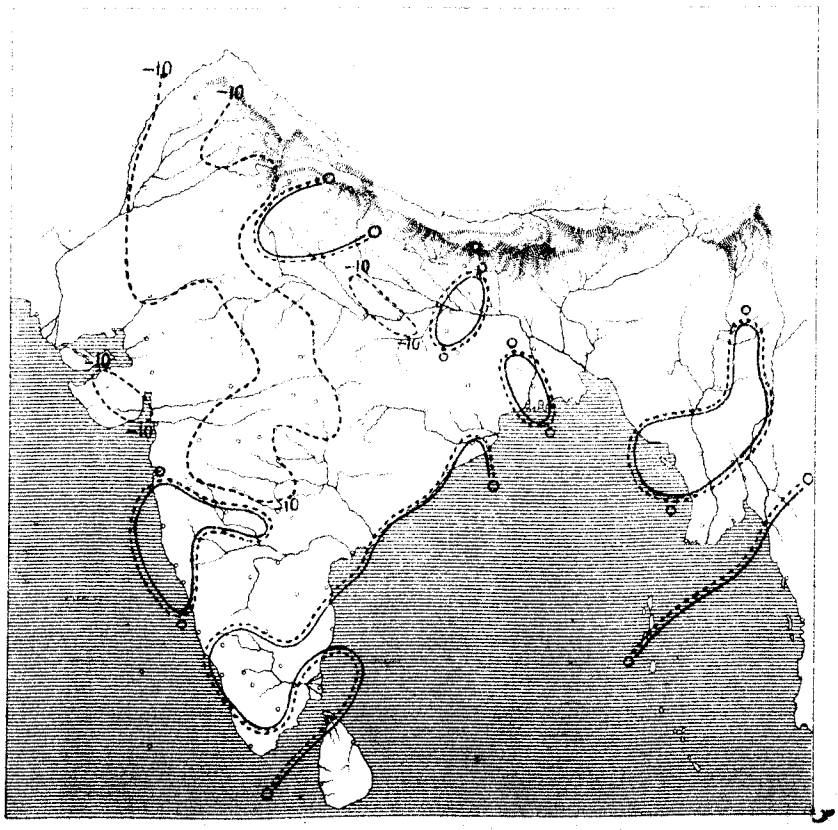


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 HRS.

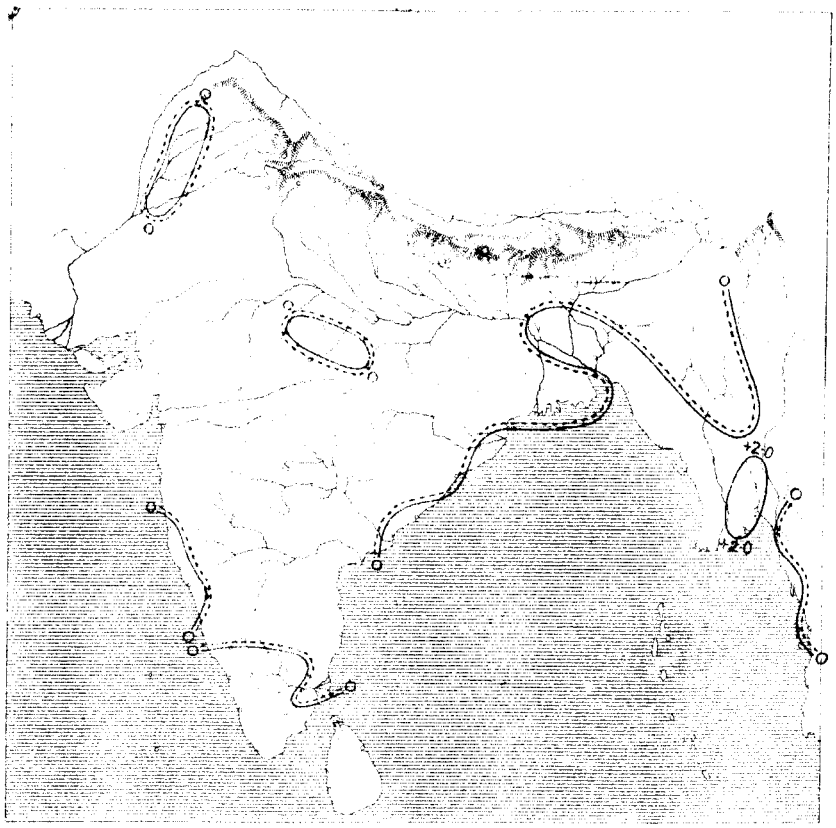
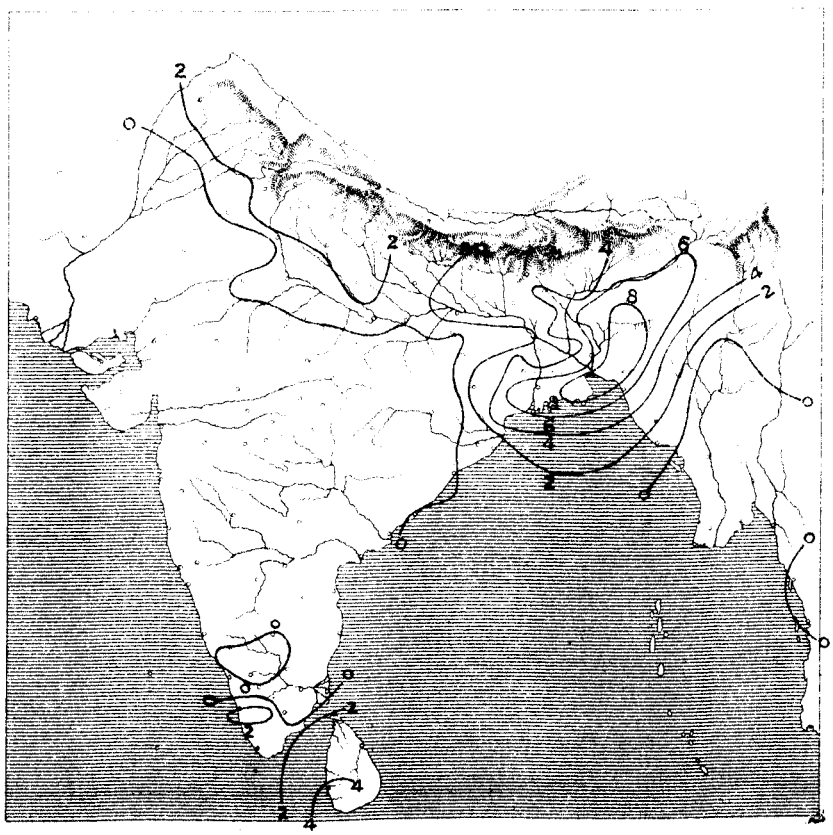
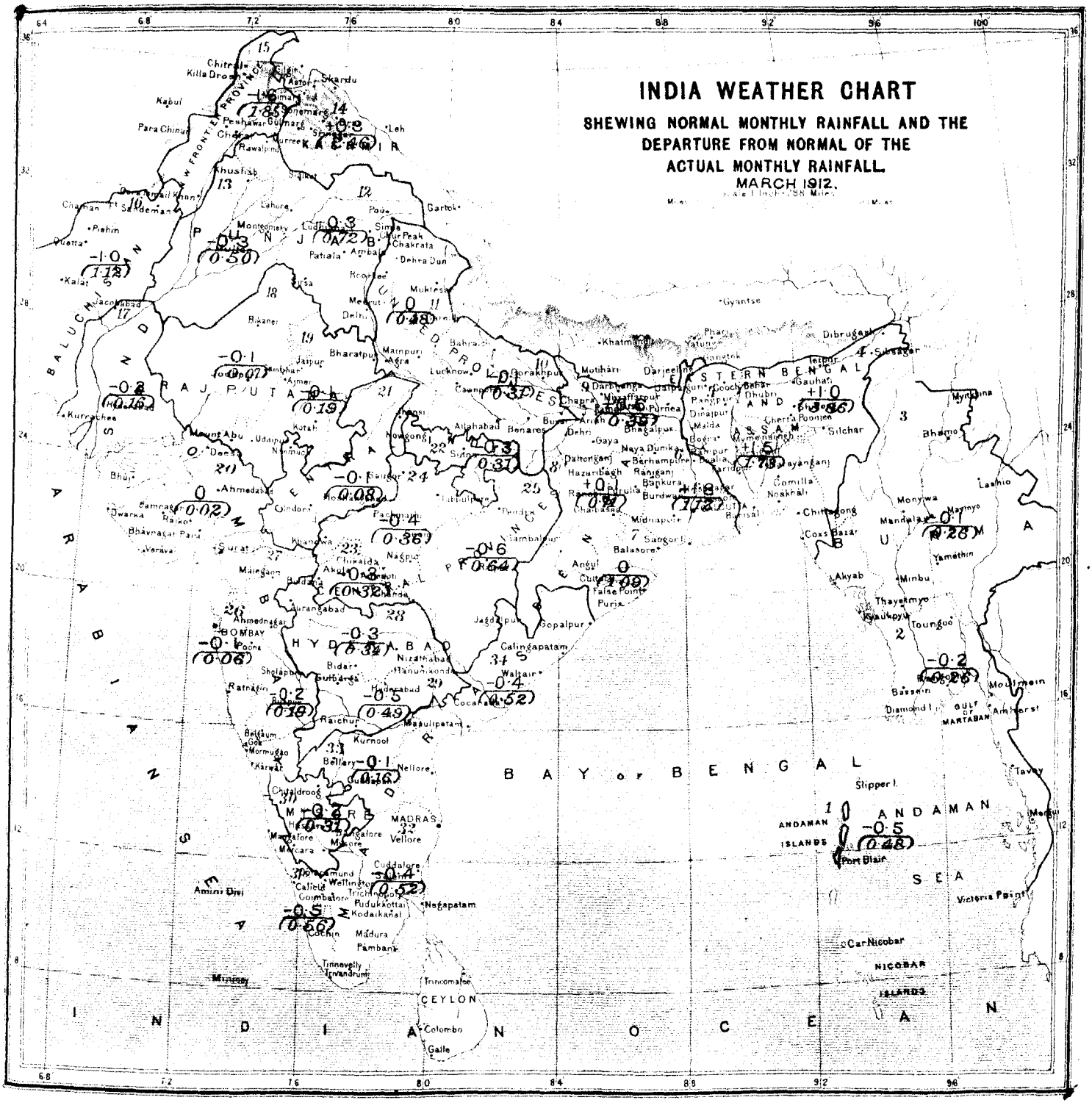


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)



LITHO. BY S.S. MUNDLE.



The country is divided into 34 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 monthly 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. Eastern Bengal
6. Bengal
7. Orissa
8. Chota Nagpur
9. Bihar
10. United Provinces, East
11. Do., West
12. Punjab, East and North
13. Do., Southwest
14. Kashmir
15. Northwest Frontier Province
16. Baluchistan
17. Sind
18. Rajputana, West
19. Rajputana, East
20. Gujarat
21. Central India, West
22. Do., East
23. Berar
24. Central Provinces, West
25. Do., East
26. Konkan
27. Bombay, Deccan
28. Hyderabad, North
29. Do., South
30. Mysore
31. Malabar
32. Madras, Southeast
33. Madras, Deccan
34. Madras Coast, North

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GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, APRIL, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of April, 1912, is based on observations taken daily at 8 hrs. at 218 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 16 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. During the month under review several disturbances of the cold weather type were transmitted into north-west India from the west, but they were almost without exception feebly marked and produced precipitation only in Baluchistan and the extreme north. Thunderstorms were experienced in north-east India, Burma and the Peninsula, but except in the first named area they were not so frequent as is usually the case in April.

The total precipitation of the month was short of the average over a large part of the country, the only areas which received appreciably more than their normal supply being Assam, Bengal, Orissa, Bihar, the Central Provinces East, the Punjab, the North-West Frontier Province, Baluchistan, Malabar and Hyderabad South. The greatest defect occurred in Lower Burma and the Bay Islands where it amounted to 1·4."

Humidity, both absolute and relative, was low in the northern half of the Peninsula and high in Bihar, the United Provinces, the Punjab and the North-West Frontier Province, and approximately normal over the rest of the country. The cloud amount was above normal almost everywhere except in southern India and on the Burmese coast.

Temperature was low, both by day and night in Assam, Bengal and Bihar, but elsewhere the monthly values of mean temperature did not differ appreciably from the normal.

Atmospheric pressure at the earth's surface was ·053" in excess of the normal. The excess in north-west India decreased with elevation, so that at the level of Leh its amount was barely one-third of that in the plains of the Punjab.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar Observations.*—Photographs of the sun were obtained on all the days during the month and prominences were recorded throughout except on the 6th when the weather was unfavourable.

Sunspots.—Two small dots appeared a little to the east of the central meridian on the 8th at about latitude —12° and very near the same place where spot No. 2007 had been seen in March. They rapidly developed into a moderately sized double spot group which indicated some disturbance in the C line on several days. The group dis-

appeared at the west limb on the 15th and returned again on the 30th as a single small spot at the east limb. The heliographic positions of the spots were :—

No.	Latitude.	Longitude.
2008	—12	304
2009	—11	304

Prominences.—Thirty-nine large, 1 metallic and 6 eruptive prominences were observed during the month. The highest recorded was on the 10th at latitude +31° east and was 120″ high.

Magnetic disturbances.—There was a "moderate" magnetic disturbance on the 10th when spot No. 2008 was rapidly developing, having crossed the central meridian about 2 days previously.

Seismological records.

TABLE 1.

No.	Date.	P. T. commencement. G. M. T.	L. W. commencement. G. M. T.	Maximum. G. M. T.	End. G.M.T.	Maximum amplitude.	Duration.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	mm.	h. m.	
13	April 11	5 54·8	...	...	6 20·0	...	0 25·2	Widening of line.
14	„ 11	10 14·6	10 14·9	10 15·1	10 28·5	0·6=0·3	0 13·9	
15	„ 20	2 11·0	...	...	2 54·6	...	0 43·6	Widening of line.
16	„ 23	3 54·1	3 54·4	...	4 01·8	0·7=0·3	0 07·7	
17	„ 23	21 52·2	...	21 54·6	22 10·5	0·7=0·3	0 18·3	
18	„ 25	?	...	10 32·6	10 39·7	...	0 07·1	Widening of line. Hours signal at 10h.30m. Sudden displacement of trace through 0·1 mm. at 10h. 32·6m.

J. EVERSHED,

Director,

Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of April, 1912 the traces showed 15 calm days, 14 days of small and one day of moderate disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 2nd, 9th, 12th. 21st and 29th.

The following table represents the magnetic character of each day during the month.

TABLE 2.

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

C = calm ; S = small ; M = moderate ; G = great; V. G. = very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follow :—

Easterly declination . . .	0° 52′ 8″
Horizontal force	0·36870 C. G. S. unit.
Vertical force	0·16345 „ „
Inclination	23° 54·5
Inclination (observed) . . .	23° 53′·3
Horizontal force range . . .	0·00040 C. G. S. unit.
Horizontal force summed range .	0·00255 „
Declination range . . .	3′·5
Declination summed range . .	13′·7

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

Seismic disturbances.

TABLE 3.

Date.	Commencement.		Maximum.		End.		Maximum amplitude.	Duration.	
1912.	H.	M.	H.	M.	H.	M.	mm.	H.	M.
April 1st .	5	19·1	5	23·1	5	30·3	0·4	0	11·2
„ 23rd .	21	52·4	21	59·6	22	10·7	0·5	0	18·3
„ 25th .	10	34·7	10	35·9	10	42·4	0·2	0	7·7

All times given above denote G. M. T.
Sensibility to tilt 1 mm. = 0″·40.

N. A. F. MOOS,

Director,

Bombay and Alibag Observatories.

CALCUTTA OBSERVATORY.

5.—*List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. commencement G. M. T.	L. W. commencement G. M. T.	Maximum. G. M. T.	End G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
April 8th	11 37·5	...	...	12 40·0	1 2·5	...	Thickening of line.
" 23rd	21 49·6	21 53·7	21 54·7	22 11·0	0 21·4	1·5	

Sensibility 1 mm. =0·38″ of tilt.

C. W. PEAKE,
Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6.—*List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 5.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Max. amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
3rd	A	16 37·0	?	?	?	16 37·5	0 0·5	Small	Masstouching stops.
6th	A	14 19·9	?	?	?	14 21·2	0 1·3	"	
	B	14 20·0	?	?	14 20·7	14 21·7	0 1·7	"	Masstouching stops.
	A	17 33·0	?	?	17 34·2	17 36·1	0 3·1	?	Do.
	B	17 33·1	?	17 33·5	17 33·7	17 37·9	0 4·8	0·2	
16th	A	2 31·3	2 31·9	2 32·3	2 32·4	2 34·8	0 3·5	0·2	
	B	2 31·7	2 32·1	2 32·3	2 32·3	2 33·5	0 1·8	0·4	
19th	B	10 43·4	?	?	10 44·0	10 45·2	0 1·8	?	Masstouching stops.
	B	11 41·0	?	?	11 41·7	11 43·9	0 2·9	?	Do.
23rd	A	21 48·8	21 53·2	21 57·9	22 1·2	22 50	0 41	0·5	
	B	21 48·8	21 53·2	21 53·4	21 59·9	22 23	0 34	0·4	
25th	A	10 29·4	10 30·1	10 30·7	10 30·7	10 49	0 20	2·0	
	B	10 29·4	10 30·1	10 30·8	10 30·8	10 45	0 16	3·6	
27th	A	22 18·0	?	22 18·2	22 18·3	22 24	0 6	Small	

All times are given in G. M. T.
A=E—W component.
B=N—S component.
Magnification of each instrument was 15.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity. Rossi-Forel scale.	No. of shocks.
		H. M.	Sec.		
Tavoy	5th	11 0	?	4	?
Chaman	11th	17 3	120	5	2
Gopalpur	15th	3 50	3	3	1
Khushab	16th	2 35	45	3	2
Pharijong	20th	14 12	3	5	1
Murree	25th	9 53	30	5	1
Srinagar	25th	10 26	60	7	1
Cherat	25th	10 29	2	6	1
Chitral	25th	10 30	35	6	4
Lahore	25th	10 31	60	5	3
Drosh	25th	10 33	10	8	3
Rawalpindi	25th	10 34	2	5	1
Salonah	26th	15 51	8	5	2
Drosh	26th	23 32	5	6	2
"	27th	22 22	3	6	1

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·47
Minimum	1·40
Mean	1·44
Number of days of observation	5

W. A. HARWOOD,
Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. In the subequatorial region, as represented by Seychelles and Zanzibar, pressure differed but little from the normal; the velocity of air movement was low, and at Seychelles the direction of wind contained an undue westerly component. Rainfall was in defect by 31 per cent. at Seychelles and 7 per cent at Zanzibar.

TABLE 7.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	...	+·008	+·003
Actual mean wind direction	...	S 17° W	N 33° W
Normal mean wind direction	...	S 15° W	N 8° E
Actual mean wind velocity (miles per diem).	...	112	89
Normal mean wind velocity (miles per diem).	...	125	112
Rainfall departure from normal	...	−0·92	−2·29

Depressions and cyclonic storms.

9. April usually witnesses the establishment of the conditions characteristic of the hot season in northwest India and the highlands to the west of the Indus. Most of the disturbances which affect northwest India in April are locally formed and of thermal origin. During the month under review four or five disturbances affected northwest India. Some of them, according to the limited evidence available, were connected with low pressure conditions which advanced into Asia Minor from the west and were therefore of the class of cold weather storms. Within India the precipitation associated with them was restricted almost entirely to Kashmir, the Punjab, the North-West Frontier Province and Baluchistan, and was almost continuous during the period from the 14th to the 25th.

Some very severe local storms occurred in Bengal and north Burma and did considerable damage in the small areas affected by them.

Pressure.

10. The slight excess which had characterized March became much intensified in April for which month the mean barometric pressure in the plains of India was ·053″ above the normal. The excess was common to all parts of the country, but was somewhat more marked at the earth's surface than at the level of the observing hill stations.

As temperature conditions of the month differed to no great extent from the normal over a large part of the Indian region, it is obvious that the high density of the air was not due merely to variations of temperature of the lower atmospheric strata.

The table below shows the abnormal features of the distribution of pressure as well as of temperature during the month in different parts of the country.

TABLE 8.

Division.	Departure from normal of	
	Pressure	Mean temperature.
	″	°
Burma	+·057	−0·4
Assam	+·087	−4·6
Bengal	+·073	−3·8
Bihar and Orissa	+·068	−2·8
United Provinces	+·062	−1·8
Punjab	+·062	−1·7
North-West Frontier Province	+·039	−1·4
Sind	+·043	+0·8
Rajputana	+·039	0
Bombay	+·039	+1·0
Central India	+·046	−0·1
Central Provinces	+·045	−0·4
Hyderabad	+·048	+0·6
Mysore	+·046	+1·6
Madras	+·050	+1·1

As is ordinarily the case when the cold weather conditions in northern India persist into April the vertical gradient was steeper than usual.

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B–A.
	"		"	"
Quetta	+·034	Jacobabad	+·032	—·002
Leh	+·018	Lahore	+·060	+·042
Murree	+·030	Peshawar	+·037	+·007
Simla	+·034	Ludhiana	+·064	+·030
Chakrata	+·035	Roorkee	+·071	+·036
Darjiling	+·005	Dhubri	+·086	+·081
Mount Abu	+·038	Deesa	+·042	+·004
Pachmarhi	+·035	Khandwa	+·047	+·012
Kodaikanal	+·023	Madura	+·066	+·043

Temperature.

11. In northwest India weather was much cooler than usual from the 2nd to the 7th, and again from the 21st to the 26th and distinctly hot from the 10th to the 15th, whole in north-east India temperature was low almost uninterruptedly throughout the month. In the Peninsula and Burma excepting the northern districts, which were practically beyond the influence of the disturbed conditions in northern India, the temperature conditions were much less unstable than is ordinarily the case in April.

On the mean of the whole month temperature was lower than usual, both by day and night, in Assam, Bengal and Bihar, and by day only in the Punjab and parts of the United Provinces, but in almost all other parts of the country the deviations from the normal were not of any great significance.

TABLE 10.

SUB-DIVISION.	ACTUAL TEMPERATURE.					DEPARTURE FROM NORMAL OF		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	91·0	79·9	85·5	11·1	20·1	—0·4	+1·4	—1·8
2. Lower Burma	94·6	75·9	85·3	18·8	27·6	+0·9	—0·2	+1·1
3. Upper Burma	97·6	72·2	84·9	25·5	39·8	—1·3	—1·7	+0·4
4. Assam	79·6	65·8	72·7	13·8	29·5	—6·4	—2·7	—3·7
5. Bengal	89·0	71·6	80·3	17·4	34·3	—5·2	—2·5	—2·7
6. Orissa	95·3	76·7	86·0	18·6	32·5	—2·5	—0·2	—2·3
7. Chota Nagpur	98·9	72·1	85·5	26·8	45·7	—2·9	—1·7	—1·2
8. Bihar	93·7	70·5	82·1	23·3	40·5	—6·0	—2·5	—3·5
9. United Provinces, East	98·4	71·2	84·8	27·3	43·1	—3·5	—0·4	—3·1
10. Do., West	98·6	70·7	84·7	27·8	43·3	—2·8	—0·5	—2·3
11. Punjab, East and North	92·5	66·6	79·5	25·9	46·9	—3·7	+0·5	—4·2
12. Do., Southwest	93·5	68·7	81·1	24·8	50·1	—4·6	+0·5	—5·1
13. Kashmir	64·4	41·9	53·1	22·5	45·7	+1·6	+1·7	—0·1
14. North-West Frontier Province	87·7	63·8	75·7	23·9	50·1	—3·1	+0·3	—3·4
15. Baluchistan	82·8	58·7	70·9	24·0	46·3	—2·5	—1·9	—0·6
16. Sind	96·4	74·4	85·4	22·1	38·1	—0·9	+2·6	—3·5

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
17. Rajputana, West	100·1	74·1	87·2	26·0	44·9	—1·1	—0·1	—1·0
18. Do., East	100·1	75·2	87·6	24·9	39·9	—1·1	+2·1	—3·2
19. Gujarat	98·0	74·2	86·1	23·8	37·0	+0·7	+1·8	—1·1
20. Central India, West	100·3	72·7	86·5	27·6	42·7	—0·5	+2·1	—2·6
21. Do., East	100·1	71·8	86·0	28·3	43·8	—2·4	+0·3	—2·7
22. Berar	103·9	77·2	90·5	26·7	43·3	+0·3	+1·3	—1·0
23. Central Provinces, West	101·8	73·2	87·5	28·6	44·7	—1·4	+0·6	—2·0
24. Do., East	99·8	73·9	86·9	25·9	39·2	—2·5	—0·7	—1·8
25. Konkan	90·2	78·9	84·6	11·2	20·2	+0·6	+0·6	0
26. Bombay Deccan	101·7	72·7	87·2	29·0	41·0	+1·0	+1·3	—0·3
27. Hyderabad, North	102·1	75·8	88·9	26·4	40·1	+0·2	+1·5	—1·3
28. Do., South	102·0	78·0	90·1	24·0	33·6	—0·2	+1·0	—1·2
29. Mysore	95·3	70·9	83·1	24·4	30·3	+1·7	+1·5	+0·2
30. Malabar	91·5	79·0	85·3	12·4	18·0	+0·8	+1·6	—0·8
31. Madras, Southeast	97·2	78·1	87·7	19·1	25·9	+0·7	+1·4	—0·7
32. Do., Deccan	105·0	80·6	92·8	24·4	34·3	+1·0	+2·0	—1·0
33. Do. Coast, North	93·3	78·2	85·8	15·1	23·5	+0·5	+0·5	0

TABLE 11.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·1	—0·7	—0·4
Assam	—6·4	—2·7	—4·6
Bengal	—5·2	—2·5	—3·8
Bihar and Orissa	—4·2	—1·5	—2·8
United Provinces	—3·2	—0·5	—1·8
Punjab	—4·0	+0·5	—1·7
North-West Frontier Province	—3·1	+0·3	—1·4

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Sind	—0·9	+2·6	+0·8
Rajputana	—1·1	+1·2	0
Bombay	+0·8	+1·3	+1·0
Central India	—1·5	+1·2	—0·1
Central Provinces	—1·3	+0·5	—0·4
Hyderabad	—0·1	+1·2	+0·6
Mysore	+1·7	+1·5	+1·6
Madras	+0·8	+1·4	+1·1

Winds.

12. (*a*) At Port Blair the usual westerly element in the mean wind direction was replaced by an easterly component, and at Colombo calms were recorded on no less than 29 days; these are indications that over the sea the transition from the winter to the summer type of air circulation was occurring more slowly than usual. In northern India the easterly winds which usually do not extend further west than Bihar were during the month under review continued up the Gangetic Plain as far west as Lucknow and Bareilly, and a portion of the heavy rainfall recorded in north-west

India may have been due to this abnormal feature in the air movement. Elsewhere the deviations from the normal direction were not of much significance.

(*b*) Except in Burma, Bengal and the North-West Frontier Province, where it was feebler than usual, the velocity of air movement was very nearly normal in amount.

(*c*) Winds blew with more than their usual steadiness in the greater part of the Peninsula and of north-west India, while in Burma the directions were not so steady as is ordinarily the case in April.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	−0·8	−14
Assam	−0·1	+4
Bengal	−1·4	−7
Bihar and Orissa	−0·1	+8
United Provinces	−0·3	+4
Punjab	0	+7
North-West Frontier Province	−0·7	0
Sind	−0·3	+12
Rajputana	−0·1	+7
Bombay	−0·5	+7
Central India	−0·6	−6
Central Provinces	+0·5	+6
Hyderabad	−0·9	+6
Mysore	+0·2	+4
Madras	0	+9

Humidity and cloud.

13. The absolute humidity was above the average in Bihar, the United Provinces, the Punjab, the North-West Frontier Province, Sind and the extreme south of the Peninsula, and normal or in defect in almost all other parts of the country. The greatest deficiency occurred in Khandesh where the air contained barely half of the normal quantity of vapour. The relative humidity of the air was also similarly distributed, except that in Assam and Bengal, owing to the low temperature, the defect was replaced by an excess.

Skies were clouded to a greater extent than usual in April in all parts of the Indian region with the exception of Malabar, Mysore, southeast Madras, the Bombay-Deccan, the coast districts of Burma and a few places in Hyderabad and the United Provinces. The excess was most conspicuous in Central India and the region defined by Rangoon, Toungoo and Thayetmyo where it was nearly equal to one-third of the total sky expanse.

TABLE 13.

Division.	Hygrometry, 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	72	−1	·740	−·034	3·8	+0·3
Assam	90	+5	·650	−·048	6·8	+0·8
Bengal	82	+4	·774	−·041	5·1	+1·0
Bihar and Orissa	67	+7	·677	+·009	3·1	+0·8
United Provinces	47	+6	·493	+·044	1·9	+0·6
Punjab	52	+9	·453	+·028	3·1	+0·9
North-West Frontier Province.	69	+11	·532	+·053	4·1	+1·3
Sind	61	+5	·657	+·082	3·1	+1·2
Rajputana	32	+1	·353	−·013	2·4	+0·7
Bombay	59	0	·656	+·017	2·5	+0·3
Central India	31	−3	·365	−·050	3·7	+2·4
Central Provinces	33	−5	·383	−·055	2·6	+0·5
Hyderabad	47	−5	·565	−·044	2·9	−0·2
Mysore	68	−3	·645	0	2·5	−1·3
Madras	73	0	·862	+·028	4·0	+0·1

Rainfall.

14. Except locally in Malabar and Hyderabad South the month's aggregate rainfall was either normal or in defect throughout the Peninsula, the deficiency being greatest in Madras Southeast where it amounted to an inch or 72 per cent. In the Central Provinces the month's total quantity was 52 per cent. in excess in the eastern districts, and 54 per cent. short of the normal in Berar and the western districts. In northern India the distribution was marked by much irregularity : thus while the precipitation was well above the normal in Baluchistan, the North-West Frontier Province, the Punjab, Bihar, Orissa, Assam and Bengal it was either about normal or in defect in Kashmir, Rajputana, Gujarat, Sind, the United Provinces, Chota Nagpur and Central India. In Burma the monthly total was 59 per cent. below the normal due chiefly to the scanty fall in Lower Burma.

On the average of the whole of the plains there was an excess of 19 per cent. in the month's rainfall.

TABLE 14.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	1·0	3·7	0·43	1·83	− 1·40	− 77
2. Lower Burma	0·9	2·5	0·45	1·87	−1·42	− 76
3. Upper do.	2·0	2·2	0·74	1·14	−0·40	− 35
4. Assam	16·7	12·0	11·94	9·35	+2·59	+ 28
5. Bengal	8·0	4·1	6·24	3·03	+3·21	+106
6. Orissa	3·3	2·1	1·98	1·22	+0·76	+ 62
7. Chota Nagpur	2·3	1·8	0·95	0·90	+0·05	+ 6
8. Bihar	1·9	1·1	1·01	0·59	+0·42	+ 71
9. United Provinces, East	0·5	0·4	0·17	0·14	+0·03	+ 21
10. Do., West	0·7	0·6	0·21	0·23	−0·02	− 9
11. Punjab, East and North	2·6	1·0	0·80	0·43	+0·37	+ 90
12. Punjab, Southwest	3·2	0·9	1·22	0·37	+0·85	+230
13. Kashmir	5·8	4·4	2·44	2·35	+0·09	+ 4
14. North-West Frontier Province	5·5	2·6	2·22	1·32	+0·90	+ 68
15. Baluchistan	2·6	1·2	0·90	0·48	+0·42	+ 87
16. Sind	0·1	0·3	0·06	0·13	−0·07	− 54
17. Rajputana, West	0·2	0·2	0·07	0·06	+0·01	+ 17
18. Do., East	0·4	0·3	0·14	0·11	+0·03	+ 27
19. Gujarat	0·1	0·1	0·02	0·02	0	0
20. Central India, West	0·1	0·1	0·01	0·05	−0·04	− 80
21. Do., East	0·5	0·3	0·11	0·12	−0·01	− 8
22. Berar	0·4	0·6	0·10	0·24	−0·14	− 58
23. Central Provinces, West	0·4	0·6	0·11	0·22	−0·11	− 50
24. Do., East	1·7	1·2	0·73	0·48	+0·25	+ 52
25. Konkan	0·7	0·8	0·38	0·45	−0·07	− 16

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
26. Bombay Deccan	1·6	1·6	0·80	0·78	+0·02	+ 3
27. Hyderabad, North	1·3	1·3	0·47	0·48	—0·01	— 2
28. Do., South	2·3	1·6	1·03	0·67	+0·36	+ 54
29. Mysore	2·5	2·9	1·60	1·64	—0·04	— 2
30. Malabar	4·3	4·3	5·13	2·90	+2·23	+ 77
31. Madras, Southeast	0·9	2·3	0·42	1·49	—1·07	— 72
32. Do., Deccan	1·3	1·4	0·56	0·67	—0·11	— 16
33. Do. Coast, North	1·5	1·6	0·79	0·96	—0·17	— 18

TABLE 15.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	0·61	1·48	—0·87	— 59
Assam	11·94	9·35	+2·59	+ 28
Bengal	6·24	3·03	+3·21	+106
Bihar and Orissa	1·22	0·79	+0·43	+ 54
United Provinces	0·19	0·18	+0·01	+ 6
Punjab	0·89	0·42	+0·47	+112
North-West Frontier Province	2·22	1·32	+0·90	+ 68

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Sind	0·06	0·13	—0·07	— 54
Rajputana	0·12	0·09	+0·03	+ 33
Bombay	0·47	0·48	—0·01	— 2
Central India	0·04	0·07	—0·03	— 43
Central Provinces	0·25	0·29	—0·04	— 14
Hyderabad	0·78	0·59	+0·19	+ 32
Mysore	1·60	1·64	—0·04	— 2
Madras	0·97	1·36	—0·39	— 29
Mean of India	1·30	1·09	+0·21	+ 19

Snowfall.

I.—AFGHANISTAN.

15. There was no snowfall, but some parts of the country were visited towards the end of the month by a rather unusual hailstorm.

II.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Wano.*—No snow fell during the month.

(*b*) *Kurram.*—There were in all six falls on the Sufed Koh.

(*c*) *Kohat.*—No snow storm occurred on the hills bordering this district.

III.—KASHMIR.

No information is available.

IV.—PUNJAB.

(*a*) *Murree.*—No snowfall occurred in these hills.

(*b*) *Kilba (Simla Hills).*—There were in all nine falls, two during the first week and seven during the second half of the month. The lowest level reached by most of the falls was about 10,000 feet and here the aggregate fall was estimated at nine inches.

V.—UNITED PROVINCES.

(*a*) *Garhwal.*—Snow fell on the highest elevations on the 24th and 25th.

(*b*) *Almora.*—The total fall of the month was reported as amounting to about 7 feet in Chaudas, 6 feet in Byans and Malla Darma, 4 feet in Malla Johar and 3 feet in Malla Danpur. The snowline came down to a distance of about half a mile from the perpetual snows.

SUMMARY.

16. (*a*) In Transcaspian and Russian Turkistan snowfall is reported to have occurred as late as the end of the month.

(*b*) In the hill districts bordering upper India, according to the available information, the aggregate fall of the month was almost certainly less than the average.

HEM RAJ.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 16 stations in India, etc., in April, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs. at

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
5	Calcutta . .	21	29·874	29·741	·133	29·806	+·055	29·774	93·4	75·0	18·4	98·7	63·0	35·7	86·8	90·7	83·6	—1·4	71·4	77·2	77·5	75·4
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad . .	309	·550	·412	·138	·481	+·063	·729	101·7	72·6	29·1	108·4	61·8	46·6	92·8	100·0	86·6	− 1·0	62·1	68·8	68·7	66·5
	VI.—Punjab.																					
11	Lahore . .	702	·148	·054	·094	·095	+·060	·759	93·4	66·7	26·7	106·9	57·2	49·7	83·2	91·9	79·7	− 1·2	61·4	67·9	69·7	66·3
	IX.—Rajputana.																					
18	Jaipur . .	1,431	28·448	28·336	·112	28·386	+·039	·721	100·3	73·2	27·1	107·5	65·1	42·4	91·6	97·1	86·6	+ 0·3	59·7	66·9	68·0	61·9
	X.—Bombay.																					
25	Bombay . .	37	29·906	29·783	·123	29·844	+·032	·820	91·3	78·6	12·7	94·2	74·6	19·6	85·7	87·3	83·9	+ 1·8	74·1	77·6	77·5	76·4
	XIV.—Mysore.																					
29	Bangalore . .	3,021	26·995	26·860	·135	26·933	+·055	·698	95·1	69·8	25·3	98·6	66·2	32·4	84·8	93·2	81·2	+ 1·3	64·2	70·1	67·9	67·4
	XV.—Madras.																					
31	Pudukkottai .	318	29·633	29·436	·147	29·559		·803	99·5	78·7	20·8	103·0	75·0	28·0	89·5	95·5	89·1		76·3	79·6	80·3	78·7
	Madras . .	22	·930	·811	·119	·878	+·053	·830	92·9	77·4	15·5	97·2	72·5	24·7	90·1	88·5	84·2	+ 0·1	76·5	79·8	80·2	78·8
	Hill Stations excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	23·160	23·111	·049	23·127	+·036	23·089	63·7	50·8	12·9	73·0	40·7	32·3	58·9	60·3	57·9	− 1·4	43·1	48·4	49·3	46·9
	Sarain . .		·207	·154	·053	·171		·134	63·1	42·9	20·2	73·0	34·9	38·1	58·1	60·2	51·2			47·8	49·7	
	Mukteswar . .	7,592	22·896	22·832	·064	22·856		22·814	67·4	47·9	19·5	75·3	40·9	34·4	60·6	62·5	58·2		40·7	48·6	50·4	46·6
	Katmandu . .	4,388	25·691	25·591	·100	25·639	+·090†	25·593	80·3	54·6	25·7	86·4	44·1	42·3	71·2	75·9	68·1	+1·0†	52·0	60·7‡	62·0‡	58·2
	Ootacamund .	*7,397*	23·125	23·053	·072	23·087		23·023	72·9	52·1	20·8	76·5	48·2	28·3	69·0	67·3	63·1		48·4	55·9	56·2	53·5
	Kodaikanal . .	7,688	22·899	22·835	·064	22·867		22·802	71·0	53·4	17·6	75·8	50·6	25·2	66·4	64·1	62·2		48·0	56·1	57·9	54·0
	Dodabetta . .	8,539	·152§	·084	·068	·116		·054§	66·2	50·8	15·4	69·3	47·9	21·4	63·4§	63·0	59·1		44·4	52·2§	54·1	50·1
	Extra India.																					
	Diego Garcia .																					
	Seychelles . .	15	29·956	29·856	·100	29·909	+·003†	29·847	86·2	79·6	6·6	88·3	76·8	11·5	83·7	84·6	81·5	+2·1†	73·8	78·4	78·8	77·0
	Mauritius . .	181																				

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 5,200 feet.

§ Mean of 29 days.

A.

16 stations in India, etc., in April, 1912.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind direction. Total number of 10 hrs. and 16 hrs. winds from											Wind steadiness.		Wind velocity.		Rainfall.		Station.	Number of subdivision.
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.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·725	·805	·767	·798	+·001	83	63	54	72	+ 2	4·0	3·5	3·7	+1·1	1		3	1	2	20	33			S 24° W	S 30° W	78	69	116*	168	46	1·54	Calcutta.	5
																															V.—United Provinces of Agra and Oudh.	
·420	·389	·291	·386	+·012	53	25	15	33	+ 1	2·1	2·6	2·3	+0·6	1	7	5	3	1	4	4	17	18	N 53° W	N 54° W	50	35	71	127	0	0	Allahabad.	9
																															VI.—Punjab.	
·478	·478	·434	·480	+·085	73	44	31	52	+11	3·1	4·1	3·6	+0·7	9	7	5	2	5	3	1	10	18	N 42° W	N 15° W	37	28	53	77	1·34	0·44	Lahore.	11
																															IX.—Rajputana.	
·348	·354	·325	·355	+·022	43	24	18	30	0	2·9	5·8	4·3	+1·8		2	3	10	6	3	7	14	15	N 79° W	N 57° W	23	50	101*	120	0·12	0·12	Jaipur.	18
																															X.—Bombay.	
·780	·837	·811	·834	—·007	80	68	63	73	− 4	2·7	2·0	2·3	+0·7		1		1		4	3	23	28	N 72° W	N 60° W	77	56	169*	254	0	0	Bombay.	25
																															XIV.—Mysore.	
·535	·562	·386	·514	—·041	74	47	25	51	− 4	1·8	2·2	2·0		1	1	5	16	11	5	13	6	2	S 31° E	S 27° W	32	38	121	115	0·05	0·04	Bangalore.	29
																															XV.—Madras.	
·877	·870	·898	882		89	61	50	67		4·3	4·3	4·3		14			6	28	8	4			S 37° E		63		106		0·14	0·14	Pudukkottai.	31
·900	878	·917	·920	+·020	96	62	66	78	0	3·3	1·1	2·2	−1·3				1	40	11	8			S 28° E	S 36° E	85	83	122*	182	0	0	Madras.	
																															Hill Stations excluding Kashmir and Baluchistan.	
·199	·232	·238	·216	+·005	54	47	47	49	+ 6	5·3	6·0	5·7	+1·5																1·78	0·52	Simla.	
	·230	·254				49	51			5·6	7·3	6·5		20	6	8			11	8	6	1	S 49° W		15		30		4·64	1·28	Sarain.	
·182	·223	·244	·209		55	43	45	48		3·6	6·6	5·1		13	1	1	1	1		3	38	2	N 89° W		65		186		2·05	1·09	Mukteswar.	
·361	·417‡	·403‡	·387	+·027	84	57‡	47‡	63	+ 5	4·9	6·6	5·7	+1·7	59							1		W*	N 87° W	2	42	28*	36	3·42	1·05	Katmandu.	
·304	·313	·327	·310		78	45	52	59		3·5	6·5	5·0		2	3	13	34	7	1				N 82° W		82		72		2·32	0·58	Ootacamund.	
·292	·350*	·422	·355		71	55	71	66		3·3	6·5	4·9			12	10	16	18	1			3	N 77° E		57		206*		10·05	4·07	Kodaikanal.	
·227	·277§	·337	·279		61	48§	62	57		4·0§	6·5	5·3			11	24	19	5					N 58° E		79		305		3·04	1·35	Dodabetta.	
																															Extra India.	
																															Diego Garcia.	
·755	·900	·909	·880	+·017	75	78	76	79	− 1	6·0	6·1	6·1	+1·0†	10	8		4	8	2		4	24	N 33° W	N 8° E	35	9	89*	112	5·06	1·01	Seychelles.	
																															Mauritius.	

* Uncorrected for scale error. † Departure from old normal. ‡ Mean of 18 days. ¶ Wind observation less f

Table B.—Abstract of observations taken at 8 hrs. at 218 stations in India, etc., in April, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

		Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
	Pressure departure from normal.	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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·057	95·9	+0·1	74·3	−0·7	85·1	−0·4	21·5	32·0	−0·8	−14	72	−1	·740	−·034	3·8	+0·3	0·61	1·48	−0·87
Assam	+·087	79·6	−6·4	65·8	−2·7	72·7	−4·6	13·8	29·5	−0·1	+4	90	+5	·650	−·048	6·8	+0·8	11·94	9·35	+2·59
Bengal	+·073	89·0	−5·2	71·6	−2·5	80·3	−3·8	17·4	34·3	−1·4	−7	82	+4	·774	−·041	5·1	+1·0	6·24	3·03	+3·21
Bihar and Orissa	+0·68	95·4	−4·2	72·9	−1·5	84·2	−2·8	22·5	39·0	−0·1	+8	67	+7	·677	+·009	3·1	+0·8	1·22	0·79	+0·43
United Provinces of Agra and Oudh.	+·062	98·5	−3·2	71·0	−0·5	84·7	−1·8	27·5	43·2	−0·3	+4	47	+6	·493	+·044	1·9	+0·6	0·19	0·18	+0·01
Punjab	+·062	92·9	−4·0	67·3	+0·5	80·0	−1·7	25·6	48·0	0	+7	52	+9	·453	+·028	3·1	+0·9	0·89	0·42	+0·47
North-West Frontier Province	+·039	87·7	−3·1	63·8	+0·3	75·7	−1·4	23·9	50·1	−0·7	0	69	+11	·532	+·053	4·1	+1·3	2·22	1·32	+0·90
Sind	+·043	96·4	−0·9	74·4	+2·6	85·4	+0·8	22·1	38·1	−0·3	+12	61	+5	·657	+·082	3·1	+1·2	0·06	0·13	−0·07
Rajputana	+·039	100·1	−1·1	74·8	+1·2	87·5	0	25·3	41·9	−0·1	+7	32	+1	·353	−·013	2·4	+0·7	0·12	0·09	+0·03
Bombay	+·039	97·1	+0·8	75·0	+1·3	86·0	+1·0	22·1	33·8	−0·5	+7	59	0	·656	+·017	2·5	+0·3	0·47	0·48	−0·01
Central India	+·046	100·2	−1·5	72·2	+1·2	86·3	−0·1	28·0	43·3	−0·6	−6	31	−3	·365	−·050	3·7	+2·4	0·04	0·07	−0·03
Central Provinces	+·045	101·7	−1·3	74·3	+0·5	88·0	−0·4	27·3	42·7	+0·5	+6	33	−5	·383	−·055	2·6	+0·5	0·25	0·29	−0·04
Hyderabad	+·048	102·1	−0·1	77·1	+1·2	89·6	+0·6	25·0	36·4	−0·9	+6	47	−5	·565	−·044	2·9	−0·2	0·78	0·59	+0·19
Mysore	+·046	95·3	+1·7	70·9	+1·5	83·1	+1·6	24·4	30·3	+0·2	+4	68	−3	·645	0	2·5	−1·3	1·60	1·64	−0·04
Madras	+·050	96·2	+0·8	78·6	+1·4	87·4	+1·1	17·6	25·0	0	+9	73	0	·862	+·028	4·0	+0·1	0·97	1·36	−0·39

Table

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

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	150	29·814		29·894	29·897	13th	29·750	25th	·147	81·9	93·0		77·9		85·4		15·1	96·1	25th	73·7	1st	22·4
	Mergui	65	29·903	+·051	29·899	30·005	13th	29·831	30th	·174	81·0	93·5	+1·6	73·6	−0·1	83·6	+0·7	19·9	97·0	12th & 13th.	70·8	17th & 20th.	26·2
	Tavoy	19	29·953	+·032	29·905	30·066	13th	29·885	21st, 26th & 30th.	·181	80·5	95·3	+1·3	75·3	+1·1	85·3	+1·2	20·0	99·0	27th & 29th.	68·3	5th	30·7
	Moulmein	94	29·874	+·057	29·905	30·097	13th	29·784	30th	·223	82·2	95·4	+1·8	77·4	+1·0	86·8	+1·4	19·0	99·5	16th & 19th.	72·3	13th	27·2
	Rangoon	18	29·941	+·050	29·897	30·063	13th	29·843	30th	·220	80·4	99·2	+0·6	75·5	−0·7	87·5	−0·1	23·7	102·0	4 days	71·0	4th	31·0
	Bassein	27?	29·924	+·055	29·887	30·031	13th	29·823	21st	·208	83·3	98·2	+2·0	76·7	+1·2	87·5	+1·6	21·5	102·2	12th	72·4	2nd	29·8
	Diamond Island	41	29·925	+·050	29·900	30·026	13th	29·838	26th & 30th.	·188	83·9	83·1	−0·6	76·8	−1·5	82·4	−1·1	11·3	92·9	12th	74·2	3rd & 13th.	18·7
	Toungoo	164	29·780	+·057	29·886	29·904	13th	29·681	30th	·223	83·1	100·7	+0·3	75·5	−0·5	88·1	−0·1	25·2	104·0	20th	68·4	3rd	35·6
	Kyaukpyu	18	29·923		29·881	30·032	13th	29·812	25th	·190	81·2	89·9		75·7		82·8		14·2	94·0	21st	72·4	4 days	21·6
	Akyab	20	29·945	+·067	29·906	30·044	13th	29·824	30th	·220	80·0	92·0	+0·2	74·2	−1·8	83·1	−0·8	17·8	98·9	29th	65·5	2nd	33·4
3	Thayetmyo	121	29·800	+·055	29·861	29·931	11th	29·694	30th	·237	84·4	102·7	−0·3	74·6	−1·2	88·6	−0·7	28·1	106·9	30th	62·4	2nd	44·5
	Minbu	*165*	29·750	+·059	29·858	29·908	11th	29·646	30th	·262	82·6	102·9	−0·5	76·1	−0·8	89·5	−0·7	26·8	107·8	26th	68·0	2nd	39·8
	Yamethin	657	29·243	+·042	29·848?	29·390	11th	29·141	30th	·249	81·2	101·0	−1·3	74·8	−1·2	87·9	−1·3	26·1	105·3	26th & 30th.	69·0	2nd & 12th.	36·3
	Mandalay†	250	29·664	+·068	29·862	29·823	11th	29·567	30th	·256	82·0	102·1	−0·2	74·9	−2·9	8·5	−1·5	27·2	106·7	27th & 30th.	66·1	3rd	40·6
	Monywa	280	29·655		29·885	29·815	11th	29·540	25th	·275	81·5	99·6		74·5		87·0		25·1	105·8	9th	66·6	3rd	40·2
	Lashio	*2,820*	27·166	+·053	29·913	27·290	13th	27·069	30th	·221	67·7	?	?	61·3	−1·6	?	?	?	?	?	55·5	2nd	?
	Bhamo	*381*	29·568	+·096	29·910	29·713	11th	29·417	30th	·296	71·3	89·8	−4·1	65·3	−2·3	77·6	−3·2	24·5	96·4	14th	55·1	2nd	41·3
	Myitkyina	458	29·465		29·893	29·638	11th	29·351	30th	·287	69·8	85·3		64·9		75·1		20·4	90·7	29th	55·0	1st	35·7
	II.—Assam.																						
4	Dibrugarh	253	29·596		29·921	29·761	11th	29·439	25th	·322	67·9	77·1		64·7		70·9		12·4	84·4	30th	55·6	1st	28·8
	Sibsagar	333	29·639	+·092	29·940	29·785	11th	29·473	25th	·312	68·8	77·3	−5·2	64·4	−2·1	70·9	−3·7	12·9	84·6	13th	54·5	14th	30·1
	Tezpur	252	29·699		29·917	29·865	10th	29·554	25th	·311	69·0	79·3		65·5		72·4		13·8	87·1	13th	56·8	4th	30·3
	Gauhati	195	29·751		29·906	29·901	11th	29·641	25th	·260	71·0	80·5		66·2		73·4		14·3	87·8	8th & 9th	63·1	2nd	24·7
	Dhubri	115	29·807	+·086	29·879	29·973	10th	29·681	21st	·292	70·8	80·9	−7·8	67·4	−3·3	74·1	−5·5	13·5	92·0	9th	61·1	1st	30·9
	Silchar	104	29·861	+·084	29·920	29·980	11th	29·765	24th	·215	71·0	82·3	−6·2	66·4	−2·8	74·3	−4·5	15·9	90·3	13th	58·3	1st	32·0
	III.—Bengal.																						
5	Cox's Bazar	36	29·913		29·894	30·034	11th	29·810	30th	·224	78·4	86·5		71·2		78·9		15·3	90·2	8th	62·2	1st	28·0
	Chittagong	87	29·853	+·067	29·892	29·968	12th	29·759	24th	·209	76·5	85·6	−3·3	70·2	−3·5	77·9	−3·4	15·4	90·5	8th	59·5	1st	31·0
	Noakhali	43	29·896		29·887	30·023	12th	29·776	24th	·247	77·5	85·1		70·6		78·0		14·3	88·3	13th	58·9	1st	29·4
	Barisal	12	29·906	+·073	29·865	30·044	12th	29·799	21st	·245	79·8	89·1	−3·1	71·7	−3·7	80·4	−3·4	17·4	94·3	8th & 9th	61·1	1st	33·2
	Narayanganj	63	29·883	+·072	29·858	30·034	12th	29·760	21st	·274	76·5	87·5	−5·7	70·7	−3·6	79·1	−4·7	16·8	91·5	6th, 7th & 29th.	61·8	1st	29·7
	Mymensingh	63	29·868	+·092	29·883	30·001	11th	29·748	21st	·253	72·4	83·7	−7·1	68·8	−3·4	76·3	−5·3	14·9	93·1	9th	62·1	1st	31·0
	Bogra	75	29·828	+·078	29·855	29·992	10th	29·728	21st	·264	74·4	87·7	−8·5	69·2	−2·7	78·4	−5·6	18·5	101·2	9th	60·2	1st	41·0
	Dinajpur	123	29·770	+·081	29·850	29·942	10th	29·658	21st	·284	73·1	86·9	−7·7	67·8	−2·9	77·4	−5·3	19·1	97·3	9th	59·0	1st	38·3
	Jalpaiguri	283	29·626	+·077	29·873	29·790	10th	29·502	21st	·288	72·1	85·0	−4·5	67·3	−0·9	76·1	−2·7	17·7	90·9	9th	58·9	1st	32·0
	Saugor Island	25	29·863	+·060	29·833	29·999	12th	29·743	21st	·256	82·2	87·4	−3·4	78·1	−1·8	82·7	−2·6	9·3	91·2	28th	65·7	1st	25·5
	Midnapore	149	29·719		29·815	29·861	1st	29·580	21st	·281	80·9	95·5		74·2		84·8		21·3	103·3	23rd & 29th.	62·7	1st	40·6

† Mean of 29 days.

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

B.

stations in India, etc., in April, 1912.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 30th April, 1912.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period 1st Dec., 1911 to 30th April, 1912.	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	56	5
																																I.—Burma.
4	5	14	4	1	1		1		N 46° E		5·0*			59		79		·864		5·3		2			1·29			3·53			0·75	Victoria Point.
30									(a)	N 8° W	3·1	1·7	+1·4			83	+ 2	·869	—·024	2·6	—2·6	7	6·70	+0·30	4·09	5·72	− 1·63	6·82	12·28	− 5·46	1·30	Mergui.
30									(a)	N 27° W	1·0*	1·2	−0·[illegible]			79	− 4	·829	—·038	2·8	—1·5	0	5·30	—5·30	0·20	3·14	− 2·94	1·33	5·70	− 4·37	0·08	Tavoy.
16		1	9		4				S 71° E	S 31° E	2·0	2·8	—0·8	33	—12	73	− 6	·826	—·035	1·7	—2·3	2	5·00	—3·00	1·79	2·90	− 1·11	3·92	3·84	+ 0·08	1·66	Moulmein.
11	2	1			2	4	5	5	N 83° W	S 61° W	2·3	4·1	−1·8	37	—33	77	− 3	·822	—·026	5·6	+2·5	0	2·20	—2·20	0	1·58	− 1·58	5·55	2·47	+ 3·08	0	Rangoon.
13							5	12	N 58° W	N 55° W	4·7	4·5	+0·2	49	—18	75	− 4	·857	—·013	1·7	−1·8	0	2·10	−2·10	0	1·25	− 1·25	1·40	2·19	− 0·79	0	Bassein.
2	5	3				1	4	15	N 37° W	N 47° W	8·9	6·2	+2·7	69	+ 6	74	0	·870	+·021	2·1	—2·1	0	2·09	−2·09	0	1·03	− 1·03	1·57	2·39	− 0·82	0	Diamond Island.
12	1	1		7	7	2			S 20° E	S 28° E	2·1	3·4	−1·3	43	—31	66	− 7	·748	−·100	6·6	+3·8	2	3·10	−1·10	0·63	1·97	− 1·34	4·22	2·92	+ 1·30	0·26	Toungoo.
9	2	13	1	2				3	N 39° E		4·2*			49		78		·838		3·5		1			0·60			0·77			0·60	Kyaukpyu.
	8	10	4	4	1			3	N 42° E	N 48° E	3·5	2·8	+0·7	56	+9	78	− 2	·792	−·093	2·8	—1·7	2	1·80	+0·20	0·71	1·70	− 0·99	1·96	3·20	− 1·24	0·59	Akyab.
11	2	5	1	5	3	2		1	S 73° E	S 10° W	2·7*	4·7	—2·0	23	−40	67	+ 5	·797	+·062	3·7	+2·6	1	1·60	—0·60	0·23	0·84	− 0·61	0·25	1·37	− 1·12	0·11	Thayetmyo
1	2			24				8	S 49° E	S 45° E	2·8	7·1	—4·3	62	+14	61	+ 1	·670	—·007	2·7	+1·5	0	1·20	—1·20	0	0·93	− 0·93	0·46	1·96	− 1·50	0	Minbu.
6		2		15	5			2	N 62° E	S 28° E	2·4	5·0	−2·6	40	—31	62	− 3	·663	—·079	1·5	+0·5	3	3·60	—0·60	0·54	1·66	− 1·12	0·86	2·91	− 2·05	0·22	Yamethin.
9	1	1		10	3	3	1	1	S 23° E	S 3° W	3·9	4·6	—0·7	37	—10	54	− 5	·593	−·114	2·5	+0·1	1	2·40	—1·40	0·27	1·13	− 0·86	0·64	1·77	− 1·13	0·19	Mandalay.
9	15	1					1	4	N 9° W		2·2			62		56		·597		4·7		1	2·00	−1·00	0·18	1·08	—0·90	0·18	1·88	− 1·70	0·10	Monywa.
16	2	7	1	2			1	1	N 42° E		3·0*			27		75	+ 5	·496	—·015	8·4	+2·9	5			3·54	2·05	+ 1·49	6·72	3·95	+ 2·77	1·71	Lashio.
22	3	5							N 29° E	N 14° W	1·8	3·1	—1·3	27	− 6	81	+ 7	·623	—·011	5·5	+1·7	5	4·80	+0·20	3·45	1·71	+ 1·74	4·41	4·01	+ 0·40	1·17	Bhamo.
15	2	11	2						N 45° E		1·8			46		76		·556		4·7		8			3·35	1·81	+ 1·54	5·31	4·31	+ 1·00	0·82	Myitkyina.
																																II.—Assam.
25		1	3	1					E		0·9			15		99		·667		6·3		15	13·50	+1·50	6·48	11·83	− 5·35	14·95	20·22	− 5·27	0·93	Dibrugarh.
9	5	10	1	1	1			3	N 28° E	N 48° E	2·0	2·4	—0·4	46	− 7	92	+ 2	·646	−·043	8·8	+1·9	13	14·50	—1·50	8·05	10·22	− 2·17	16·12	18·81	− 2·69	1·82	Sibsagar.
2	3	13	12						N 60° E		4·0			79		88		·622		7·0		16	11·00	+5·00	7·98	6·52	+ 1·46	13·36	10·05	+ 3·31	1·00	Tezpur.
25		1	3	1					E		1·3			15		85		·647		7·0		18	10·20	+7·80	11·22	6·43	+ 4·79	15·99	10·20	+ 5·79	1·95	Gauhati.
2		12	13	2		1			N 74° E	N 72° E	7·1	6·4	+0·7	76	+13	86	+ 7	·644	—·043	7·2	+2·2	17	7·40	+9·60	7·43	4·75	+ 2·68	10·34	7·82	+ 2·52	1·43	Dhubri.
17		4	6	2		1			N 86° E	N 82° E	1·8	2·5	—0·7	30	+ 5	98	+ 5	·672	−·058	4·3	—1·8	20	13·70	+6·30	14·35	14·62	− 0·27	30·70	25·76	+ 4·94	1·65	Silchar.
																																III.—Bengal
	1	5	9	11	3	1			S 71° E		4·5*			66		83		·801		4·3		6			9·21			12·39			3·37	Cox's Bazar.
3		7	8	12					S 81° E	S 47° E	2·0	5·0	—3·0	69	+12	81	+ 1	·744	−·096	4·8	+0·4	13	4·42	+8·58	9·61	4·76	+ 4·85	17·16	9·55	+ 7·61	1·99	Chittagong.
3		1	5	16	2	3			S 45° E		4·4			70		84		·791		4·7		15	4·61	+10·39	12·65	5·73	+ 6·92	15·19	10·32	+ 4·87	2·04	Noakhali.
20		1	1		6	2			S 2° E	S 8° W	1·0	4·2	—3·2	22	—33	83	+ 1	·846*	—·057	6·2	+1·3	13	4·29	+8·71	12·44	4·01	+ 8·43	16·80	8·13	+ 8·67	2·72	Barisal.
4		1	7	7	8	1	1	1	S 40° E	S 10° E	3·0	5·3	−2·3	53	—4	83	+ 1	·759	—·091	5·8	—0·1	14	6·59	+7·41	11·61	4·95	+ 6·66	14·55	9·35	+ 5·20	3·01	Narayanganj.
11		2	8	8	1				S 71° E	S 68° E	2·1	3·1	—1·0	53	—17	86	+ 4	·688	—·084	6·5	+1·2	15	6·23	+8·77	17·97	5·57	+12·40	21·98	9·34	+12·64	3·48	Mymensingh
9			16	1	3	1			S 75° E	S 63° E	1·4	3·4	—2·0	53	− 6	84	+ 7	·720	−·040	5·7	+1·9	8	3·81	+4·19	3·72	1·92	+ 1·80	5·33	4·64	+ 0·69	1·23	Bogra.
		12	11	2	1	1	3		N 73° E	N 86° E	3·3	4·1	−0·8	56	+ 8	85	+13	·697	+·018	4·8	+0·7	4	3·21	+0·79	2·00	2·19	− 0·19	4·49	3·95	+ 0·54	0·62	Dinajpur.
11		7	7	5					N 84° E	N 88° E	1·6			49	—18	82	+ 6	·653	—·024	3·9	+1·1	13	5·53	+7·47	4·70	3·48	+ 1·22	11·21	5·76	+ 5·45	1·24	Jalpaiguri.
		1	1		17	11			S 14° W	S 18° W	13·4	13·1	+0·3	82	+ 5	84	+ 4	·918	—·010	5·5	—0·3	5	2·00	+ 3·00	2·23	1·19	+ 1·04	6·75	4·44	+ 2·31	0·73	Saugor Island.
1	1	1	1	9	11	4	2		S 9° E		2·8			63		78		·811		3·6		6	3·10	+ 2·90	3·80	1·97	+ 1·83	10·31	5·25	+ 5·06	1·59	Midnapore.

Stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

(a) Indeterminate.

Table

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

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal—*concld.*																						
	Calcutta	21	29·861	+·059	29·830	30·006	10th	29·739	21st	·267	81·0	93·1	−2·5	75·2	−0·6	84·1	−1·5	17·9	93·6	9th	63·0	1st	35·6
	Jessore	33	29·870	+·075	29·850	30·030	12th	29·760	24th	·270	78·5	90·9	−6·3	72·7	−2·4	81·8	−4·3	18·2	97·0	9th	60·2	1st	36·8
	Burdwan	99	29·772	+·063	29·819	29·929	1st	29·629	21st	·300	78·6	95·8	−4·8	73·7	−2·0	84·7	−3·4	22·1	104·4	29th	61·8	1st	42·6
	Berhampore	67	29·814	+·074	29·830	29·989	10th	29·664	21st	·325	78·2	94·5	−5·5	72·3	−2·3	83·4	−3·9	22·2	101·6	9th	61·2	1st	40·4
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·833	+·064	29·828	29·975	1st	29·685	21st	·290	81·5	93·4	−4·1	74·6	−1·4	84·0	−2·7	18·8	102·9	23rd	66·6	1st & 10th,	36·3
	False Point	21	29·882	+·060	29·846	30·015	11th & 12th.	29·760	24th	·255	83·2	89·1	−0·8	77·2	−0·4	83·1	−0·6	11·9	96·2	8th	68·1	21st	28·1
	Cuttack	80	29·818	+·065	29·839	29·945	11th	29·702	24th	·243	82·5	100·0	−2·0	77·9	−0·1	89·0	−1·1	22·1	105·4	23rd	71·7	1st	33·7
	Puri	24	29·880		29·843	30·003	12th	29·761	24th	·242	82·0	87·9		78·2		83·1		9·7	90·1	28th	71·6	1st	18·5
	Angul	455	29·436		29·853	29·553	11th & 12th.	29·311	24th	·242	82·4	100·2		75·4		87·8		24·8	106·1	24th	68·0	16th	38·1
	Sambalpur	486	29·399	+·059	29·832	29·517	11th	29·282	23rd	·235	84·1	101·1	−3·2	76·7	+1·1	88·9	−1·1	24·4	107·6	24th	67·1	1st	40·5
7	Chaibasa	*733*	29·129	+·060	29·816	29·245	1st	29·016	21st	·229	79·5	100·2	−3·1	73·7	−1·7	86·9	−2·4	26·5	106·1	15th	62·8	1st	43·3
	Ranchi	2,128	27·764	+·065	29·806	27·884	12th	27·646	21st	·238	77·6	94·4	−2·7	70·4	−1·7	82·4	−2·2	24·0	100·7	15th	59·9	1st	40·8
	Purulia	*816*	29·054‡		29·823‡	29·177	1st & 12th.	28·889	21st	·288	77·9†	99·4		73·5†		86·5†		25·9	107·5	15th	65·1	1st	47·4
	Daltonganj	*730*	29·131		29·823	29·253	11th	28·983	21st	·270	79·5	101·6		70·9		86·3		30·7	103·6	15th	57·5	1st	51·1
8	Purnea	134	29·760	+·095	29·851	29·941	10th	29·647	21st	·294	75·6	88·2	−8·8	68·2‡	−1·5‡	78·2‡	−5·3	20·0	95·6	9th	59·2	1st	36·4
	Monghyr	155	29·718		29·828	29·833	12th	29·595	20th	·230	78·7	92·1		70·4		81·2		21·7	99·2	28th	60·9	1st	38·3
	Darbhanga	165	29·765	+·073	29·828	29·870	12th	29·568	21st	·302	74·9	91·1	−5·0	67·6	−4·5	79·4	−4·7	23·5	97·6	4 days	53·2	1st	44·4
	Pusa	188	29·672		29·818	29·838	12th	29·556	23rd	·282	76·6	93·3		67·9		80·6		25·4	100·6	9th	57·6	1st	43·0
	Patna	183	29·672	+·065	29·812	29·848	12th	29·543	21st	·305	78·7	92·7	−7·9	71·1	−2·4	81·9	−5·1	21·6	98·5	10th & 30th,	63·2	1st	35·3
	Buxar	230	29·601		29·801	29·758	12th	29·452	21st	·306	79·8	97·2		72·8		85·0		24·4	103·5	21st	62·1	1st	41·4
	Gaya	372	29·476	+·059	29·799	29·614	12th	29·333	21st	·281	82·7	99·8	−3·6	73·8	−1·1	85·8	−2·3	26·0	105·4	21st	62·2	1st	43·2
	Naya Dumka	480	29·376	+·084	29·821	29·547	1st	29·224	21st	·323	78·1	95·5	−4·6	71·9	−2·7	83·7	−3·7	23·6	103·4	29th	61·0	1st	42·4
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·580	+·074	29·807	29·764	12th	29·453	21st	·311	78·3	94·5	−5·9	68·0	−4·4	81·2	−5·1	26·5	99·6	22nd	57·8	1st	41·8
	Benares	267	29·581	+·063	29·802	29·720	12th	29·442	21st	·278	83·1	100·6	−2·5	72·9†	+1·0†	86·6†	−0·7	27·7	106·1	21st	62·1	1st	44·0
	Allahabad	309	29·537	+·057	29·801	29·674	12th	29·370	21st	·304	83·9	101·0	−2·8	72·6	+0·2	86·8	−1·3	28·4	107·1	21st	62·0	1st	45·1
	Cawnpore	416	29·415	+·057	29·787	29·552	11th	29·234	21st	·318	82·5	100·5	−1·7	72·4	+0·1	86·5	−0·8	28·1	106·2	15th & 21st	62·4	1st	43·8
	Lucknow	368	29·475	+·071	29·804	29·623	12th	29·313	21st	·310	81·3	98·6	−3·8	71·2	+0·3	84·9	−1·7	27·4	104·0	20th, 21st & 30th,	61·1	1st	42·9
	Bahraich	401	29·435	+·069	29·803	29·615	12th	29·302	21st	·313	78·6	95·4	−4·2	69·9	+0·2	82·7	−2·0	25·5	100·1	29th	59·0	6th	41·1
10	Jhansi	824	29·035	+·040	29·804	29·171	11th	28·859	21st	·312	86·1	102·0	−2·2	75·1	−1·6	88·5	−1·9	26·9	108·0	15th	67·5	1st & 7th	40·5
	Agra	556	29·287	+·052	29·802	29·431	11th	29·093	21st	·333	82·4	100·0	−2·6	73·8	+0·1	86·9	−1·3	26·2	105·5	14th	65·5	1st	41·0
	Mainpuri	516	29·321	+·062	29·797	29·449	11th	29·139	21st	·310	80·4	101·4	−1·1	70·6	+0·1	86·0	−0·5	30·8	109·3	15th	62·1	3rd & 6th	47·2
	Bareilly	568	29·258	+·063	29·790	29·398	11th	29·038	21st	·300	78·9	96·9	−2·4	69·1	+0·2	83·0	−1·1	27·8	102·8	21st	60·0	9th	42·8
	Roorkee	899	28·938	+·071	29·811	29·071	11th	28·790	21st	·281	76·9	92·5	−5·6	65·1	−1·4	78·9	−3·5	27·5	99·5	15 & 21st	54·4	3rd	45·1

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

‡ Mean of 28 days.

† Mean of 29 days.

B—*continued.*

stations in India, etc., in April, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 30th April, 1912.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1911 to 30th April, 1912.	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	56	57
																																III.—Bengal.
		1		3	8	16	1	1	S 24° W	S 25° W	4·8*	5·1	−0·3	72	+ 2	78	0	·827	−·026	4·7	+1·3	4	2·92	+ 1·08	2·46	1·75	+ 0·71	7·29	4·77	+ 2·52	1·54	Calcutta.
7		2	2	10	7	2			S 33° E	S 1° E	3·2	3·0	+0·2	56	+ 4	85	+ 4	·828	−·059	4·7	0	7	4·68	+ 2·32	7·12	3·38	+ 3·74	12·65	7·32	+ 5·33	2·02	Jessore.
5	2	2	1	1	4	9	4	2	S 54° W	S 27° W	2·0	3·5	−1·5	37	−23	80	+10	·793	+·029	5·6	+2·3	4	3·48	+ 0·52	2·18	2·18	0	3·99	5·34	− 1·35	0·97	Burdwan.
4	1	3	6	1	12	3			S 30° E	S 2° E	2·2	3·5	−1·3	46	−11	76	0	·732	−·055	5·6	+1·8	4	2·56	+ 1·44	1·38	1·48	− 0·10	2·38	4·01	− 1·63	0·49	Berhampore
																																IV.—Bihar and Orissa.
2		1		1	6	17	2	1	S 37° W	S 29° W	3·6	6·3	−2·7	69	+14	72	− 6	·752	−·121	3·7	−0·3	7	3·58	+ 3·42	3·87	2·14	+ 1·73	13·52	6·28	+ 7·24	1·05	Balasore.
1		1		1	7	17	2	1	S 36° W	S 38° W	9·7	10·1	−0·4	72	− 5	77	− 5	·869	−·059	6·3	+1·1	1	1·84	− 0·84	0·74	0·79	− 0·05	9·28	4·09	+ 5·19	0·66	False Point.
7		2	1	1	6	8	5		S 34° W	S 39° W	3·5*	3·7	−0·2	43	−17	73	+ 1	·815	−·011	5.1	+1·6	3	1·97	+ 1·03	0·75	1·18	− 0·43	2·57	3·41	− 0·84	0·35	Cuttack.
	1		1		3	22	3		S 45° W		11·3			83		81		·883		5·1		1	1·17	− 0·17	0·36	0·67	− 0·31	1·36	2·85	− 1·49	0·35	Puri.
1	1	6	2	6	5	1	1	7	N 87° E		5·5			14		70		·774		4·2		6			2·46	1·92	+ 0·54	6·07	5·46	+ 0·61	0·64	Angul.
		2	1	2	7	16	2		S 27° W	S 87° E	4·1	2·8	+1·3	66	+56	52	+ 1	·607	−·003	3·6	+1·4	1	1·50	− 0·50	0·38	0·72	− 0·34	3·85	3·08	+ 0·77	0·15	Sambalpur.
8		1			2	14	3	2	S 54° W	S 62° W	2·8	1·9	+0·9	56	− 3	64	+ 6	·652	−·003	3·8	+2·0	4	2·06	+ 1·94	1·67	1·55	+ 0·12	4·51	5·11	− 0·60	0·56	Chaibasa.
	1			3	7	10	6	3	S 45 W	S 51° W	5·2	5·4	−0·2	59	+11	51	+10	·499	+·017	2·9	+1·4	3	2·16	+ 0·84	0·90	1·09	− 0·19	3·25	4·94	− 1·69	0·36	Ranchi.
22				1	1	2	2	2	S 63° W		2·7			13		69†		·659†		0·9		0	2·39	− 2·39	0·05	1·38	− 1·33	1·79	5·00	− 3·21	0·05	Purulia.
21			4	2		2		1	S 55° E		3·2			10		46		·462		2·0		2	0·70	+ 1·30	0·47	0·46	+ 0·01	1·24	3·39	− 2·15	0·26	Daltonganj.
7		6	12	4				1	N 84° E	N 68° E	3·1	3·4	−0·3	59	− 1	75	+ 8	·658	+·007	2·3	−0·3	4	1·93	+ 2·07	2·35	1·15	+ 1·20	4·77	2·84	+ 1·93	0·74	Purnea.
1		2	16	4		1	4	2	S 86° E		6·2			47		70		·687		1·8		1			0·63			2·60			0·56	Monghyr.
7			22			1			S 88° E	S 67° E	3·4	4·2	−0·8	69	+16	78	+15	·680	+·057	1·4	+0·2	1	1·47	− 0·47	0·66	0·70	− 0·04	2·03	2·28	− 0·25	0·55	Darbhanga.
4	1	5	13	4	1	2			S 87° E		4·2			57		69		·621		2·1		2			1·18			2·22			0·96	Pusa.
			22	1		2	5		S 83° E	S 81° E	6·1	3·6	+2·5	53	+33	70	+19	·684	+·128	1·9	+0·6	1	0·58	+ 0·42	0·21	0·32	− 0·11	1·38	2·19	− 0·81	0·14	Patna.
		1	14	3	3	5	3	1	S 55° E		4·7			40		54		·545		3·0		0	0·35	− 0·35	0	0·19	− 0·19	0·99	2·17	− 1·18	0	Buxar.
10		6	3	1	2	5	3		S 34° E	S 34° W	2·8	3·5	−0·7	7	−26	60	+ 9	·681	+·083	2·4	+0·7	1	0·58	+ 0·42	0·30	0·24	+ 0·06	0·81	2·39	− 1·58	0·26	Gaya.
19		1	4	5				1	S 74° E		1·8			23		69	+17	·659		2·6		4	2·38	+ 1·62	1·92	0·98	+ 0·94	3·70	3·28	+ 0·42	0·85	Naya Dumka
																																V.—United Provinces of Agra and Oudh.
8	5	8	5	2		1	1		N 50° E	N 57° E	1·8	2·6	−0·8	46	+35	65	+14	·628	+·094	0·7	−0·6	1	0·58	+0·50	0·16	0·47	− 0·31	2·52	2·27	+ 0·25	0·16	Gorakhpur.
5	1	1	5	7		5	5	1	S 13° E	S 53° W	3·1	2·6	+0·5	20	− 2	50	+ 2	·552	+·058	2·0	+0·7	0	0·40	−0·40	0	0·19	− 0·19	0·09	2·14	− 2·05	0	Benares.
3		3	5	3	1	3	8	4	S 85° W	N 86° W	3·0	3·9	−0·9	12	−10	39	+ 3	·449	+·025	1·8	+0·2	0	0·20	−0·20	0	0·16	− 0·16	0·29	1·97	− 1·68	0	Allahabad.
2	5	1	6	4	1	6	3	2	S 45° E	S 79° W	2·4	3·0	−0·6	3	−16	43	+ 3	·484	+·019	0·8	−0·1	0	0·40	−0·40	0	0·24	−0·24	0·96	1·93	− 0·97	0	Cawnpore.
15		2	8	1	1	1	1	1	S 88° E	N 81° W	1·7	2·9	−1·2	26	+ 6	48	+ 8	·521	+·076	1·4	−0·2	2	0·40	+1·60	0·52	0·29	+0·23	2·29	2·34	− 0·05	0·35	Lucknow.
4	1		10	9	1	1	2	2	S 65° E	N 55° E	2·5	3·0	+0·5	43	+37	54	+ 3	·524	−·029	1·6	+0·1	3	0·80	+2·20	0·75	0·38	+0·37	4·01	2·94	+ 1·07	0·31	Bahraich.
6	2	3	1	1	2	9	4	2	S 65° W	S 87° W	3·3	2·6	+0·7	27	− 3	25	− 3	·316	−·048	6·2	+5·2	0	0·50	−0·50	0	0·17	−0·17	0·16	1·84	− 1·68	0	Jhansi.
8	2	2	1	3	2	2	5	5	N 75° W	S 89° W	3·7	3·7	0	17	−20	41	+ 6	·451	+·056	2·6	+1·4	0	0·40	−0·40	0·05	0·25	−0·20	2·25	1·75	+ 0·50	0·05	Agra.
1	4	3	3	3	2	3	4	7	N 39° W	S 74° W	1·7	1·8	−0·1	23	+ 9	43	+ 6	·446	+·046	0	−1·4	0	0·40	−0·40	0	0·42	−0·42	1·79	2·38	− 0·59	0	Mainpuri.
25			5						E	N 20° W	0·8	2·7	−1·9	17	+ 9	57	+12	·564	+·119	2·5	+1·1	0	0·45	−0·45	0	0·29	−0·29	1·66	3·11	− 1·45	0	Bareilly.
22		2	2	2				2	N 67° E	S 60° E	2·5	2·4	+0·1	10	+ 3	54	+13	·493	+·072	1·7	+0·1	1	1·10	−0·10	0·24	0·47	−0·23	3·99	4·90	− 0·91	0·13	Roorkee.

stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

Table

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

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Punjab.																						
11	Delhi	718	29·121	+·063	29·807	29·250	11th	28·945	21st	·305	79·8	95·9	−3·8	72·7	−0·8	81·3	−2·3	23·2	105·0	15th	62·3	1st & 2nd	42·7
	Sirsa	662	29·172	+·059	29·806	29·317	11th	29·002	21st	·315	77·8	97·1	−4·0	68·6	+0·1	82·8	−1·9	28·5	107·8	15th	59·5	4th	48·3
	Patiala ¶	*818*	29·002		29·795	29·150	12th	28·872	20th	·278	75·7	93·4		60·4‡		73·9‡		33·0	103·8	15th	54·4	6th	49·4
	Ambala	892	28·925	+·052	29·793	29·057	12th	28·776	21st	·261	76·6	96·2	−1·5	66·9	+0·7	81·6	0·4	29·3	104·5	15th	56·9	3rd	47·6
	Ludhiana	812	29·019	+·064	29·811	29·139	11th	28·869	21st	·270	74·7	94·1	−3·3	67·8	+0·6	80·9	−1·3	26·3	103·5	15th	56·0	2nd	47·5
	Lahore	702	29·126	+·060	29·810	29·255	11th	28·959	30th	·286	74·4	92·7	−5·5	65·7	+2·4	79·7	−1·5	26·0	104·4	15th	57·2	5th	47·2
	Sialkot	830	29·066	+·067	29·825	29·[illegible]31	2nd	28·843	21st	·288	72·1	87·3	−7·9	63·3†	−3·0?	74·9†	−5·5?	21·0	99·0	30th	51·5	5th	47·5
	Rawalpindi	1,674	28·180	+·054	29·843	28·318	11th	28·028	30th	·290	69·8	84·2	−4·2	60·2	+0·3	72·2	−1·9	24·0	95·4	30th	48·9	5th	47·5
12	Khushab	612	29·236	+·074	29·827	29·280	11th	29·048	30th	·332	76·8	91·3	−4·0	67·8	−0·2	79·6	−2·1	23·5	104·9	30th	53·9	2nd	51·0
	Montgomery	558	29·275	+·064	29·808	29·426	11th	29·090	30th	·336	78·1	94·1	−6·0	63·3	+0·2	81·2	−2·8	25·8	105·9	30th	57·0	5th	48·9
	Multan	420	29·436	+·064	29·825	29·591	11th	29·221	30th	·370	78·9	95·1	−3·9	70·0	+1·4	82·5	−1·3	25·1	107·3	30th	57·0	2nd	50·3
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·767	+·037	29·880	28·917	11th	28·587	30th	·330	69·3	85·2	−1·7	62·0	+1·2	73·6	−0·3	23·2	101·2	30th	52·4	5th	48·8
	D. I. Khan	590	29·268	+·040	29·841	29·421	11th	29·053	30th	·368	73·7	90·1	−4·4	65·6	−0·5	77·9	−2·5	24·5	103·4	30th	52·1	2nd	51·3
	VIII.—Sind.																						
16	Jacobabad	186	29·636	+·032	29·786	29·769	11th	29·453	30th	·316	82·5	101·8	−1·3	72·3	+2·6	87·1	+0·7	29·5	113·1	30th	63·3	9th	49·8
	Hyderabad	96	29·761	+·042	29·809	29·877	11th	29·618	30th	·259	83·3	101·3	−1·4	75·2	+2·9	88·2	+0·7	26·1	109·0	20th&30th	68·0	4th & 7th	41·0
	Karachi	13	29·893	+·056	29·857	30·014	11th	29·749	30th	·265	79·6	86·2	−0·1	75·6	+2·3	80·9	+1·1	10·6	93·0	17th	69·5	5th	23·5
	IX.—Rajputana.																						
17	Bikaner	*771*	29·063	+·050	29·805	29·205	11th	28·876	20th	·329	81·6	99·4	−1·9	73·9	−1·7	86·7	−1·8	25·5	109·5	14th	63·0	4th	46·5
	Jodhpur	780	29·077	+·037	29·812	29·226	11th	28·909	20th	·317	83·1	100·9	−0·3	74·4	+1·4	87·7	+0·5	26·5	108·5	13th&30th	65·3	7th	43·2
18	Jaipur	1,431	28·437	+·042	29·809	28·590	11th	28·282	21st	·308	83·4	99·7	−2·0	73·1	+2·0	86·4	0	26·6	107·7	14th	65·1	4th	42·6
	Ajmer	1,611	28·269	+·036	29·820	28·416	11th	28·123	21st	·293	80·0	97·6	−1·7	74·7	+3·3	86·1	+0·8	22·9	105·4	14th	66·2	4th	39·2
	Kotah	819?	29·011	+·028	29·775	29·162	11th	28·861	21st	·301	88·3	103·0	+0·4	77·8	+0·9	90·4	+0·7	25·2	108·6	14th, 21st & 30th.	70·6	2nd & 3rd	38·0
	X.—Bombay.																						
19	Deesa	466	29·430	+·042	29·848	29·544	11th	29·315	20th	·229	84·3	105·7	+1·5	74·6	+2·9	90·1	+2·2	31·1	111·8	13th	66·9	7th	44·9
	Bhuj	365	29·516	+·060	29·862	29·627	7th	29·402	21st	·225	82·2	100·5	−0·5	74·0	+2·5	87·3	+1·0	26·5	107·0	20th	67·0	6th	40·0
	Jamnagar	61	29·874		29·881	29·978	9th	29·776	30th	·202	81·8	97·6		72·3		84·9		25·3	103·5	19th	65·8	1st	37·7
	Dwarka	37?	29·899	+·037?	29·882	30·003	12th	29·806	21st	·197	79·9	85·8	+1·0	77·7	+1·7	81·7	+1·3	8·1	87·8	21st & 30th.	74·2	5th & 6th	13·6
	Rajkot	429	29·485	+·039	29·864	29·560	12th	29·401	21st	·189	81·7	101·7	−1·1	71·2¶	+1·8¶	86·4¶	+0·3	30·5	107·1	14th	64·5	1st	42·6
	Veraval	*18*	29·913	+·055	29·874	30·015	7th	29·828	21st	·187	79·8	86·9¶	−0·8¶	73·1	+0·6	80·0¶	−0·1	13·8	102·1	13th	67·8	4th	34·3
	Bhavnagar Para	55	29·866	+·026	29·867	29·975	7th	29·766	21st	·209	84·6	103·7	+2·9	75·7	+0·9	89·7	+1·9	28·0	109·5	14th	68·0	7th	41·5
	Surat	39	29·891	+·040	29·873	29·988	7th	29·802	21st	·186	85·4	102·2	+2·1	75·2	+2·4	88·7	+2·3	27·0	109·9	12th	68·6	1st & 7th	41·3
	Ahmadabad ¶	163	29·728	+·033	29·840	29·836	7th	29·608	20th	·228	82·9	104·9	−0·5						111·6	20th			
25	Bombay	37	29·899	+·032	29·876	29·989	7th	29·803	24th	·186	82·5	91·2	+2·7	78·6	+0·9	84·9	+1·8	12·6	94·0	26th	74·5	1st	19·5
	Ratnagiri	110	29·814	+·033	29·862	29·915	11th	29·736	21st	·177	84·0	90·4	+0·3	78·0	+0·6	84·2	+0·5	12·4	94·8	27th	72·9	1st & 6th,	21·9
	Goa	199	?	?	?	?	?	?	?	?	82·1	87·7	−1·5	75·9	+1·0	83·8	−0·3	7·8	91·1	17th & 27th.	72·1	17th	19·0
	Marmagao	*60*	29·874	+·034	29·868	29·978	12th	29·796	24th	·182	85·5	91·5	+1·4	79·6	−0·4	85·5	+0·5	11·9	94·0	23rd, 25th & 26th.	72·7	17th	21·3

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

¶ Mean of 29 days.
† „ „ 28 „
‡ „ „ 9 „

NOTE.—The barometric readings are not reduced to sea-level, in the case of

B—*continued.*

stations in India, etc., in April, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911, to 30th April, 1912.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1911, to 30th April, 1912.	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	56	57
																																VI.—Punjab.
1	1	4	2	2	2	4	9	5	N 83° W	N 77° W	3·5	2·8	+0·7	30	−7	46	+10	·460	+·087	2·2	+0·2	1	0·90	+0·10	1·10	0·38	+0·72	3·91	3·06	+0·85	1·05	Delhi.
7	8	2		4	3		2	4	N 6° W	N 28° W	4·5	3·9	+0·6	20	+18	48	+6	·417	+·025	2·8	−0·1	2	0·60	+1·40	0·38	0·33	+0·05	3·45	2·00	+1·45	0·18	Sirsa.
3	3	3	3		1		1	15	N 25° W		5·0			59		53		·473		2·1		1			0·57	0·45	+0·12	2·54	4·61	−2·07	0·18	Patiala.
3	9	1	7	2	1		3	4	N 18° E	N 18° W	4·0	2·3	+1·7	33	+24	45	−8?	·402	−·073	3·0	+1·7	1	0·90	+0·10	0·28	0·51	−0·23	2·55	5·66	−3·11	0·13	Ambala.
20	1	1	1	2			2	3	N 23° W	N 27° E	1·0	1·8	−0·8	7	0	49	+4	·405	−·026	3·0	+0·3	1	1·00	0	0·70	0·83	−0·13	2·91	5·65	−2·74	0·51	Ludhiana.
10	6	4	3	2			1	4	N 19° E	N 31° E	2·0	2·3	−0·3	33	+13	59	+12	·497	+·078	3·3	+1·0	4	1·00	+3·00	1·34	0·50	+0·84	3·95	3·71	+0·24	0·44	Lahore.
14	3	5	2	1		1	1	3	N 18° E	N 20° E	1·5	2·0	−0·5	23	−10	66	+18	·505	+·069	3·2	+1·1	6	1·90	+4·10	1·98	0·82	+1·16	7·46	6·87	+0·59	0·52	Sialkot.
12	8		2	1	1	1	4	1	N 20° W	N 30° W	2·3	2·3	0	20	−9	64	+8	·457	+·035	4·2	+1·1	8	3·20	+4·80	2·66	1·45	+0·81	6·99	9·84	−2·85	1·25	Rawalpindi.
7	1	6	7	2	3	2	1	1	N 89° E	N 37° E	4·5	4·9	−0·4	32	−5	51	+9	·448	+·046	5·5	+2·7	5	1·50	+3·50	2·01	0·89	+1·12	3·72	4·01	−0·29	1·14	Khushab.
3	8	7	6	4	2				N 59° E	S 83° E	4·4	4·6	−0·2	53	+27	44	+6	·398	−·015	2·4	+0·2	3	0·70	+2·30	0·31	0·29	+0·52	2·46	2·18	+0·28	0·33	Montgomery.
13	12	1		1				3	N 3° W	N 51° E	1·0	1·6	−0·6	46	+23	55	+7	·524	+·053	2·3	+0·7	3	0·70	+2·30	1·00	0·20	+0·80	3·45	1·62	+1·83	0·47	Multan.
																																VII.—North-West Frontier Province.
14	1	2		1	4	4	3	1	S 45° W	S 54° W	1·6	2·9	−1·3	20	+10	68	+6	·486	+·017	4·6	+1·7	6	3·40	+2·60	2·95	1·78	+1·17	7·17	7·35	−0·18	0·30	Peshawar.
15	1	3		2		1	1	7	N 28° W	N 5° E	1·6	1·8	−0·2	23	−10	70	+16	·578	+·089	3·5	+1·4	4	1·90	+2·10	0·99	0·74	+0·25	2·42	3·16	−0·74	0·40	D. I. Khan.
																																VIII.—Sind.
12	3	10	3		2				N 51° E	N 88° E	4·0	3·1	+0·9	43	+16	55	+17	·604	+·183	2·1	+0·2	0	0·10	−0·40	0	0·16	−0·16	0·20	1·17	−0·97	0	Jacobabad.
2	4	1			1	15	4	3	S 74° W	S 48° W	4·6	7·9	−3·3	53	−4	47	−1	·529	+·018	2·9	+1·3	0	0·20	−0·20	0	0·04	−0·04	0·68	0·79	−0·13	0	Hyderabad.
						5	17	8	N 86° W	N 89° W	11·2	9·6	+1·6	86	+25	82	−1	·838	+·045	4·2	+2·0	0	0·20	−0·20	0	0·16	−0·16	0	1·54	−1·54	0	Karachi.
																																IX.—Rajputana.
6	2	6	5	6	2	1	1	1	E	S 51° W	3·5	4·3	−0·8	37	+15	38	+2	·382	−·027	2·1	+0·3	0	0·30	−0·30	0·14	0·14	0	1·64	1·16	+0·48	0·07	Bikaner.
4	2	8	1		3	9	3		S 57° W		3·1			10		24	−3	·263		2·3		0	0·20	−0·20	0·02	0·14	−0·12	0·02	0·73	−0·71	0·02	Jodhpur.
6	4	7	5	3			3	2	N 43° E	N 34° W	4·2*	3·7	+0·5	37	+3	33	−2	·370	−·023	2·7	+0·6	1	0·40	+0·60	0·12	0·19	−0·07	2·55	1·48	+1·07	0·12	Jaipur.
14		2			1	8	3	2	S 66° W	W	4·3	4·2	+0·1	33	+2	42	+5	·435	+·012	2·6	+1·1	0	0·50	−0·50	0·06	0·20	−0·14	0·34	1·33	−0·99	0·05	Ajmer.
13	3	3					6	5	N 41° W		2·2			37		24	+2	·311		2·5		0	0·30	−0·30	0·07	0·43	−0·36	0·22	1·27	−1·05	0·07	Kotah.
																																X.—Bombay.
	5	1		1		5	9	9	N 66° W	N 88° W	6·5	6·6	−0·1	62	+32	50	+10	·561	+·104	2·1	+0·9	0	0	0	0	0·03	−0·03	0	0·42	−0·42	0	Deesa.
						3	8	19	N 64° W	N 75° W	8·1	8·5	−0·4	82	+5	62	+7	·661	+·051	2·1	+1·1	0	0	0	0	0·09	−0·09	0	0·44	−0·44	0	Bhuj.
						8	12	10	N 85° W		10·9			83		69		·747		0·1		0			0	0	0	0	0·42	−0·42	0	Jamnagar.
1	1					5	13	10	N 79° W		7·9			76		83	+2	·846		3·5		0			0	0	0	0·10	0·68	−0·58	0	Dwarka.
	1					1	14	14	N 67° W	N 66° W	9·7	7·6	+2·1	89	+16	66	−5	·609	−·061	3·3	+2·2	1	0	+1·00	0·24	0·03	+0·21	0·25	0·30	−0·05	0·24	Rajkot.
14	7						2	7	N 30° W	N 47° W	6·4	6·1	+0·3	46	−17	74	+2	·739	+·015	3·0	+0·4	0	0	0	0	0	0	0	0·19	−0·19	0	Veraval.
2	4				1		4	19	N 48° W	S 66° W	3·4	7·7	−4·3	80	+13	54	−8	·637	−·064	2·4	+0·8	0	0	0	0	0·13	−0·13	0·02	0·50	−0·48	0	Bhavnagar Para.
5	9	4		1	3	3	2	3	N 19° W	S 61° W	3·4	5·4	−2·0	27	−13	58	−7	·708	−·031	1·9	+0·2	0	0	0	0	0·05	−0·05	0	0·27	−0·27	0	Surat.
4	4					2	3	16	N 49° W	N 45° W	4·3	3·4	+0·9	69	+28	65	+18	·732	+·190	2·1	+0·6	1	0·10	+0·90	0·26	0·03	+0·23	0·26	0·27	−0·01	0·26	Ahmadabad.
2	5	5	3	2	2	3	3	5	N 6° W	N 33° E	6·9*	7·7	−0·8	23	+13	75	0	·834	+·002	4·0	+0·9	0	0·10	−0·10	0	0·06	−0·06	0	0·27	−0·27	0	Bombay.
6	9	4	1	5	4			1	N 52° E	N 81° W	6·2	6·1	+0·1	27	+7	71	0	·818	+·006	3·3	+0·3	0	0·10	−0·10	0	0·10	−0·10	0	0·38	−0·38	0	Ratnagiri.
1	4	2	15	2	3	2			N 89° E	N 29° E	4·9	5·0	−0·1	57	+43	81	+7	·885	+·019	4·9	+1·5	2			1·96	0·48	+1·48	1·96	0·80	+1·16	1·74	Goa.
2	3	4	6	2	8	3	2		S 47° E	N 5° W	5·5*	6·2	−0·7	27	+23	75	0	·914	+·027	5·5	+1·7	1			0·56	0·87	−0·31	0·56	1·10	−0·54	0·55	Marmagao.

hill or plateau stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

Table

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

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches: 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air: Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay—*concld.*																						
	Karwar	44	29·900	+·040	29·878	29·992	12th	29·828	26th	·164	82·9	90·1	+0·1	78·6	+0·7	84·4	+0·4	11·5	93·7	18th	74·5	2nd, 6th, & 8th.	19·2
26	Malegaon	1,430	28·482	+·036	29·827	28·568	7th	28·399	21st	·169	87·7	105·3	+2·1	73·3	+1·5	89·3	+1·8	32·0	109·4	13th & 20th.	62·1	1st	47·3
	Ahmadnagar	2,154	27·788	+·045	29·811	27·876	11th	27·711	21st	·165	85·3	101·9	+2·9	71·3	+1·7	86·6	+2·3	30·6	105·6	13th & 15th.	60·0	1st	45·6
	Poona	1,846	28·684	+·028	29·859	28·157	12th	28·004	21st	·153	77·2	102·5	+0·9	70·7	+1·0	86·6	+0·9	31·8	106·5	14th	62·3	1st	44·2
	Sholapur	1,590	28·320	+·035	29·813	28·404	6th	28·231	21st	·173	86·4	103·7	−1·1	77·5	+2·0	90·6	+0·5	26·2	107·3	14th & 15th.	69·1	1st	38·2
	Bijapur	*1,948*	27·978	+·044	29·816	28·060	6th	27·889	21st	·171	83·8	100·7	+0·9	75·9	+1·1	88·3	+1·0	24·8	105·2	22nd	70·3	3rd	34·9
	Belgaum	2,536	27·409	+·044	29·822	27·500	12th	27·336	22nd	·164	78·9	96·2	+0·2	67·7	+0·2	81·9	+0·2	28·5	99·3	9th, 10th & 22nd.	63·5	1st & 10th.	35·8
	XI.—Central India.																						
20	Neemuch	1,624	28·259	+·038	29·799	28·394	11th	28·137	20th	·257	85·1	100·6	−0·3	74·0	+2·7	87·3	+1·2	26·6	107·9	14th	67·0	7th	40·9
	Indore	1,823	28·077	+·045	29·805	28·183	11th	27·964	20th	·219	85·3	99·9	−0·7	71·3	+1·6	85·7	+0·5	28·6	105·6	14th	61·1	1st	44·5
21	Nowgong	754	29·108	+·057	29·814	29·250	11th	28·939	21st	·311	83·3	100·4	−3·0	71·1	−0·3	85·8	−1·7	29·3	106·5	15th	62·5	1st	44·0
	Sutna	1,041	28·805	+·045	29·790	28·938	11th	28·643	21st	·295	82·8	99·9	−1·8	72.5	+0·9	86·2	−0·5	27·4	105·8	17th	62·2	1st	43·6
	XII.—Central Provinces.																						
22	Buldana	2,132	27·744		29·747?	27·822	15th	27·672	5th	·150	86·3	100·2		77·7		89·0		22·5	105·7	14th	69·8	1st	35·9
	Akola	925	28·962	+·046	29·821	29·058	11th & 12th.	28·863	21st	·195	88·6	106·6	+0·6	75·5	+0·7	91·0	+0·7	31·1	111·7	14th	60·6	1st	51·1
	Amraoti	1,215	28·666	+·041	29·781?	28·763	11th	28·548	21st	·215	86·7	104·9	−0·1	78·3	+2·0	91·6	+0·9	26·6	109·3	14th	66·3	1st	43·0
23	Khandwa	1,044	28·847	+·047	29·823	28·955	11th	28·738	20th	·217	87·9	105·0	+0·2	76·8	+1·5	90·9	+0·9	28·2	110·2	13th & 20th.	64·1	1st	46·1
	Hoshangabad	1,006	28·878	+·042	29·826	28·988	11th	28·743	20th	·245	83·9	103·1	−1·7	74·4	+0·6	88·8	−0·5	28·7	108·6	15th	64·4	1st	44·2
	Saugor	1,807	28·064	+·033	29·800	28·185	11th & 12th.	27·937	21st	·248	84·9	99·3	−2·2	73·8	+1·0	86·6	−0·6	25·5	105·3	30th	67·6	1st	37·7
	Jubbulpore	1,327	28·527	+·030	29·792	28·654	11th & 12th.	28·385	21st	·269	81·7	100·2	−1·8	71·6	+1·0	85·9	−0·4	28·6	105·3	21st	59·3	1st	46·0
	Seoni	2,033	27·868	+·045	29·799	27·991	11th	27·746	21st	·245	83·7	99·2	−1·9	67·5†	+4·3?	83·3†	−3·1?	31·7	103·1	21st	55·5	1st	47·6
	Nagpur	1,017	28·868	+·058	29·820	28·974	11th	28·749	21st	·225	86·3	104·0	−1·5	75·0	−1·2	89·5	−1·3	29·0	109·1	16th	62·3	1st	46·8
24	Pendra‡	2,123?	27·840		29·762?	27·926	7th	27·716	21st	·210	82·4	96·1		71·8		88·9		24·3	101·8	14th & 16th.	63·2	1st	38·6
	Raipur	970	28·914	+·062	29·826	29·020	11th	28·794	21st	·226	82·5	101·4	−2·9	75·6	−1·3	88·5	−2·1	25·8	106·7	24th	67·6	1st	39·1
	Chanda	*634*	29·237	+·038	29·809	29·355	11th	29·129	21st	·226	87·2	104·4	−2·1	76·2	−0·2	90·3	−1·1	28·2	109.0	24th	64·0	1st	45·0
	Jagdalpur	1,813	28·124		29·852	28·216	11th	28·027	21st	·189	80·7	97·4		72·2		84·8		25·2	102·2	12th	68·1	2nd & 27th	34·1
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	28·033	+·030	29·824	28·107	7th	27·942	21st	·165	87·0	102·5	−0·1	73·8‖	+2·3‖	88·0‖	+1·1	28·7	106·9	13th & 14th.	66·2	2nd	40·7
	Nizamabad	1,248	28·653		29·822	28·749	11th	28·538	21st	·211	85·0	103·5	+0·5	77·3	+0·8	90·5	+0·7	26·2	109·4	14th	66·7	1st	42·7
	Bidar	*2,165*									85·0	100·4		76·2		88·3		24·2	105·4	14th	68·4	25th	37·0
28	Gulbarga	1,503	28·418	+·048	29·831	28·510	12th	28·314	21st	·196	85·5	103·6	+0·4	77·5	+0·9	90·6	+0·7	26·1	107·5	14th	72·3	2nd & 27th	35·2
	Raichur	*1,311*	28·609	+·063?	29·837	28·707	12th	28·515	21st	·192	86·1	101·9	−0·2	79·8	+0·6	90·9	+0·2	22·1	105·0	14th, 16th & 22nd.	69·6	26th	25·4
	Hyderabad (Deccan)	1,690	28·234	+·055	29·833	28·333	12th	28·154	24th	·179	82·9	100·7	−1·3	76·7	+1·4	88·7	+0·1	24·0	104·3	13th	70·7	1st & 26th.	33·6
	Hanamkonda	877	29·045	+·060	29·861	29·157	12th	28·952	21st	·205	83·3	101·9	+0·4	78·1	+1·2	90·0	+0·8	23·8	104·5	9th & 22nd.	74·2	25th	30·3
	XIV.—Mysore.																						
29	Chitaldrug	2,406	27·554	+·042	29·830	27·641	12th	27·484	21st	·157	80·6	97·5	+1·7	74·1	+2·3	85·8	+2·0	23·4	100·1	4 days	71·8	1st & 4th.	28·3
	Hassan	3,149	26·865	+·054	29·848	26·950	12th	26·800	21st	·150	75·9	92·9	+1·9	68·3	+1·9	80·6	+1·9	24·6	95·3	22nd	63·9	1st	31·4
	Bangalore	3,021	26·990	+·048	29·847	27·087	12th	26·917	21st	·170	77·3	95·1	+1·9	69·8	+0·6	82·5	+1·3	25·3	98·8	25th	66·3	4 days	32·5
	Mysore	2,518	27·464	+·040	29·857	27·561	12th	27·399	21st	·162	78·0	95·5	+1·5	71·3	+1·0	83·4	+1·3	24·2	97·5	14 days	68·5	1st & 4th	29·0

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

‡ Mean of 26 days.

‖ Mean of 15 days.

B—*continued.*

***stations in India, etc., in April, 1912*—continued.**

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911, to 30th April, 1912.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1911, to 30th April, 1912.	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	56	57
																																X.—Bombay—*concld.*
10	10	5			1	4			N 4° E	N 9° W	3·3	3·5	−0·2	33	−10	77	−1	·869	+·039	1·7	−1·6	0	0·90	−0·90	0	0·57	−0·57	0·15	0·83	−0·68	0	Karwar.
4			1	1	3	6	15		N 70° W	N 69° W	7·3	6·9	+0·4	62	−1	27	−28	·359	−·292?	0·3	−1·7	0	0·30	−0·30	0·13		−0·13	0·47	0·59	−0·12	0	Malegaon.
	4	1	1		1		5	18	N 44° W	N 1° E	4·5	7·7	−3·2	72	+24	25	−30?	·305	−·326?	1·6	0	1	0·60	+0·40	0·25	0·34	−0·09	0·29	1·29	−1·00	0·18	Ahmadnagar.
5	2						20	3	N 80° W	N 83° W	7·1	7·7	−0·6	72	+15	42	+1	·396	−·030?	0·2	−1·7	0	1·40	−1·40	0	0·60	−0·60	0·08	0·94	−0·86	0	Poona.
	3	8	1	7		2		9	N 24° E	N 45° W	9·4	6·4	+3·0	33	+10	35	−4	·441	−·031	2·0	−0·6	0	1·10	−1·10	0·04	0·51	−0·47	2·12	1·33	+0·79	0·02	Sholapur.
9	2	3		2	1	3	5	5	N 66° W	N 82° W	4·5	4·1	+0·4	23	−35	45	−15	·514	−·144?	2·8	+0·5	4	2·20	+1·80	1·22	0·82	+0·40	1·48	1·48	0	0·36	Bijapur.
24	2	1			1	1	1		N 45° W	S 83° W	6·0†	9·6	−3·6	3	−25	56	+6	540	−·021?	2·2	−0·3	3	3·80	−0·80	1·37	1·74	−0·37	2·01	2·55	−0·54	0·55	Belgaum.
																																XI.—Central India.
3	2	4	11			1	7	2	N 41° E	N 51° W	7·0‡	6·4	+0·6	27	+5	22	−13	·263	−·159	3·7	+2·4	1	0·10	+0·90	0·12	0·12	0	0·29	0·77	−0·48	0·12	Neemuch.
2	4	2	3	1		2	9	7	N 51° W	N 45° W	3·6	3·2	+0·4	43	−7	30	+9	·358	−·100	4·0	+2·6	0	0·20	−0·20	0	0·14	−0·14	0·22	0·74	−0·52	0	Indore.
6	2		5	1	6	2	8		S 32° W	S 75° W	1·8	2·3	−0·5	23	−14	36	−2	·412	−·011?	3·4	+2·2	1	0·10	+0·90	0·24	0·17	+0·07	0·69	2·14	−1·45	0·17	Nowgong.
9	1		3	1		12	2	2	S 50° W	N 55° W	2·1	4·9	−2·8	33	−7	37	+11	·426	+·110	3·5	+2·5	0	0·20	−0·20	0·07	0·16	−0·09	0·64	2·66	−2·02 +1·44	0·04	Sutna.
																																XII.—Central Provinces.
	2			1	1	2	13	11	N 72° W		5·0	6·6	−1·6	73		26		·324		1·8		0			0·04	0·23	−0·19	0·07	1·51		0·04	Buldana.
3	2	1	2	2	2	3	9	6	N 83° W	N 67° W	4·9†	4·3	+0·6	37	−16	19	−11	·259	−·119?	2·9	+1·0	0	0·50	−0·50	0·02	0·17	−0·15	0·91	1·78		0·02	Akola.
7	2	2	2	1	3	4	6	3	S 82° W	S 69° W	5·7	3·9	+1·8	23	−7	27	−8	·349	−·094	2·6	+0·5	0	0·80	−0·80	0	0·26	−0·26	0·43	1·79		0	Amraoti.
3	3		1	1	2	1	13	6	N 77° W	N 68° W	5·9	4·7	+1·2	53	−10	22	−8	·284	−·076?	3·2	+1·8	0	0·30	−0·30	0·05	0·13	−0·08	0·07	0·90	−0·83	0·05	Khandwa.
8		2	6	1		4	8	1	S 67° W	S 48° W	2·8	2·2	+0·6	10	−7	29	−9	·334	−·112	2·5	+0·8	0	0·30	−0·30	0	0·16	−0·16	0·50	1·48	−0·98	0	Hoshangabad.
1		2	2	8	1	4	10	2	S 39° W	S 53° W	5·8	3·4	+2·4	30	+13	26	−4	·301	−·047	3·4	+2·1	0	0·30	−0·30	0·02	0·37	−0·35	0·78	2·22	−1·44	0·02	Saugor.
8		1		5	7	5	2	2	S 13° W	S 18° W	1·8	2·4	−0·6	40	+7	35	0	·380	−·019	2·1	+0·5	0	0·60	−0·60	0·02	0·27	−0·25	2·67	2·43	+0·24	0·02	Jubbulpore.
	5	2	2	2	11	2	2	4	S 17° W	S 86° W	4·2	2·8	+1·4	17	+8	30	−9	·332	−·112	2·1	0	2	1·30	+0·70	0·26	0·50	−0·24	3·27	3·02	+0·25	0·13	Seoni.
3	2	2	5	7	2	5		4	S 50° E	N 83° W	3·6	4·4	−0·8	23	+15	32	−4	·407	−·060	3·0	+0·5	4	1·10	+2·90	1·23	0·56	+0·67	5·81	2·39	+3·42	0·39	Nagpur.
5	1	1	1	3	7	6	1	1	S 11° W		5·4§			42		34		·372		3·1		2			0·91	1·50	−0·59	6·01	5·69	+0·32	0·41	Pendra.
8			2		6	11	3		S 33° W	S 56° W	4·7	4·6	+0·1	56	+19	44	+7	·472	+·016	1·0	−1·5	3	1·40	+1·60	0·83	0·66	+0·17	3·88	2·43	+1·45	0·33	Raipur.
9			2	8	7	3	1		S 17° E	S 52° E	2·7	2·6	+0·1	53	+34	41	−4	·529	−·024	2·1	−0·3	2	1·80	+0·20	0·53	0·65	−0·12	4·50	2·66	+1·84	0·29	Chanda.
6	2		1	4	7	4	5	1	S 26° W					37		61		·635		3·4		7			2·62			4·88			0·70	Jagdalpur.
																																XIII.—Hyderabad.
3	7	3	2	3		3	4	5	N 22° W		8·8			27		37	+32	·471		2·0		0	0·60	+0·60	0	0·27	−0·27	0	1·24	−1·24	0	Aurangabad.
8	2	1	2	1	5	10	1		S 25° W		4·0			37		43	−10	·528		3·6		3	1·40	+1·60	1·01	0·93	+0·08	4·57	2·15	+2·42	0·47	Nizamabad.
		2		4	2	14		6	S 48° W		5·1			47		43		·510		4·2		4	2·60	+1·40	0·91	1·41	−0·50	2·77	2·61	+0·16	0·35	Bidar.
1	1	5	5	5	9	2	1	1	S 46° E	N 78° W	6·6	6·6	0	43	+36	39	−11	·475	−·108	1·1	−1·4	3	2·20	+0·80	1·02	1·05	−0·03	2·55	1·93	+0·62	0·40	Gulbarga.
	3	5	2	7	8	5			S 35° E	S 58° W	5·0	6·2	−1·2	40	−2	50	−3	·626	−·009	3·2	+0·5	3	1·20	+1·80	2·05	0·84	+1·21	2·88	1·59	+1·29	1·00	Raichur.
27			1	1		1			S 38° E	S 72° W	1·7	3·3	−1·6	3	−16	56	0	·620	−·015	2·5	+0·3	2			1·79	1·05	+0·74	4·14	2·33	+1·81	1·21	Hyderabad (Deccan).
4			1	16	9				S 31° E		7·2			76		61	−3	·693		3·5		1	1·30	−0·30	0·45	1·04	−0·59	3·87	2·09	+1·78	0·45	Hanamkonda.
																																XIV.—Mysore.
1			2	3		8	13	3	S 71° W	S 70° W	3·6	4·9	−1·3	59	−4	61	−2	·635	+·007	2·4	−0·5	2	2·50	−0·50	0·45	1·21	−0·76	1·35	2·05	−0·70	0·23	Chitaldrug.
9	2		2	1	1	4	6	5	N 84° W	S 82° W	3·9	2·5	+1·4	33	+4	73	0	·648	+·013	2·2	−2·2	4	4·80	−0·80	2·49	2·34	+0·15	2·99	3·59	−0·60	0·99	Hassan.
1			2	3	7	11	5	1	S 30° W	S 41° W	5·1	3·5	+1·6	59	+5	66	−6	·617	−·032	2·0	−1·3	0	2·40	−2·40	0·05	1·37	−1·32	2·41	2·77	−0·36	0·04	Bangalore.
3			1	2	7	11	6		S 35° W	S 68° W	4·9	5·8	−0·9	62	+10	71	−3	·682	+·012	3·2	−1·2	4	4·30	−0·30	2·45	2·65	−0·20	3·41	3·59	−0·18	1·40	Mysore.

stations, the elevations of which exceed 3,200 feet.

§ Mean of 25 days.

* Uncorrected for scale error.

† Mean of 29 days.
‡ „ 28 „

Table

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

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras.																						
30	Mangalore	65	29·877	+·032	29·873	29·972	12th	29·807	21st	·165	85·4	93·2	+0·9	79·9	+2·7	85·5	+1·8	13·3	95·8	26th	77·4	1st & 2nd.	18·4
	Calicut	27	29·907	+·025	29·863	30·011	12th	29·829	21st	·182	83·6	91·5	+0·2	79·4	+1·5	85·5	+0·9	12·1	93·8	18th & 24th.	77·1	19th	16·7
	Cochin	9	29·928	+·026	29·865	30·031	12th	29·853	26th	·178	84·3	91·8	+0·3	78·9	+0·5	85·4	+0·4	12·9	93·7	4 days	72·7	6th	21·0
	Trivandrum	198	29·740	+·045	29·868	29·838	12th	29·653	26th	·180	82·3	89·3	+·8	77·9	+1·6	83·6	+1·7	11·4	92·0	10th, 12th & 14th	76·0	1st, 2nd & 14th.	16·0
31	Pamban	37	29·896	+·038	29·860	30·004	12th	29·801	26th	·203	85·3	92·9	+2·0	79·6	+0·6	86·3	+1·3	13·3	94·2	4 days	74·0	6th	20·2
	Madura	447	29·510	+·066	29·885	29·627	12th	29·430	25th	197	85·7	100·1	+0·8	78·9	+2·5	89·5	+1·7	21·2	102·5	25th	74·1	8th & 9th	28·4
	Pudukkottai	318	29·632		29·879	29·737	12th	29·560	26th	·177	85·5	99·4		78·8		89·1		20·6	102·2	25th	75·0	8th	27·2
	Negapatam	31	29·913	+·045	29·873	30·017	12th	29·832	26th	·185	86·2	92·9	+0·4	81·7	+2·7	87·3	+1·5	11·2	94·5	12th & 26th,	78·0	2nd	16·5
	Trichinopoly	255	29·701	+·057	29·887	29·825	12th	29·611	26th	·214	85·9	101·1	0	78·[illegible]	+0·7	89·7	+0·3	22·9	104·6	25th	74·3	26th	30·3
	Coimbatore	1,341	28·596	+·032	29·857	28·705	12th	28·509	21st	·196	81·3	98·8	+1·7	74·[illegible]	+1·4	86·8	+1·5	24·0	100·5	9th	70·3	1st	30·2
	Salem	940	28·010	+·054	29·904?	29·151	12th	28·959	25th	192	81·3	102·5	+1·8	77·8	+2·0	90·2	+1·9	24·7	105·5	25th	73·8	3rd	31·7
	Cuddalore	37	29·916	+·061	29·883	30·031	12th	29·831	21st	·197	85·0	92·5	−0·3	78·[illegible]	+1·2	85·3	+0·5	14·5	95·3	24th	74·7	3rd	20·6
	Vellore	707	29·234		29·875	29·343	12th	29·151	21st	·192	82·5	99·2		75·4		87·3		23·8	102·7	25th	71·0	8th	31·7
	Madras	22	29·927	+·050	29·881	30·033	12th	29·842	21st	·191	85·1	92·7	−0·4	77·5	+0·4	85·1	0	15·2	95·0	30th	72·5	3rd	22·5
32	Cuddapah	433	29·487	+·052	29·851	29·576	11th	29·391	21st	·182	88·1	106·1	+0·9	82·3	+1·5	94·2	+1·2	23·8	109·2	25th	76·1	2nd	33·1
	Bellary	1,475	28·433	+·034	29·821	28·527	12th	28·333	21st	·194	84·7	104·5	+1·1	78·5	+1·4	91·5	+1·3	26·0	107·0	10th & 13th.	71·3	6th	35·7
	Kurnool	923	28·979	+·037	29·829	29·073	11th	28·865	21st	·208	85·7	104·5	+0·9	81·0	+3·0	92·8	+1·9	23·5	107·2	24th & 25th.	73·1	6th	34·1
33	Nellore	66	29·866†	+·065†	29·857†	29·979	12th	29·763	24th	·216	84·0	97·5	−3·4?	77·0	−0·4	87·3	−1·9?	20·5	101·6	8th & 10th.	74·1	3rd, 4th & 9th.	27·5
	Masulipatam	15	29·931	+·064	29·881	30·036	12th	29·829	24th	·207	85·5	94·8	−0·1	78·5	+1·0	86·7	+0·5	16·3	97·3	9th	74·2	1st	23·1
	Cocanada	26	29·934	+·071	29·897	30·044	12th	29·839	24th	·205	84·4	95·7	+0·1	78·4	+0·1	87·1	+0·1	17·3	109·2	29th	74·6	4th	25·6
	Waltair (Vizagapatam).	*226*	29·719	+·072	29·886	29·834	12th	29·616	22nd	·218	83·2	88·7		78·9		83·8		9·8	91·6	15th & 23rd.	75·9	22nd	15·7
	Calingapatam	19	29·918		29·875	30·041	12th	29·804	24th	·237	84·4	93·8		78·4		86·1		15·4	100·3	26th	74·8	1st	25·5
	Gopalpur	33	29·875	+·073	29·849	29·990	12th	29·754	24th	·236	82·3	89·3	+1·6	77·8	+0·3	83·6	+0·9	11·5	94·7	6th	71·0	7th	23·7
	Bay Islands.																						
1	P. V. Fraser	8	29·942‖		29·865‖	30·075	10th	29·852	21st	·223	82·6												
	Port Blair	58	28·901	+·044	29·889	29·998	13th	29·825	26th	·173	84·0	92·1	−0·4	80·2	+1·1	86·2	+0·5	11·9	96·2	1st	76·5	6th, 7th & 8th.	19·7
	Sliper Island	90	29·869§		29·892§	29·999	13th	29·783	26th	·216	84·7	89·9		79·7		84·8		10·2	93·1	29th	72·6	2nd	20·5
	Kashmir.																						
	Muzaffarabad	2,475	27·529		30·009	27·650	11th	27·368	21st	·282	63·8	79·5		54·5		67·0		25·0	91·7	30th	41·1	2nd	50·6
13	Srinagar	5,204	24·932	+·023	24·903	25·077	11th	24·814	4th	263	51·9	64·4	−3·8	45·9	+0·5	55·1	−1·7	18·5	79·1	30th	38·6	3rd	40·5
	Dras	*10,059*	20·864	+·056	20·832	21·094	11th	20·695	4th	·399	28·3	41·4		18·1		29·8		23·3	54·0	28th	4·0	8th & 9th.	50·0
	Leh	11,503	19·748	+·018	19·716	19·952	11th	19·592	25th	·360	41·4	59·0	+1·9	31·8	+0·9	45·4	+1·4	27·2	66·9	14th	20·0	7th	46·9
	Skardu	*7,505*	22·909	+·023	22·879	23·162	11th	22·734	21st	·428	53·2	65·8	+4·6	46·2	+4·3	56·0	+4·5	19·6	78·0	30th	37·1	1st	40·9
	Gilgit	4,890	25·123		25·096	25·369	11th	24·932	4th	·437	59·8	76·4	+3·7	51·9	+0·9	65·6	+2·3	21·5	90·2	30th	45·2	3rd & 4th.	45·0
	Baluchistan.																						
	Fort Sandeman		25·418		25·387	25·634	11th	25·283	1st	·351	61·9	81·2‡		52·5		68·1‡		28·7	92·9	30th	41·1	2nd	51·8
15	Quetta	5,502	24·666	+·034	24·626	24·837	12th	24·530	21st	·307	59·7	72·6	−1·6	46·7	+0·4	59·7	−0·6	25·9	82·6	29th & 30th.	36·2	2nd	46·4
	Chaman	4,311	25·706	+·010	25·668	25·896	11th	25·593	3rd	·303	66·1	77·6	−3·3	55·6	−4·3	66·6	−3·8	22·0	91·8	30th	38·8	4th	53·0

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 5,200 feet.

§ Mean of 23 days.
‖ „ „ 21 „
† Mean of 29 days.
‡ „ „ 18 „

B—*continued.*

stations in India, etc., in April, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911 to 30th April, 1912.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1911, to 30th April, 1912.	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	56	57
																																XV.—Madras.
	3	5	17	3	1		1		N 81° E	N 60° E	4·1	2·3	+1·8	72	+42	68	− 8	·835	−·028	3·9	−0·6	0	2·30	−2·30	0·12	1·48	−1·36	1·15	2·16	−1·01	0·06	Mangalore.
15		3	3	1		1	1	6	N 1° W	N 13° E	4·6	7·5	−2·9	15	−17	78	0	·899	+·028	3·5	−1·4	3	5·10	−2·10	1·81	3·86	−2·05	2·54	6·11	−3·57	1·35	Calicut.
	1	11	15	3					N 75° E	N 27° E	4·9	4·4	+0·5	86	+26	78	− 1	·914	+·023	3·6	−0·5	11	7·00	+4·00	4·28	5·21	−0·93	10·51	10·28	+0·23	1·36	Cochin.
27	2	1							N 15° E	N 4° E	3·0*	4·3	−1·3	10	−42	79	0	·865	+·004	6·5	+2·2	6	7·10	−1·10	3·02	4·72	−1·70	9·84	9·89	−0·05	1·16	Trivandrum.
18			2	3	5		2		S 17° E	S 38° E	3·3	5·3	−2·0	23	−23	75	− 3	·995		2·9		3	3·30	−0·30	1·11	1·96	−0·85	13·60	13·00	+0·60	0·64	Pamban.
2	1	8	8	3	2	2	2	2	N 77° E	N 41° E	4·4	2·3	+2·1	37	+11	78	+ 7	·946	+·113	6·5	+2·5	1	3·30	−2·30	0·75	2·25	−1·50	5·25	5·53	−0·28	0·75	Madura.
15		5		3	2	4		1	S 34° E		4·5			13		74		·901		4·5		1			0·14	1·42	−1·28	7·99	4·80	+3·19	0·14	Pudukkottai.
		7		16	2	2		3	S 59° E	S 6° E	4·0	5·0	−1·0	49	+19	75	0	·940	+·032	4·2	−0·3	0	1·20	−1·20	0·03	0·69	−0·66	31·73	14·83	+16·90	0·03	Negapatam.
9	1	7	6	1	1	4	1		N 80° E	S 34° W	2·8*	3·9	−1·1	27	+10	69	+ 1	·856	+·052	4·1	−0·1	2	2·10	−0·10	4·91	1·77	+3·14	9·25	6·17	+3·08	4·80	Trichinopoly.
13	4	13							N 35° E	S 1° W	2·9	2·2	+0·7	53	+38	85	+ 3	·911	+·094	3·6	−0·9	1	3·50	−2·50	0·21	1·67	−1·46	2·96	4·23	−1·27	0·12	Coimbatore.
5		7	13	2	1	1		1	N 82° E	S 67° E	4·7	3·4	+1·3	59	+46	75	+ 4	·886	+·080	4·5	+1·5	0	3·10	−3·10	0·07	2·03	−1·96	0·76	4·31	−3·55	0·07	Salem.
5	1			1	5	9	5	5	S 60° W	S 39° W	6·6	2·0	+4·6	46	− 6	74	− 7	·884	−·083?	4·1	−0·3	0	1·00	−1·00	0	0·69	−0·69	12·96	10·39	+2·57	0	Cuddalore.
20	4	1						5	N 21° W		2·9			27		72		·803		4·0		0	1·20	−1·20	0	1·01	−1·01	5·38	6·76	−1·38	0	Vellore.
1				3	18	7	1		S 9° W	S 10° W	5·0*	5·5	−0·5	82	+ 9	76	+ 2	·928	+·033	3·0	−1·4	0	1·10	−1·10	0	0·61	−0·61	9·20	8·27	+0·93	0	Madras.
	6	3	3	2		7	4	5	N 48° W	S 41° E				27	−10	61	+ 6	·822	+·091	1·9	−0·7	0	0·70	−0·70	0	0·53	−0·53	0·38	2·12	−1·74	0	Cuddapah.
8	3	1	3		2	3	6	4	N 72° W	N 69° W	3·0	3·9	−0·9	23	− 7	54	+ 1	·639	+·010	2·5	−0·4	3	1·90	+1·10	0·75	0·85	−0·10	1·06	1·35	−0·29	0·25	Bellary.
1		2	3	8	13	1		2	S 26° E	S 10° E	5·5*			62	+55	57	+ 3	·698	+·032	3·0	+0·8	1	1·70	−0·70	0·14	0·71	−0·57	0·38	1·56	−1·18	0·14	Kurnool.
					30				S	S 29° E	6·2*	6·0	+0·2	100	+33	75	0	·866	−·039	2·0	−2·1	0	0·30	−0·30	0	0·41	−0·41	3·94	5·18	−1·24	0	Nellore.
			1	8	13	6	2		S 1° E	S 1° E	5·7	5·6	+0·1	76	+ 9	78	− 3	·947	−·032?	3·9	−0·1	0	0·50	−0·50	0	0·66	−0·66	0·87	2·55	−1·68	0	Masulipatam.
14		1		1	1	16	3		S 47° W	S 66° W	4·2	5·5	−1·3	40	− 7	75	+ 1	·898	+·028	5·9	+2·1	0	0·70	−0·70	0	0·62	−0·62	1·46	2·79	−1·33	0	Cocanada.
			1	1		26	1	1	S 45° W	S 75° W	8·7			82	+ 9	72	− 3	·815	−·032	5·7	+2·0	1	0·90	+0·10	0·13	0·86	−0·73	2·69	3·99	−1·10	0·11	Waltair (Vizagapatam).
	2	1	1		1	14	10	1	S 70° W		9·8			67		72		·838		3·7		1			0·12	2·43	−2·31	1·24	5·94	−4·70	0·10	Calingapatam.
2	2		1	2	8	13		2	S 28° W	S 35° W	13·4	13·1	+0·3	56	−11	76	− 6	·835	−·049	3·5	0	2	1·10	+0·90	1·05	0·79	+0·26	4·22	3·03	+1·19	0·69	Gopalpur.
																																Bay Islands.
			1		8	13	3		S 36° W					83		84		·939		3·3		0			0·13			3·86			0·07	P. V. Fraser.
12	4	8	5	2				1	N 53° E	N 82° W	3·5	3·5	0	43	+13	79	− 4	·919	−·030	4·1	−0·3	2			0·86	2·88	−2·02	33·60	12·48	+21·12	0·53	Port Blair.
2	11	8	1			1		7	N 3° E		4·2			69		73		·870		3·6		0			0	0·78	−0·78	16·05	3·14	+12·91	0	Slipper Island.
																																Kashmir.
	1	1	1	2	7	15	2	1	S 30° W		0·6			67		62		·365		4·4		7			3·83			16·77			1·24	Muzaffarabad.
9			1	8	4	1	2	5	S 3° E	S 29° E	1·8	3·5	−1·7	23	+12	83	− 1	·323	−·010	5·5	+1·0	11	6·80	+4·20	4·01	3·65	+0·36	12·62	14·35	− 1·73	0·66	Srinagar.
30									(a)		0·6					83	− 5	·135		3·5		4	8·80	−4·80	1·30	4·01	−2·71	13·19	11·95	+ 1·24	0·45	Dras.
24					5	1			S 7° W	S 66° W	2·4	2·3	+0·1	20	− 8	55	+ 7	·139	+·029	5·2	−0·3	3	0·70	+2·30	0·44	0·22	+0·22	1·50	1·40	+ 0·10	0·15	Leh.
11		1	7	3	1	5	2		S 36° E		5·9			23		48	−14	·196		3·9		0	2·00	−2·00	0·09	1·11	−1·02	4·01	3·71	+ 0·30	0·08	Skardu.
27						2	1		S 59° W		1·2			7		47	− 3	·238	−·006	4·3	−0·9	1	2·80	−1·80	0·25	1·05	−0·80	1·32	2·07	−0·75	0·17	Gilgit.
																																Baluchistan.
11		1		1	2	4	8	3	S 77° W		3·8			37		66		·360		3·1		5			1·55			1·55**			0·52	Fort Sandeman
15	1	4	2	2	3	1	1	1	S 81° E	S 45° W	1·5	2·6	−1·1	13	+6	54	+ 2	·286	+·004	2·8	+0·3	5	2·40	+2·60	2·21	1·04	+1·17	8·16	7·82	+ 0·34	0·55	Quetta.
14	1			6	4	4	1		S 2° E	S 2° W	4·8	5·9	−1·1	33	−10	54	− 4	·341	+·033	4·4	+2·0	3	1·60	+1·40	0·81	0·56	+0·25	6·27	6·17	+ 0·10	0·21	Chaman.

(a) Indeterminate.

* Uncorrected for scale error.

** Rainfall since 1st April 1912.

Table

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

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Baluchistan—*concld.*																						
	Kalat	6,630	23·883		23·845	24·049	12th	23·763	21st	·286	49·7	69·5		?		?		?	82·0	30th	?	?	?
	Dalbandin	2,779	27·130		29·833	27·326	11th	26·989	30th	·337	71·3	89·1		60·1		74·6		29·0	100·8	30th	49·3	5th	51·5
	Pasni		29·892		29·852	30·035	11th & 12th.	29·738	30th	·297	77·5	89·1		73·6		81·3		15·5	96·5	19th & 20th.	67·5	5th	29·0
	Panjgur		26·747		26·705	26·905	11th	26·619	21st	·286	64·9	86·3		60·5		73·4		25·8	94·8	29th	53·5	5th	41·3
	Robat		26·766		26·724	26·968	1st & 11th.	26·562	26th	·406	67·1	83·4		62·0		72·7		21·4	101·0	29th	49·8	4th	51·2
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*									56·1	71·8		48·1		59·9		23·7	86·5	30th	40·4	7th	46·1
	Para Chinar	6,000	24·407		24·383	24·547	7th	24·273	14th	·274	56·2	67·0		47·2		57·1		19·8	81·2	30th	38·1	2nd	43·1
	Cherat	*4,256*	25·727	+·054	25·695	25·892	11th	25·607	21st	·285	61·1	70·3	—5·2	55·9	—2·0	63·1	—3·6	14·4	87·2	30th	43·4	5th	43·8
	Murree	6,333	23·863	+·030	23·831	24·023	11th	23·741	21st	·282	55·9	64·5	—4·3	53·3	+1·0	58·9	—1·7	11·2	76·1	30th	41·2	5th	34·9
	Simla	7,232	23·136	+·034	23·098	23·270	11th & 12th.	23·038	21st	·232	56·1	63·3	—1·9	51·1	—1·1	57·2	—1·5	12·2	73·0	16th	40·7	3rd	32·3
	Sarain		23·179		23·141	23·326	12th	23·094	24th	·232	50·9	62·8		42·7		52·8		20·1	73·0	15th	34·9	3rd	38·1
	Kalabagh		Observations not received.																				
	Chakrata	7,022	23·325	+·035	23·285	23·454	12th	23·250	21st	·204	56·3	67·6	—2·7	49·3	—2·8	58·5	—2·7	18·3	75·7	16th	43·2	2nd & 3rd.	32·5
	Mukteswar	7,592	22·874	+·022	22·833	23·008	12th	22·784	21st	·224	56·4	66·9	—2·5	48·1	—2·2	57·5	—2·3	18·8	75·5	16th	41·0	2nd	34·5
	Darjiling	7,376	23·009	+·005	22·964	23·145	12th	22·931	25th	·214	51·2	58·3	—3·9	46·9	—2·0	52·6	—2·9	11·4	63·8	13th	41·2	1st	22·6
	Shillong	4,920	25·155		25·107	25·288	12th	25·063	25th	·225	61·0	69·5		54·2		61·8		15·3	76·9	8th & 9th	41·7	1st	35·2
	Cherrapunji	4,309	25·724		25·675	25·852	12th	25·628	21st	·224	60·7	66·9		55·3		61·1		11·6	72·7	8th & 13th.	44·1	20th	28·6
	Maymyo	3,545	26·476	+·043	26·421	26·588	11th	26·386	25th	·202	67·4	82·8	—1·7	57·9	—0·8	70·4	—1·3	24·9	87·0	8th	48·1	2nd	38·9
	Pachmarhi	3,528	26·479	+·035	26·426	26·661	12th	26·419	30th	·182	79·9	92·2	—0·3*	69·7	+0·1	80·9	—0·1	22·5	98·0	15th	60·1	1st	37·9
	Mount Abu	3,945	26·091	+·033	26·041	26·224	11th	25·982	21st	·242	75·5	84·6	—1·1	69·3	+0·2	77·0	—0·5	15·3	91·7	12th & 13th.	63·4	7th	28·3
	Mercara	3,781	26·267	+·033	26·200	26·376	12th	26·204	21st	·172	72·4	86·5	+2·6	64·1	—0·1	75·3	+1·3	22·4	90·5	13th & 16th.	61·0	2nd	29·5
	Ootacamund	*7,327*	23·116		23·052	23·206	12th	23·070	21st	·136	63·3	72·9		52·3		62·6		20·6	76·5	25th	48·2	2nd & 4th.	28·3
	Kodaikanal	7,688	22·882	+·023	22·817	22·969	12th	22·840	21st	·129	60·1	70·9	+1·5	53·4	—0·1	62·2	+0·7	17·5	76·0	10th	50·5	2nd	25·5
	Extra India.																						
	Singapore (a)	10	29·932		29·863	30·046	13th	29·859	21st	·187	85·6	88·7		75·6		82·1		13·1	92·5	1st	71·0	1st	21·5
	Penang (a)	20	29·885		29·:80	29·968	10th	29·788	21st	·180	84·9	92·7		76·4		84·5		16·3	95·0	6 days	72·0	4th, 13th & 15th.	23·0
	Trincomalee	99	?	?	?						79·8	93·0	+2·0	77·2	—0·4	85·1	+0·8	15·8	95·5	12th	74·5	4th	21·0
	Colombo	24	29·902	+·006	29·853	30·000	12th	29·824	21st	·176	76·6	90·6	+1·7	74·8	—1·2	82·7	+0·3	15·8	92·5	2nd & 11th.	70·0	4th	22·5
	Minicoy	7	29·947			30·042	12th	29·874	21st	·168													
	Amini Divi	*13*	29·837	+·041	29·878	30·027	12th	29·859	21st	·168	86·4	93·8	+3·5	80·3	+0·2	87·1	+1·9	13·5	98·8	25th	72·9	28th	25·9
	Gyantse	13,120	17·057		17·018	17·130	21st	16·977	26th	·153	36·7	54·3		22·8		38·5		21·5	62·3	30th	14·0	1st	48·3
	Pharijong	14,400									32·3	43·9		16·9		30·4		27·0	52·8	26th	—8·6	1st	61·4
	Gangtok	5,660?									57·3	66·5		51·7		59·1		14·8	73·1	7th	46·2	1st	26·9
	Gartok (b)	14,140	17·561			17·600	11 days	17·500	5 days	·100	25·0	50·9		7·1		29·0		43·8	59·8	21st	—15·8	1st	75·6
	Kashgar (b)	4,255	25·557			25·855	10th	25·310	27th	·545	64·3	80·5	+8·9	55·1	+6·1	67·8	+7·5	25·4	93·9	30th	41·8	1st	52·1
	Kabul		Observations not recorded.																				
	Meshed	3,104	26·768		29·909	27·007	14th	26·529	21th	·478	52·8	69·4		43·9	—4·2	56·6		25·5	87·9	29th	31·1	5th	56·8
	Jask	13	29·899	+·017	29·866	30·133	12th	29·750	26th	·388	74·9	86·1	—1·1	72·8	—0·5	79·5	—0·8	13·3	94·3	30th	68·3	5th & 10th	26·0
	Muscat	20	29·914	+·045	29·882	30·171	12th	29·754	26th	·417	81·8	88·7	+2·9	77·3	—3·2	83·0	—0·1	11·4	102·3	27th	71·1	10th & 11th	31·2

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

NOTE.—The barometric readings are not reduced to sea-level, in the case of

(a) 9 hrs. observations.

(b) Aneroid corrected.

B—*continued.*

stations in India, etc., in April, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911, to 30th April, 1912.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1911, to 30th April, 1912.	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	56	57
																																Baluchistan—*concld.*
22				1	3	4			S 18° W	S 35° W	4·5			23	−27	64		·231		1·3		4	1·10	+2·90	1·93	0·45	+1·51	5·34	5·07	+ 0·27	0·60	Kalat.
5		2	9	3	4	5	1	1	S 44° E		5·4			33		43		·331		3·5		0			0·04			2·47			0·04	Dalbandin.
26	1						2	1	N 57° W		4·3			10		82		·777		1·7		0			0			1·29			0	Pasni.
3	4	8	10		2	2		1	N 63° E		6·0			46		66		·407		1·7		2			0·62			2·39			0·48	Panjgur.
3	1	4	2	4	4	3	5	2	S 14° W		6·9			13		51		·324		4·9		3			1·25			3·50			0·56	Robat.
																																Hill Stations excluding Kashmir and Baluchistan.
26	1			1	1	1			S		3·0			3		68		·301		5·6		3			0·94	3·47	−2·53	5·50	10·49	− 4·99	0·48	Chitral.
17			1		1	2	8	1	S 79° W		2·1			30		64		·284		3·5		12	8·50	+3·50	4·46	3·82	+0·64	13·31	13·59	− 0·28	0·98	Para Chinar.
4	13	2		1				10	N 11° W	N 11° W	9·0	9·6	−0·6	72	+20	58	+10	·292	+·015	5·6	+2·4	10			4·06	2·62	+ 1·44	10·80	13·81	− 3·01	1·15	Cherat.
11	1		2	14	2				S 47° E	N 68° E	4·4	6·8	−2·4	53	+33	45	− 1	·199	−·026	4·5	+0·4	12	5·90	+6·10	8·17	3·67	+4·50	15·81	17·85	−2·04	1·46	Murree.
																50	+10	·221	+·024	4·6	+1·4	4	3·10	+0·90	1·78	1·75	+ 0·03	9·22	11·38	−2·16	0·52	Simla.
20	1	1			7	1			S		1·3			20		69		·254		4·6		8			4·64	2·75	+1·89	17·87	23·85	−5·98	1·28	Sarain.
																							Observations		not received							Kalabagh.
5	12	2		4	3			4	N 8° E	N 17° E	3·9	5·5	−4·6	33	− 5	56	+13	·251	+·041	4·0	+1·4	8	3·90	+4·10	2·70	1·59	+1·11	12·70	14·39	− 1·69	0·83	Chakrata.
10		2	3	1			13	1	N 81° W		6·2			30		47	+ 7	·212		3·6		5			2·05	1·40	+0·65	7·34	8·70	− 1·36	1·09	Mukteswar.
25			1			3	3		S 62° W	S 26° E	1·7	6·3	−4·6	13	+ 5	91	+10	·341	−·008	7·6	+2·8	14	8·29	+5·71	7·63	3·66	+3·97	10·42	7·28	+3·14	1·23	Darjiling.
17			1		3	8	1		S 33° W		2·6			37		71		·374		5·6		18	8·70	+9·30	8·78	4·21	+4·57	14·03	8·14	+ 5·89	1·14	Shillong.
20		1				5	1	3	S 83° W		3·3			20		83		·435		8·2		19	17·00	+2·00	28·72	33·18	−4·46	52·65	45·09	+7·56	3·53	Cherrapunji.
24		2			1	3			S 24° W		1·4			7		74	+ 7	·501		3·1		3	4·30	−1·30	2·95	1·88	+1·07	3·76	3·06	+0·70	2·30	Maymyo.
7	2		1	2	1	7	1	9	N 84° W	N 89° W	1·9	4·4	−2·5	33	+ 6	31*	+ 2	·306*	+·001	0·6	−1·3	0	0·80	−0·80	0	0·32	−0·32	1·00	2·44	−1·44	0	Pachmarhi.
1	5	5	1	1		4	7	6	N 44° W	N 63° W	5·8	6·4	−0·6	43	0	36	+ 7	·312	+·048	2·2	+1·2	0	0·30	−0·30	0	0·15	−0·15		1·08	−1·08	0	Mount Abu.
23	2	1					2	2	N 34° W	N 21° W	1·8			17	−23	80	+ 2	·627	+·041	3·2	−1·0	2	5·70	−3·70	3·05	2·60	+0·46	3·38	4·53	−1·15	1·76	Mercara.
3		8	12	6	1				N 89° E		3·0	2·9	+0·1	73		51		·292		2·8		5	7·10	−2·10	2·32	2·40	−0·08	7·53	8·31	−0·78	0·58	Cotacamund.
	7	9	9	3				2	N 52° E		8·5†			66		63	+ 2	·325		2·8		8	7·00	+1·00	10·05	4·28	+5·77	19·02	15·48	+3·54	4·07	Kodaikanal.
																																Extra India.
12		12	2	4					N 65° E		4·5†			47								12			5·75	8·65	− 2·90	37·71	45·45	− 7·74	1·46	Singapore.
		21	1	5	1			2	N 56° E		10·2†			70						5·6		9			5·09	7·53	− 2·44	24·17	28·70	− 4·53	0·79	Penang.
6		1	1	1		21			S 40° W	S 39° W	3·91	5·0	−1·1	62	− 6	87	+ 6	·835	−·012	6·0	+2·9	3			0·74	2·06	− 1·32	26·82	25·40	+ 1·42	0·30	Trincomalee.
29		1							N 45° E	S 12° E	2·1†	4·6	−2·5	3	−49	94	+16	·864	−·030	6·4	+1·5	17			9·89	10·27	− 0·38	21·91	25·69	− 3·75	1·62	Colombo.
	13	9	3	1	1	2	1	5	N 4° E	N 59° W	2·6	5·4	−2·8	53						4·8		9			4·67	3·24	+ 1·43	14·26	9·83	+ 4·45	1·85	Minicoy.
6	3	2				1	5	13	N 45° W		3·5			60		70	− 5	·872	−·059	3·5	−1·4	2			1·94	1·90	+ 0·04	3·30	3·46	− 0·16	1·82	Amini Divi.
30									(c)		?					70		·147		1·7		5			1·05‡			1·85‡			0·30	Gyantse.
16	3	3		4	1	2	1		S 89° E		5·8			10		90		·171		3·2		9			4·39			8·74			1·02	Pharijong.
27		3							N 5° E		1·5			10		83		·392		3·8		23			17·47	11·43	+ 6·04	23·37	20·98	+ 2·39	3·09	Gangtok.
20				7	1	2			S 23° E		7·3			27						3·3		0			0						0	Gartok.
26						1		3	N 56° W	N 21° W	0·5	3·4	−2·9	10	− 2	50	+ 4	·295	+·076	2·4	−2·6	0			0	0·28	− 0·28	2·44	1·01	+ 1·43	0	Kasangar.
																																Kabul.
22	2	2	3	1					N 59° E		1·6			20		65		·257		5·7	+1·3	6			2·47	1·75	+ 0·72	4·20	6·56	− 2·36	0·72	Meshed.
5	5	1	4				3	12	N 26° W	N 45° W	6·4	7·2	−0·8	53	+38	70	+ 4	·598	−·074	2·6	+1·6	3			0·53	0·06	+ 0·47	3·22	3·75	− 0·53	0·19	Jask.
7	3		5	3		1		11	N 10° W	N 51° W	4·6	3·1	+1·5	27	− 3	60	+ 2	·611	−·034	4·3	+3·5	5			3·81	0·11	+ 3·70	6·88	3·35	+ 3·53	2·02	Muscat.

hill or plateau stations, the elevations of which exceed 3,200 feet.
(c) Indeterminate.

† Uncorrected for scale error.

* Mean of 27 days.
‡ Snow water.

Table

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

Number of sub-division.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India—*concld.*																						
	Bahrein . .	18	29·950		29·921	30·141	12th	29·746	24th	·395	75·2	79·6		70·0		74·8		9·6	96·9	28th	64·1	12th	32·8
	Bushire . . .	14	29·919	+·028	29·895	30·129	12th	29·722	24th	·407	72·6	79·5	−2·1	66·5	−0·2	73·0	−1·1	13·0	97·3	28th	53·0	2nd	39·3
	Busrah . . .	25	29·924		29·918	30·101	13th	29·627	24th	·474	73·6	81·9		66·7		74·3		15·2	90·3	24th	56·9	1st	33·4
	Kerman . .										57·0	78·3		47·0		62·7		31·3	88·6	4th	36·0	4th	52·6
	Ispahan (*a*) § .	*5,817*	24·625			24·470	15th	24·030	25th	·440	54·6	73·3	+ 0·2	46·9	+1·2	60·1	+0·7	26·4	79·4	23rd	40·2	30th	39·2
	Tehran (*a*) § .	*4,002*	25·725			25·960	14th	25·500	25th	·460	56·3	67·5	− 3·9	49·0	− 0·9	58·3	−2·4	18·5	78·1	18th	33·5	30th	44·6
	Bagdad . .	127	29·807	−·042	29·913	30·007	15th	29·579	23rd	·428	67·2	86·6	+5·0	59·4‡	+2·5‡	73·0‡	+3·7	27·2	97·7	21st	49·5	10th	48·2
	Beirut† . . .	111			29·930						66·7	71·5		59·5		65·5		12·0	86·5	6th	53·8	8th & 29th	32·7
	Aden . . .	94	29.866	+·025	29·892	29·991	13th	29·769	21st	·222	81·7	86·8	−2·3	79·3	+2·0	83·0	−0·1	7·5	93·6	23rd	76·9	1st & 2nd	16·7
	Zanzibar . .	72	29·915	+·008	29·943	30·010	28th	29·897	5th	·113	79·6	84·4	− 0·3	77·5	−0·1	80·9	−0·2	6·9	88·9	4th	73·5	30th	15·4

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*) Aneroid uncorrected.

† 8½ hrs. observations. ‡ Mean of 29 days. § 7 hours observations.

B—*concluded.*

stations in India, etc., in April, 1912—concluded.

Wind direction. Number of winds from: Calm.	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. of mercury.	Departure from normal in inches of mercury.	Cloud. Mean amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st Dec., 1911, to 30th April, 1912.	Normal rainfall for period, 1st Dec. to 30th April.	Departure from normal of period, 1st Dec., 1911, to 30th April, 1912.	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	56	57
																																Extra India —*concld.*
	5	1	2	3	5	3	4	7	N 81° W		4·5			20		69		·602		3·0		1			1·10	0·17	+ 0·93	2·83	2·32	+ 0·51	1·05	Bahrein.
9	3	1	4	5	1		2	[illegible]	N 45° E	N 1° E	7·8	6·6	+1·2	13	—24	79	+17	·628	+·111	2·7	+0·3	1			0·25	0·48	− 0·23	6·13	9·38	— 3·25	0·17	Bushire.
	1	2	7	5	3	5	4	3	S 22° E		2·7			20		58		·480		3·4		0			0	0·48	— 0·48	7·04	4·61	+ 2·43	0	Busrah.
13	5	2	1	2	2	3	2		N 19° W		2·9*			4		51		·232		1·8		3			0·87			3·29			0·42	Kerman.
22				1		4	3		S 59° W	N 83° W	3·5	4·7	−1·2	20		52		·224		2·0		1			0·22	0·53	− 0·31	4·00	3·52	+ 0·48	0·22	Ispahan.
15	2	6	5			1	1		N 49° W	S 63° W	2·6	3·2	—0·6	30		55		·256		1·8		3			0·65	1·13	— 0·48	4·38	7·07	− 2·69	0·33	Tehran.
15	4			1	5			5	N 56° W	N 2° W	5·5	3·1	+2·4	10	—23	56	− 6	·378	—·024	1·2	—0·4	0			0·08	0·81	— 0·73	3·83	5·80	− 1·97	0·08	Bagdad.
5	3	5	1		3	7	4	2	W					19		69		·450		4·3		4			1·18			29·73			0·57	Beirut.
2	1	25	2						N 46° E	N 80° E	12·4	11·2	+1·2	89	+15	79	+ 5	·843	+·052	5·4	+2·0	2			1·26	0·27	+ 0·99	1·81	1·91	— 0·10	1·10	Aden.
2				3	13	11	1		S 17° W	S 15° W	4·7	5·2	—0·5	80	— 4	88	+ 2	·886	+·028	7·9	+1·6	16			12·93	13·85	— 0·92	31·79	31·18	+ 0·61	2·10	Zanzibar.

* Mean of 28 days.

Table C.—Abstract of observations taken at 8 hrs. at 58 fourth and fifth class stations in India, etc., in April, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs. at 58 fourth

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Bishnath	65·4	80·0	...	64·7	...	72·3	...	15·3	87·3	13th	54·7	2nd	32·6	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	70·2	80·2	...	63·9	...	72·1	...	16·3	87·0	13th	55·1	2nd	31·9	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	65·7	78·6	...	62·9	...	70·7	...	15·7	87·3	13th	53·2	1st	34·1	...	...	...	...	...	...	...	...	...	...	...
	Dikom	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jorehat	69·8	79·1	...	64·9	...	72·0	...	14·2	85·7	13th	56·8	2nd	28·9	...	...	...	...	...	...	...	...	...	...	...
	Lumding	69·0	82·7	...	64·8	...	73·8	...	17·9	93·3	7th	55·8	2nd	37·5	...	...	...	...	...	...	...	...	...	...	...
	Messa	74·4	84·2	...	62·7	...	73·5	...	21·5	92·1	13th	52·1	11th	40·0	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	65·2	80·4	...	61·7*	...	71·1	...	18·7	87·3	9th	53·7	1st	33·6	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	72·4	85·9	...	65·9	...	75·9	...	20·0	94·2	9th	55·0	1st	39·2	...	...	...	...	...	...	...	...	...	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	76·4	87·0	...	68·0	...	77·5	...	19·0	92·0	8th	59·9	1st	32·1	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	80·8	92·3	...	70·1	...	81·2	...	22·2	102·2	9th	56·7	1st	45·5	...	...	...	...	...	...	...	...	...	...	...
	Pabna	78·0	92·3	...	70·0	...	81·1	...	22·3	100·0	9th	62·3	1st	37·7	...	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	71·8	88·2	...	64·0	...	76·1	...	24·2	91·1	10th	52·8	1st	38·3	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	72·5	83·1	...	65·2	...	74·1	...	17·9	89·1	9th	57·0	1st	32·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Mean of 28 days.

C.

and fifth class stations in India, etc., in April, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911 to 30th April, 1912.	Normal rainfall for period, 1st December to 30th April	Departure from normal of period, 1st December, 1911 to 30th April, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	...	...	...	98	...	·685	...	...	...	17	...	...	5·49	6·73	−1·24	9·06	11·69	−2·63	0·84	Bishnath.
...	...	...	...	...	83	...	·613	...	...	...	15	...	...	7·38	5·11	+2·27	11·65	8·44	+3·21	1·96	Borjuli.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12·40	...	...	18·07	...	...	Chandkhira.
...	...	...	...	...	93	...	·587	...	...	...	14	...	...	7·42	11·12	−3·70	17·72	21·16	−3·44	1·95	Doom Dooma.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11·65	...	...	20·63	...	...	Dikom.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6·52	...	...	11·46	...	...	Golaghat.
...	...	...	...	...	...	...	...	...	...	Observations not received					...	...	...	...	...	...	Hailakandi.
...	...	...	...	...	87	...	·633	...	...	...	21	...	...	10·67	7·91	+2·76	17·82	13·21	+4·61	1·95	Jorehat.
...	...	...	...	...	88	...	·622	...	...	...	15	...	...	6·13	...	...	6·13	...	...	1·10	Lumding.
...	...	...	...	...	78	...	·654	...	...	...	20	...	...	7·12	5·16	+1·96	12·91	8·73	+4·18	1·03	Messa.
...	...	...	...	...	96	...	·600	...	...	...	16	...	...	6·39	6·59	−0·20	10·84	11·16	−0·32	0·79	Panerihat.
...	...	...	...	...	87	...	·698	...	...	...	18	...	...	24·51	11·02	+13·49	33·63	16·12	+17·51	4·69	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	12	6·46	+5·54	11·67	6·37	+5·30	19·92	10·65	+9·27	2·50	Comilla.
...	...	...	...	...	80	...	·728	...	...	...	15	...	...	12·62	6·76	+5·86	22·73	10·91	+11·82	2·38	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	5	6·00	−1·00	3·86	4·53	−0·67	7·04	8·25	−1·21	1·49	Faridpur.
...	...	...	...	...	73	...	·766	...	...	...	7	...	...	3·11	4·45	−1·34	5·25	·787	−2·62	0·65	Goalundo.
...	...	...	...	...	79	...	·755	...	...	...	7	...	...	3·47	3·12	+0·35	6·08	6·05	+0·03	1·28	Pabna.
...	...	...	...	...	...	...	...	...	...	...	7	4·60	+2·40	5·99	3·29	+2·70	7·76	5·92	+1·84	2·80	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	6	2·95	+3·05	1·77	1·90	−0·13	2·23	4·06	−1·83	0·50	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	3	1·81	+1·19	1·34	1·03	+0·31	3·65	3·45	+0·20	0·48	Malda.
...	...	...	...	...	...	...	...	...	...	...	6	4·39	+4·61	9·99	2·99	+7·00	12·30	5·37	+6·93	3·40	Rangpur.
...	...	...	...	...	84	...	·651	...	...	...	9	...	...	6·77	5·68	+1·09	10·42	8·95	+1·47	1·78	Dam Dim.
...	...	...	...	...	...	...	...	...	...	...	...	...	...		5·89	...		9·21	...	...	Kalchini.
...	...	...	...	...	76	...	·599	...	...	...	9	...	...	7·17	5·94	+1·23	10·92	10·44	+0·48	1·81	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	15	7·41	+7·59	7·18	4·99	+2·19	11·40	7·85	+3·55	1·95	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	8	3·39	+4·61	2·36	2·34	+0·02	5·50	5·64	−0·14	0·73	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	4	3·00	+1·00	2·18	1·38	+0·80	4·89	4·05	+0·84	1·20	Bankura.
...	...	...	...	...	...	...	...	...	...	...	4	2·47	+1·53	0·	1·57	−0·59	3·03	4·20	−1·17	0·40	Raniganj.

Total rainfall since 1st April, 1912.

Table

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

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	78·0	96·7	...	70·9	...	83·8	...	25·8	102·7	30th	62·6	1st	40·1	...	...	...	...	...	...	...	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XII.—Central Provinces																								
23	Chhindwara	81·8	99·0	...	69·9	.	84·5	...	29·1	103·7	16th	58·2	3rd	45·5	...	3	3	1	1	3	5	8	6	N 81° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	86·7	104·1	...	78·9	...	91·5	...	25·2	106·5	25th	73·9	20th	32·6	...	...	...	...	...	...	...	...	...	...	...
33	Guntur	84·5	98·6	...	78·6	...	88·6	...	20·0	103·2	10th	73·8	4th	29·4		...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	75·9	86·4	...	63·5	...	75·0	...	22·9	99·1	15th	51·0	5th	48·1	...	7	14	1	2	5	...	1	...	N 45° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	44·5	62·3	...	37·6	...	49·9	...	24·7	74·1	30th	28·2	9th	45·9	...	17	8	3	...	...	...	...	2	N 16° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C—*contd.*

fifth class stations in India, etc., in April, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911, to 30th April, 1912.	Normal rainfall for period, 1st December to 30th April.	Departure from normal of period, 1st December, 1911, to 30th April, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	3	1·35	+1·65	0·38	0·54	−0·16	1·19	3·61	−2·42	0·15	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	2	1·45	+0·55	1·69	0·76	+0·93	2·98	2·73	+0·25	0·85	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	3	0·90	+2·10	2·69	0·43	+2·26	3·81	2·09	+1·72	1·55	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	3	1·23	+1·77	2·11	0·85	+1·26	3·55	2·50	+1·05	0·88	Motihari.
...	...	...	...	...	...	...	...	...	...	...	1	0·55	+0·45	0·21	0·32	−0·11	1·05	2·06	−1·01	0·16	Chapra.
...	...	...	...	...	...	...	...	...	...	...	1	0·55	+0·45	0·17	0·29	−0·12	1·52	2·36	−0·84	0·17	Arrah.
...	...	...	...	...	...	...	...	...	...	...	2	0·41	+1·59	0·54	0·20	+0·34	1·38	2·30	−0·92	0·30	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	67	...	·642	...	...	...	...	No	rain	gauge	...	...	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	1	0·90	+0·10	0·45	0·33	+0·12	4·01	3·47	+0·54	0·33	Meerut.
...	...	...	...	...	...	...	...	...	...	...	2	1·50	+0·50	0·48	0·70	−0·22	3·97	7·15	−3·18	0·18	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	.	...	...	...	...	...	...	0	0·30	−0·30	0·01	0·25	−0·24	0·10	0·67	−0·57	0·01	Udaipur.
																					XII.—Central Provinces.
4·0	...	...	43	...	40	...	·771	...	1·2	...	0	...	...	0·09	...	...	3·74	...	...	0·05	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	3	3·70	−0·70	1·98	2·88	−0·90	7·93	9·60	−1·67	0·86	Tinnevelly.
...	...	...	...	...	54	...	·680	...	2·9	...	2	...	...	0·61	...	...	2·22	...	...	0·48	Anantapur.
...	...	...	...	...	83	...	·983	...	2·7	...	0	...	...	0	...	...	0	...	...	0	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	6	...	...	1·77	3·49	−1·72	9·02	17·21	−8·19	0·58	Car Nicobar.
																					Kashmir.
...	...	...	50	...	54	...	·468	...	3·3	...	7	...	...	2·23	...	...	10·08	...	...	0·80	Jammu.
...	...	...	...	...	...	...	...	...	..	...	14	...	...	7·44	10·26	−2·82	47·89	53·86	−5·97	1·31	Sonamarang.
...	...	...	83	...	56	...	·162	...	3·8	...	1	...	...	0·23	...	...	7·40	...	...	0·17	Kargil.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor.

Table

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

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	71·7	82·2	...	65·5	...	73·9	...	16·7	88·1	9th	59·6	1st	28·5	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	61·1	67·1	...	55·8	...	61·5	...	11·3	72·8	9th	50·4	1st	22·4	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo*	...	62·5	...	42·0	...	52·3	...	20·5	72·1	14th	33·9	5th	38·2	15	...	2	2	2	...	...	7	...	S	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drosh	55·5	71·8	...	50·8	...	61·3	...	21·0	86·6	30th	40·7	1st	45·9	1	1	2	5	7	9	3	1	...	S 30° E	...
	Pishin	...	73·6	...	47·8	...	60·7	...	25·8	85·2	30th	35·0	5th	50·2	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	84·8	...	66·5†	...	75·2†	...	18·3	92·8	24th	55·3	17th	37·5	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	42·6	56·2	...	35·6	...	45·9	...	20·6	63·2	8th	29·3	4th	33·9	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	52·6	68·4	...	41·0	...	54·7	...	27·4	78·2	21st	32·0	1st	45·2	...	...	...	...	...	...	...	...		...	...
	Koweit	...	84·4	...	67·7	...	76·0	...	16·7	92·5	28th	59·2	1st	33·3	1	2	...	4	1	3	2	3	14	S 48° W	...
	Maidan	...	83·9	...	62·7	...	73·3	...	21·2	93·2	16th	54·2	11th	39·0	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	84·7	...	66·9	...	75·8	...	17·8	90·8	22nd	61·4	3rd	29·4	...	...	...	...	...	...	10	...	14	N 80° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	81·1	...	56·9	...	69·0	...	24·2	97·8	26th & 29th.	44·2	4th	53·6	1	7	1	2	1	1	2	1	14	N 31° W	...

* Observations of 28 days.

† Mean of 23 days.

C—*concluded.*

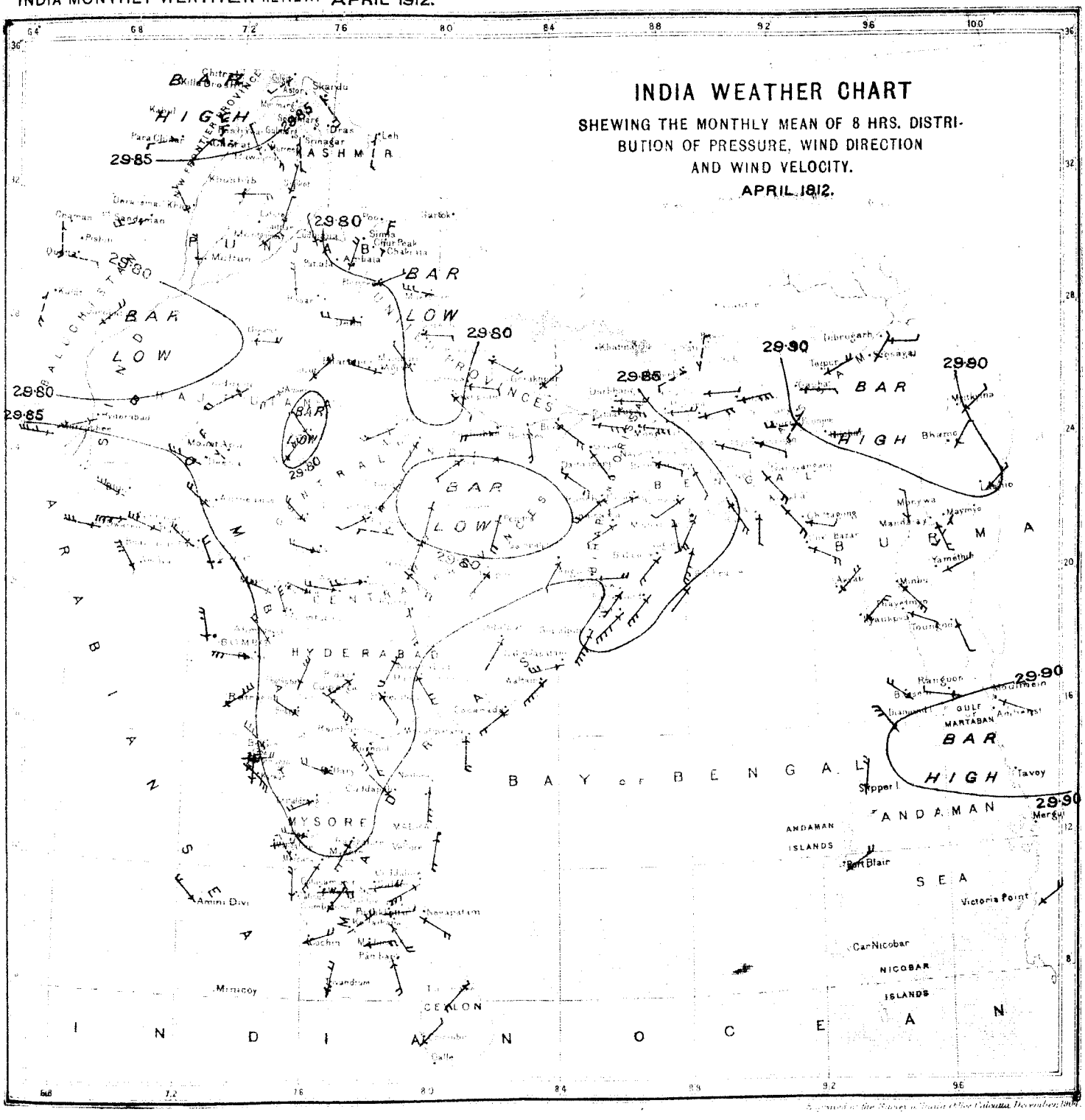
fifth class stations in India, etc., in April, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st December, 1911, to 30th April, 1912.	Normal rainfall for period, 1st December to 30th April.	Departure from normal of period, 1st December, 1911, to 30th April, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	71	...	·539	...	...	...	9	...	...	7·61	3·55	+4·06	10·17	7·06	+3·11	1·36	Panighatta.
...	...	...	...	...	79	...	·421	...	...	...	11	...	...	4·65	4·39	+0·26	7·96	9·08	+1·12	1·14	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	30	...	...	14·81	...	...	25·88	...	...	1·32	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	18	...	...	8·53	...	...	15·19	...	...	1·75	Lachung.
...	...	...	8	...	...	...	...	...	5·3	...	1	...	...	0·41	2·20	—1·79	4·82	10·78	+5·96	0·17	Poo.
...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.				...	...	...	...	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	4	...	...	2·10	...	...	14·89	...	...	1·13	Bakloh.
...	...	...	35	...	75	...	·327	...	1·9	...	7	...	...	2·65	4·17	—1·52	7·49	10·11	—2·62	0·75	Drosh.‡
...	...	...	...	...	...	...	...	...	3·1	...	4	...	...	1·75	0·71	+1·04	8·27	7·50	+0·77	0·61	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	2·6	...	0	...	...	0·06	...	...	6·76	...	...	0·03	Ahwaz.
...	...	...	...	...	77	...	·210	...	3·6	...	15	...	...	4·24¶	...	...	9·74	...	...	0·43	Chumbi.
...	...	...	...	...	62	...	·245	...	...	...	2	...	...	0·97	...	...	15·89	...	...	0·62	Kirmanshah.
...	...	...	47	...	...	...	...	...	1·5	...	0	...	...	0·02	...	...	3·69	...	...	0·01	Koweit.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	0·60	...	...	14·73	...	...	0·26	Maidan.
...	...	...	57	...	...	...	...	...	...	...	0	...	...	0	...	...	5·92	...	...	0	Muhammerah.§
...	...	...	...	...	...	...	...	...	...	...	17	...	...	12·75	24·31	—11·56	25·65	41·80	—16·15	2·62	Pemba.
...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.				...	...	...	...	...	...	Prison Island.
8·0	...	...	60	...	...	...	...	...	...	...	2	...	...	0·39	...	...	0·55‖	...	...	0·15	Seistan.

¶ Rain and snow water.

‖ Total rainfall since 1st February, 1912.

§ Wind variable 6.
‡ " " 1.

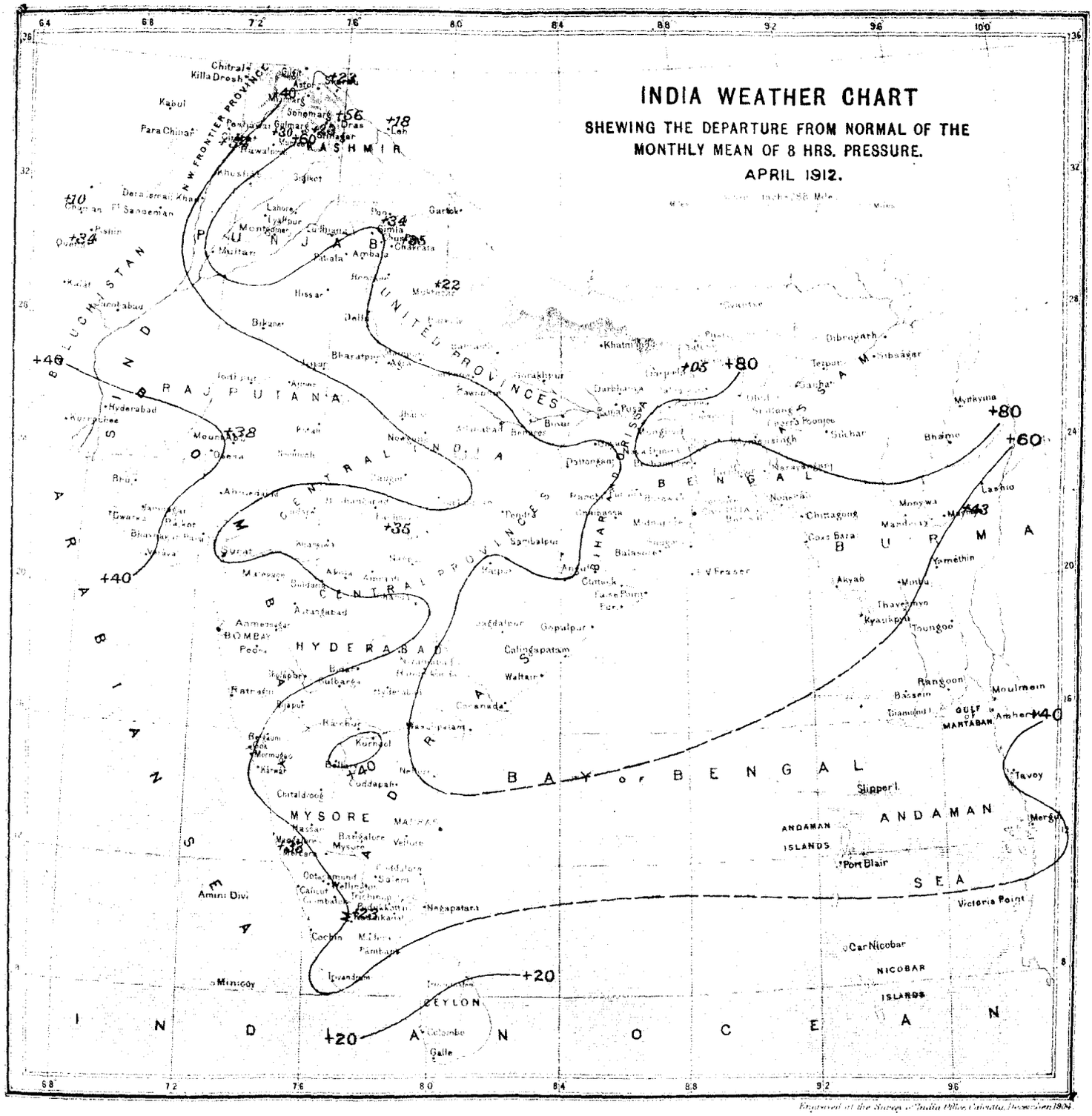


The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate up to December 1911 inclusive.



Engraved at the Survey of India Office, Calcutta, December 1904.

LITHO BY S. B. MUNDLE.

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

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

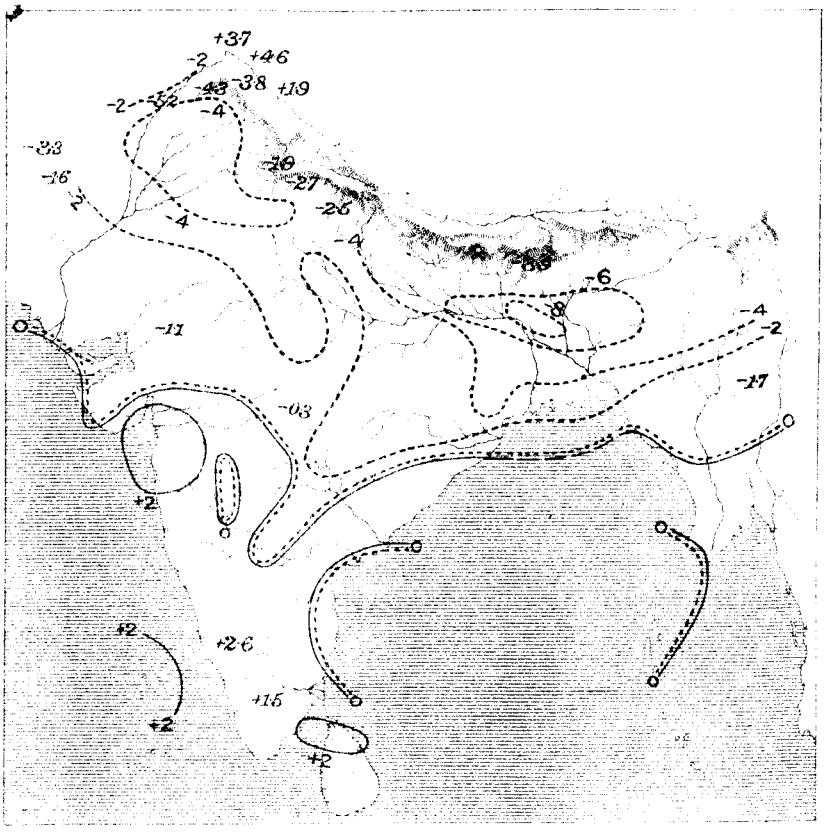
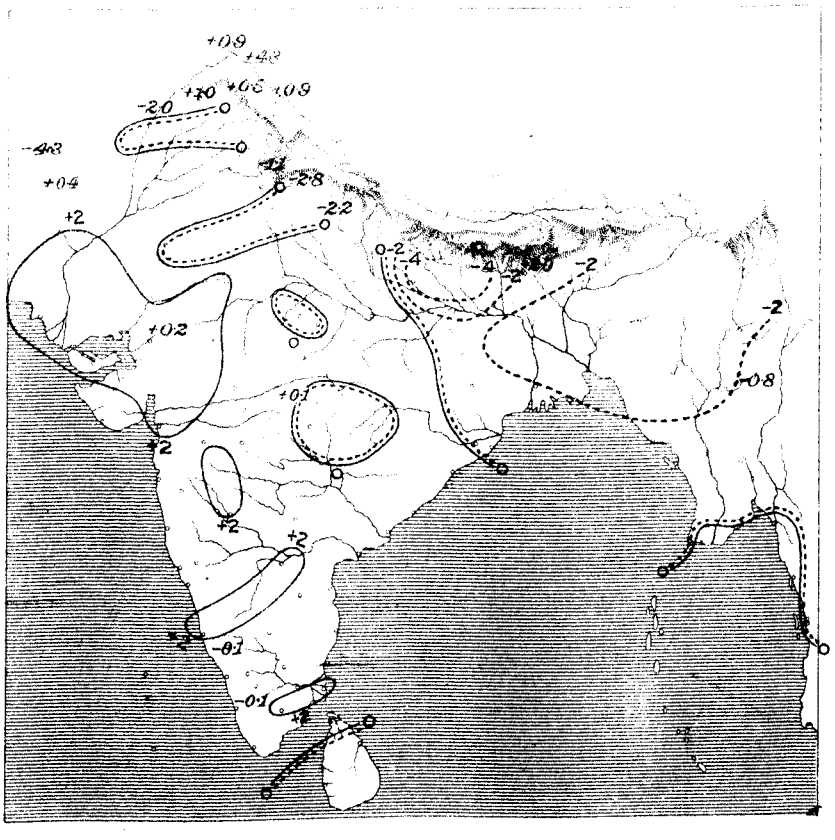


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF DAILY
MINIMUM TEMPERATURE.



LITHO. BY S. B. MUNDLE.

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

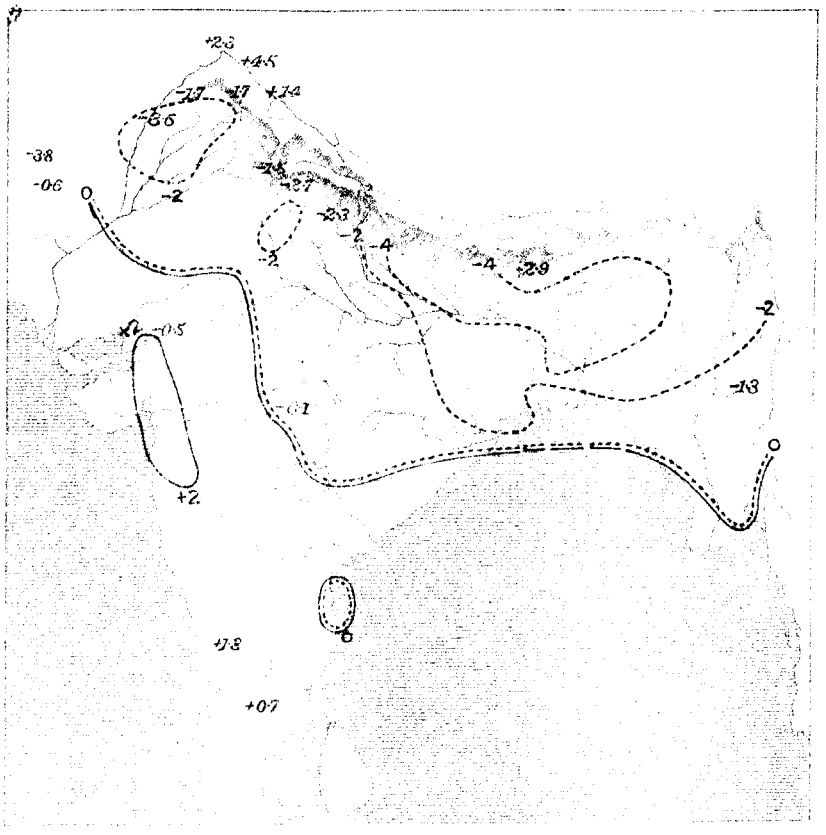


CHART SHEWING THE MONTHLY MEAN OF
PRESSURE AND RESULTANT
WIND DIRECTION.

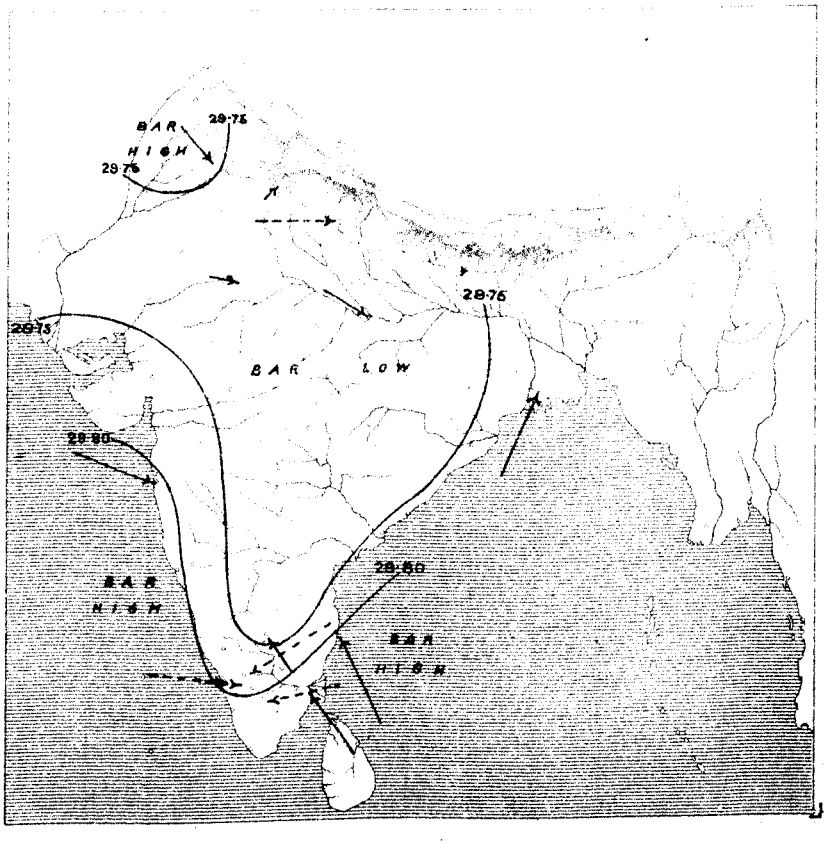


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

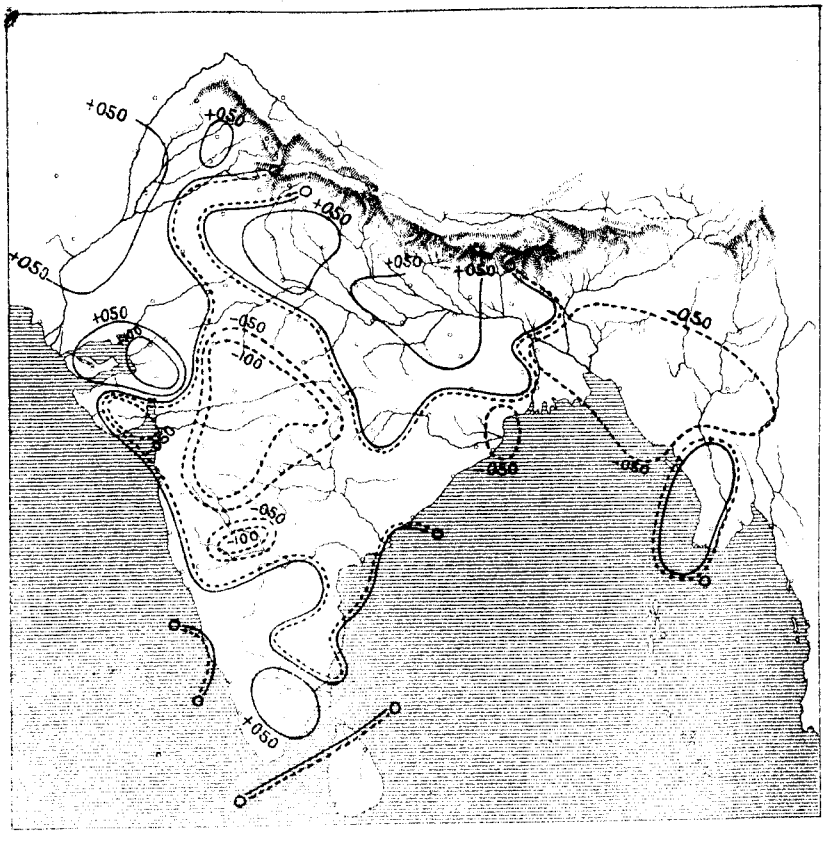
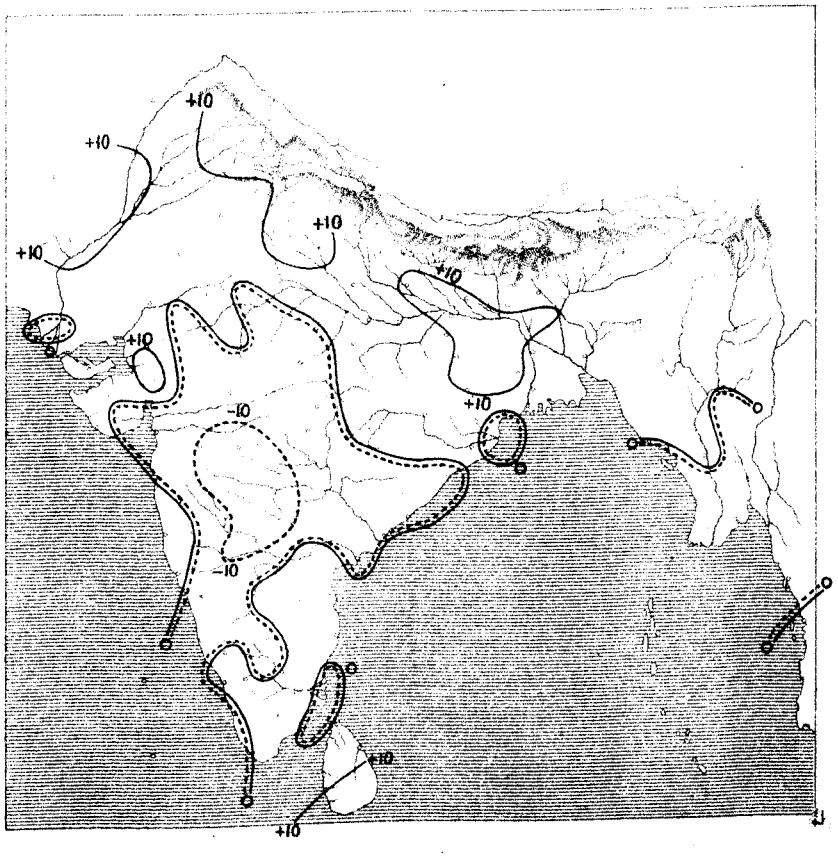


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.



LITHO. BY S.B.M.

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

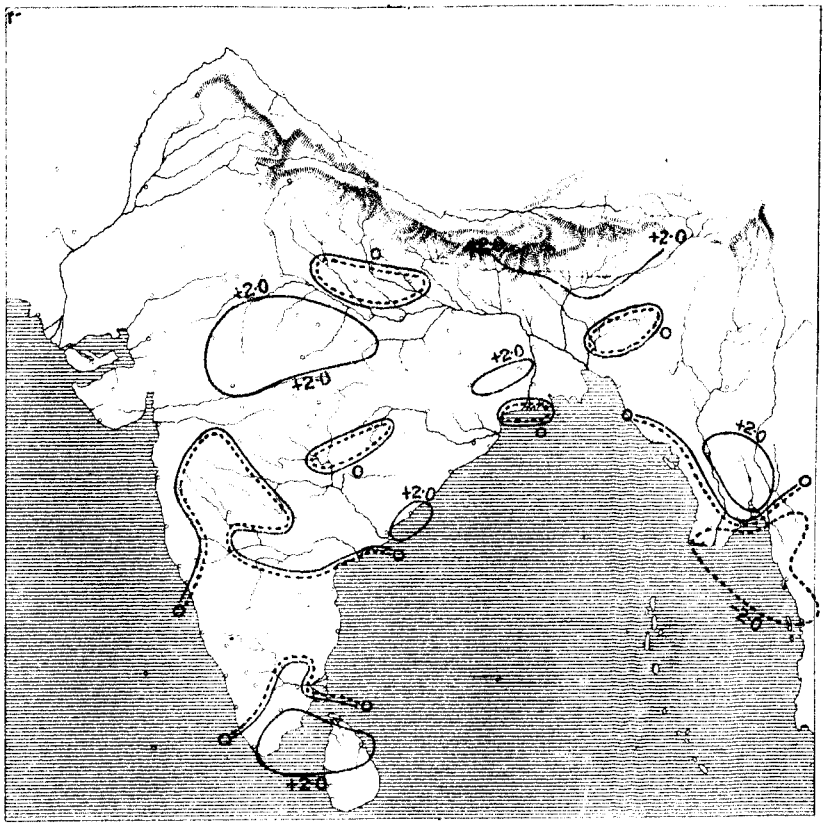
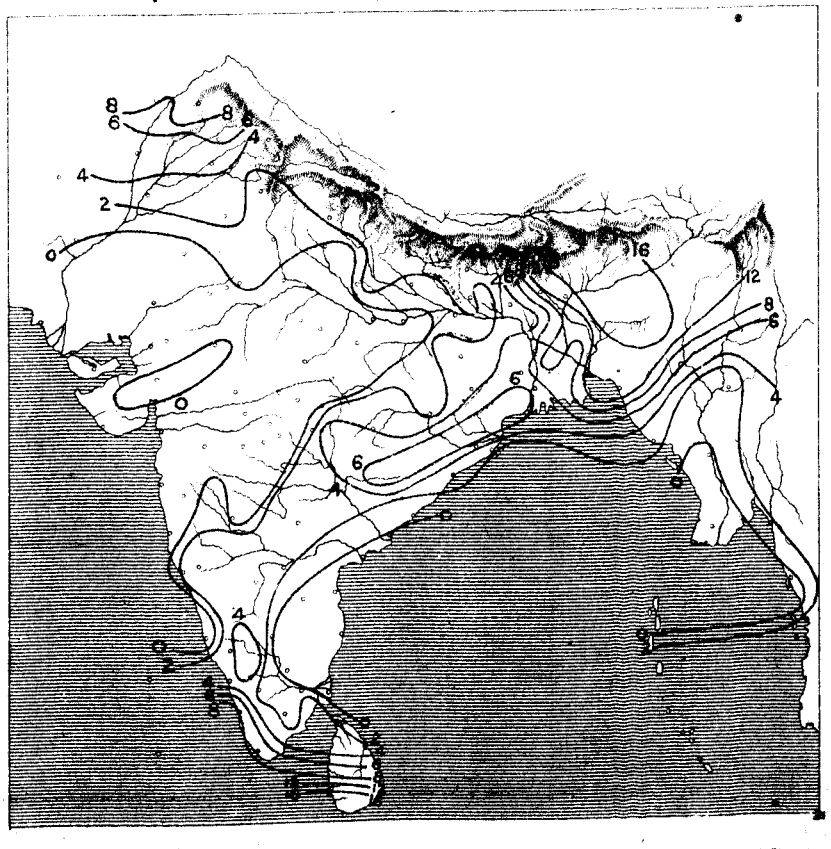
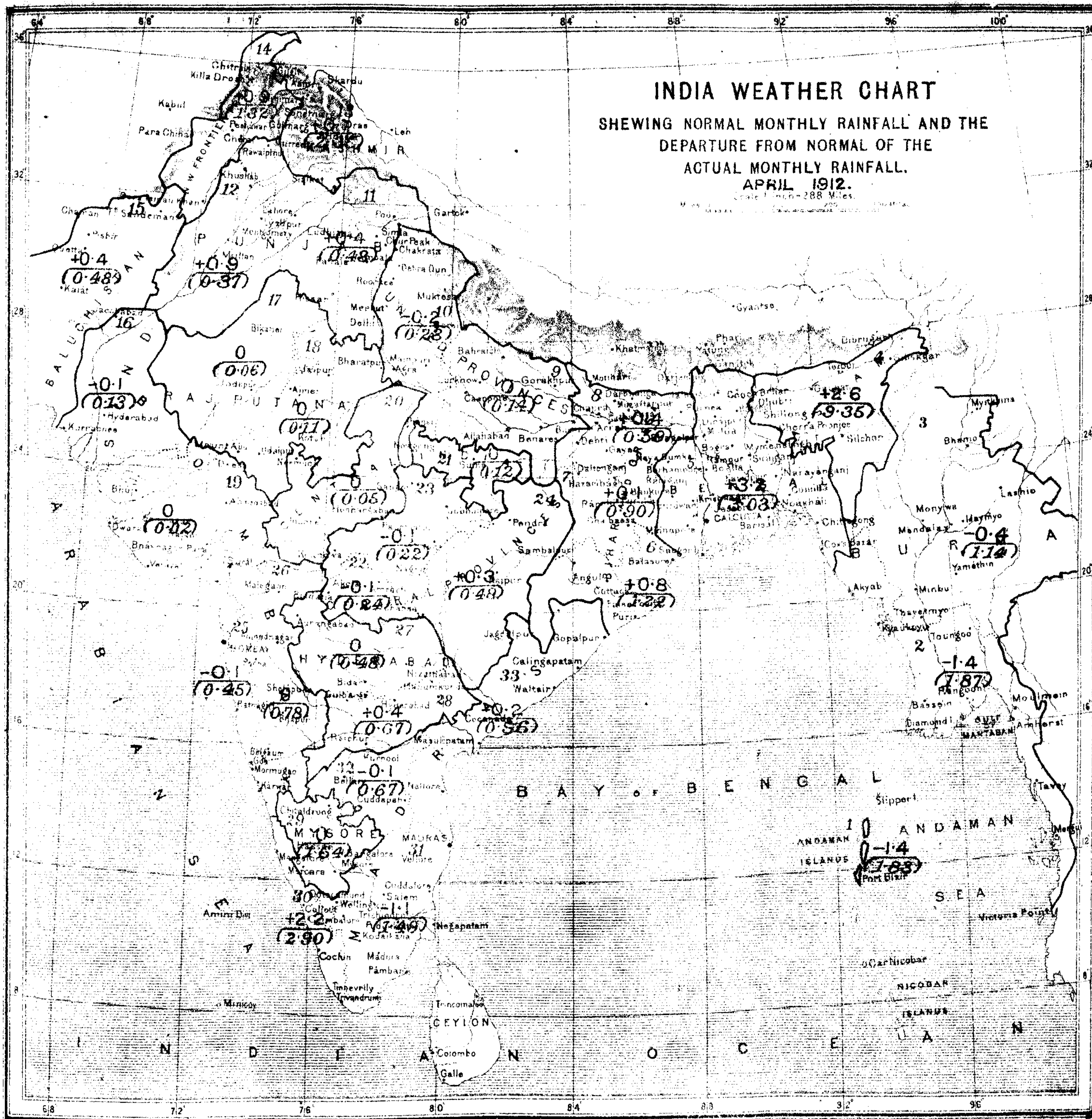


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)



LITHO. BY S. S. MUNDLE.



Reg. No. 4195 E., II.—L.—3800.

Engraved at the Survey of India Offices Calcutta, December 1904.

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 monthly 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
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

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW.

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, MAY, 1912.

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OCT 21 1912
Weather Bureau

INTRODUCTION.

THIS review of the weather in India during the month of May, 1912, is based on observations taken daily at 8 hrs. at 219 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 17 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review.

The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. The meteorology of the month was characterized by several abnormal features of which the most noteworthy were the occurrence of frequent disturbed weather in the extreme north, the comparative rareness of the usual thunder showers in most parts of the country, and the almost complete absence on the west coast of the preliminary irruptions of the monsoon winds such as usually occur during May and are the forerunners of the permanent advance of the monsoon current.

The precipitation of the month fell short of the normal in all parts of the Indian region with the exception of Bengal, Lower Burma and Kashmir. The deficiency was more than 50 per cent. in amount in Orissa, the United Provinces West, the Punjab East and North, Rajputana East, Gujarat, Central India, the Central Provinces, Hyderabad South and the Madras Deccan.

The quantity of cloud was decidedly low in Burma, Assam, Sind, Rajputana, Bombay and Hyderabad, and appreciably high in the Punjab, the North-West Frontier Province and Central India. The air was drier than usual, both relatively and absolutely, in the Punjab, Rajputana, Central India, Khandesh, the Central Provinces and parts of the United Provinces.

Temperature was very nearly normal in the plains and somewhat lower than usual in the western Himalayas.

Weather was very hot from the 14th to the 18th in the Punjab, Sind and Rajputana and remarkably high maxima were recorded at Jacobabad, Bikaner, Jodhpur and Deesa.

On the average of all the recording stations in the plains of India the barometer stood ·023″ above its normal height.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—Owing to the presence of cirrus clouds on many days the weather was not very favourable for solar observations, but prominence observations were made and photographs of the sun obtained on all the days during the month.

Sunspots.—The sunspot group No. 2009 first seen on the last day of April was visible until the 8th May. Another group of small dots appeared on the 27th close to the eastern limb and disappeared on the 29th.

Prominences.—Thirty-two large and 1 eruptive prominences were recorded. The highest was 135″ and was observed on the 24th at latitude—31° west.

Magnetic disturbances.—Moderate magnetic disturbances were recorded from the 5th to 6th and from the 12th to 14th. Sunspot No. 2009 was crossing the central meridian of the sun on the 6th.

Seismological records.

TABLE 1.

No.	Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End.	Maximum amplitude.	Duration.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	mm.	h. m.	
19	May 6	19 22·5	19 49·5	19 57·2	21 12·0	2·7=1·3	1 49·7	
20	" 11	17 ? 30·8	17 35·1	17 35·9	18 25·7	5·3=1·6	0 54·9	Hour signal at 17h. 30·0 m.
21	" 15	0 ? 33·5	0 33·3	0 34·4	...	0·4=0·2	0 54·1	Hour signal at 0 h. 30 m.
22	" 15	...	1 12·0	1 14·4	1 27·4	0·6=0·3		
23	" 17	17 13·1	...	...	17 29·0	...	0 15·9	Widening of line.
24	" 18	23 09·1	...	...	23 25·1	...	0 16·0	Do.
25	" 19	...	3 39·0	3 39·8	3 ? 49·1	0·5=0·2	0 ? 10·1	Instrument examined at 3 h. 50·8 m.
26	" 21	8 33·6	8 38·2	8 53·1	9 29·2	0·9=0·4	0 55·6	
27	" 21	10 35·1	...	...	10 58·1	...	0 23·0	Widening of line.
28	" 22	23 17·5	23 23·1	23 23·6	23 29·5	0·4=0·2	0 12·0	
29	" 23	2 29·0	2 29·5	2 39·9 42·0 47·9	6 15·2	13·5=5·4 14·5=5·8 16·0=6·0	3 46·2	
30	" 28	7 07·1	...	7 08·6	7 26·7	0·4=0·2	0 19·6	
31	" 28	13 04·7	13 26·2	13 28·2	14 13·0	0·6=0·3	1 08·3	

J. EVERSHED,

Director,

Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of May 1912, the traces showed 14 calm days, 16 days of small and one day of moderate disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 1st, 9th, 17th, 23rd and 28th.

The following table represents the magnetic character of each day during the month:—

TABLE 2.

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

C = calm; S = small; M = moderate; G = great; V. G. = very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follows:—

Easterly declination	0° 51′ 42″
Horizontal force	0·36873 C.G.S. unit.
Vertical force	0·16357 " "
Inclination	23° 55″4
Inclination (observed)	23° 54″4
Horizontal force range	0·00034
Horizontal force summed range	0·00234
Declination range	4′·1
Declination summed range	17′·7

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

Seismic disturbances.

TABLE 3.

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	h. m.	h. m.	h. m.	mm.	h. m.
May 6	19 21·1	19 44·5	20 52·5	1·9	1 31·4
" 11	17 36·7	17 40·5	18 13·9	1·1	0 37·2
" 15	mixed up in tremors.	0 34·8	mixed up in tremors.	0·3	.....
" 21	8 38·1	8 44·6	9 26·9	1·0	0 48·8
" 23	2 28·9	Traces overlap.	4 42·7	Traces overlap.	2 13·8

All times given above denote G. M. T.

Sensibility to tilt 1 mm. = 0″·40.

NOTE.—A small disturbance is noted on the 22nd at about 23 h. G. M. T., but it is marked by fine tremors.

N. A. F. MOOS,

Director,

Bombay and Alibag Observatories.

CALCUTTA OBSERVATORY.

5. *List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maximum. G. M. T.	End. G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
May 6	19 21·0	19 43·3	19 50·5	20 55·0	1 34·0	5·00*	* Measured from base line.
„ 11	...	17 39·0	17 53·2	18 47·6	1 8·6	4·00†	† Measured from base line.
„ 21	8 30·8	...	8 38·4	9 47·4	1 16·6	3·50	
„ 23	?	2 26·1	?	6 1·9	?	?	Begins with morning air tremor and as the boom moved throughout the trace the time of maximum and amplitude cannot be given.
„ 28	13 2·1‡	...	13 20·9‡	14 17·9‡	1 15·8‡	1·00	‡ As the watch stopped approximate times are given.

Sensibility 1 mm. = 0·38″ of tilt.

C. W. PEAKE,
Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. *List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 5.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Max. amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
3rd	A	6 39·2	?	6 39·7	6 39·7	6 40·7	0 1·5	Small	
	B	6 39·3	?	6 39·7	6 39·7	6 40·7	0 1·4	„	
6th	A	19 19·3	19 28·9	19 32·5	19 39·3	20 29	1 9·7	2·8	
	B	19 19·3	19 25·9	19 31·0	19 32·5	20 48	1 28·7	2·5	
11th	A	?	?	17 46·8	17 49·4	17 57	?	?	Mass resting against stops.
	B	17 34·1	17 39·9	17 47·0	17 52·0	18 48	1 8·9	?	Do.
17th	B	15 57·3	15 57·6	15 58·4	15 58·5	15 59·8	0 2·5	?	Do.
21st	A	8 33·5	8 37·2	8 42·8	8 44·3	11 51	2 57·5	0·7	
	B	8 33·5	8 37·1	8 43·4	8 46·2	8 50	0 16·5	?	
22nd	A	23 9·9	23 10·7	23 11·3	23 11·3	23 30	0 20·1	1·0	Mass resting against stops.
	B	23 10·0	23 10·9	23 11·4	23 11·4	23 24	0 14·0	2·4	
23rd	A	2 28·4	2 31·3	2 35·6	?	4 36	2 7·6	Large	Touched stops.
	B	2 28·5	2 32·3	2 35·7	?	4 37	2 8·5	„	Do.

15th B.—Slight disturbance from 6 h. 1 m. to 7 h. 11 m. Max. = 0·6 at 6 h. 11·2 m.
17th A—Clock stopped.
All times are given in G. M. T.
A = E—W component.
B = N—S component.
Magnification of each instrument was 15.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity. Rossi-Forel scale.	No. of shocks.
		H. M.	Sec.		
Chitral	1st	1 51	2	6	1
Drosh	1st	13 35	3	6	1
Chitral	1st	14 35	5	7	2
„	1st	21 20	15	6	3
Drosh	2nd	23 32	3	6	1
Gulmarg	3rd	6 45	20	5	1
Srinagar	3rd	6 51	15	5	1
Drosh	8th	23 18	4	6	2
Chitral	8th	23 50	10	6	3
Drosh	9th	17 15	2	5	1
Salonah	10th	9 34	10	5	1
Drosh	17th	4 15	2	5	1
„	17th	16 0	3	6	1
Chitral	19th	17 10	5	6	2
Drosh	19th	18 15	2	5	2
Yamethin	21st	9 30	3	7	2
Mandalay	21st	9 30 9 50 9 55	50 15 5	8	3
„	21st	10 25	30	6	1
Drosh	22nd	20 30	2	6	1
Chitral	22nd	23 13	12	6	3
Drosh	22nd	23 15	6	7	2
Gulmarg	22nd	23 16	25	6	2
Rawalpindi	22nd	23 23	7	5	4
Moulmein	23rd	3 20	?	3	1
Yamethin	23rd	3 25	90	8	Several
Akyab	23rd	3 25	20	5	2
Mandalay	23rd	3 27	180	9	7
Thayetmyo	23rd	3 35	30	5	1
Myitkyina	23rd	3 35	1	3	2
Mandalay	24th	0 5	2	3	1
„	26th	6 45	6	3	1
Drosh	29th	9 10	3	6	2
Mandalay	31st	1 15	1	3	1

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·47
Minimum	1·24
Mean	1·37
Number of days of observation	7

W. A. HARWOOD,

Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. The following information has been received for the period, July to December 1911 :—

TABLE 7.

—	July, 1911.	August 1911.	Sept. 1911.	Oct. 1911.	Nov. 1911.	Dec. 1911.
Departure from normal of mean pressure.	+·040	—·013	+·015	+·032	—·045	+·004
Actual mean wind direction.	S 59° E	S 66° E	S 74° E	S 77° E	S 68° E	S 83° E
Normal mean wind direction.	S 64° E	S 66° E	S 71° E	S 79° E	S 84° E	S 88° E
Actual mean wind velocity (miles per diem).	308	297	284	260	252	249
Normal mean wind velocity (miles per diem).	253	254	255	245	234	228
Rainfall departure from normal.	—1·75	—1·11	—0·29	—1·24	—1·51	—1·88

Weather in the Indian monsoon region.

8. Barometric pressure was in decided defect at Mauritius and Seychelles and practically normal at Zanzibar. The wind was appreciably lighter than usual in equatorial regions and at Seychelles the direction was variable during nearly the whole month.

Precipitation was 51 per cent. in excess at Seychelles and 70 per cent. in defect at Zanzibar.

TABLE 8.

—	Mauritius.*	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	—·063	—·003	—·026
Actual mean wind direction	S 67° E	S 19° W	S 1° W
Normal mean wind direction	S 65° E	S 7° W	S 43° E
Actual mean wind velocity (miles per diem).	265	106	104
Normal mean wind velocity (miles per diem).	210	142	165
Rainfall departure from normal.	+2·99	—7·97	+3·11

* Data taken from weekly telegrams.

Depressions and cyclonic storms.

9. During the month under review four disturbances, apparently of extra-Indian origin, appeared over north-west India, but the precipitation associated with them was confined almost entirely to the extreme north. In the hill districts of Kashmir and parts of the Punjab Himalayas rainfall was of almost daily occurrence. In this connection it may be noted that the distribution of pressure was very abnormal in Central Asia where an area of low pressure was shown on most days instead of the high pressure conditions characteristic of the month of May.

Both the Arabian Sea and the Bay of Bengal were free from storms. In the latter area the first temporary advance of the monsoon gave rise on the 10th to an area of low pressure off the south Coromandel coast. This, according to the available information, travelled up the Bay parallel to the east coast of the Peninsula and became dissipated over the north of the Bay on the 13th. The strongest winds, due to the disturbance recorded over the Bay, were of force 6 to 7.

On the 16th there was again a tendency to the formation of a depression over the head of the Bay, but it failed to develop.

Pressure.

10. Atmospheric pressure was almost everywhere above the average, although to a less extent than in April. Over the greater part of the country the excess of pressure was associated with somewhat higher temperature than usual.

The vertical gradient was very nearly normal in value in north-west and central India and steeper than usual in southern India and north-east India.

TABLE 9.

DIVISION.	Departure from normal of mean 8 hrs. pressure.	Departure of mean temperature.
	"	
Burma	+·019	+0·8
Assam	+·025	−0·1
Bengal	+·034	−0·4
Bihar and Orissa	+·032	0
United Provinces	+·034	−0·2
Punjab	+·033	−0·2
North-West Frontier Province	+·018	+0·5
Sind	+·026	+0·9
Rajputana	+·016	+1·2
Bombay	+·015	+1·1
Central India	+·026	+1·1
Central Provinces	+·020	+0·9
Hyderabad	+·017	+1·2
Mysore	+·020	+1·9
Madras	+·017	+0·9

TABLE 10.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B−A.
	"		"	"
Quetta	+·039	Jacobabad	+·031	−·008
Leh	+·023	Lahore	+·027	+·004
Murree	+·029	Peshawar	+·021	−·008
Simla	+·048	Ludhiana	+·036	−·012
Chakrata	+·048	Roorkee	+·044	−·004
Darjiling	+·004	Dhubri	+·030	+·026
Mount Abu	+·040	Deesa	+·018	−·022
Pachmarhi	+·021	Khandwa	+·022	+·001
Kodaikanal	+·010	Madura	+·033	+·023

Temperature.

11. Mean temperature exceeded the normal except in Bengal, Bihar, Chota Nagpur, the northern and central districts of the United Provinces, the western Himalayas, the western parts of Kashmir and a few places elsewhere. The magnitude of the departures was however small in almost all cases. Charts of maximum and minimum exhibit very similar features.

Temperature was considerably lower than usual in north-west India during the first eight days and in north-east India and Burma between the 14th and the 17th, while very hot weather was experienced in the Punjab, Rajputana and Sind from the 14th to the 18th, unprecedentedly high maxima being recorded at Jacobabad, Bikaner, Jodhpur and Deesa.

In the Peninsula no large persistent departures from the normal conditions occurred.

TABLE 11.

SUB-DIVISION.	ACTUAL TEMPERATURE.					DEPARTURE FROM NORMAL OF		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	89·3	79·6	84·4	9·7	22·3	+0·1	+0·2	−0·1
2. Lower Burma	91·2	77·4	84·3	13·8	24·8	+1·2	+0·8	+0·4
3. Upper Burma	97·2	76·8	87·0	20·4	36·3	+0·6	+0·6	0
4. Assam	86·7	72·4	79·6	14·3	25·7	−0·3	+0·1	−0·4
5. Bengal	91·7	76·1	83·9	15·6	28·3	−0·7	−0·2	−0·5
6. Orissa	99·0	81·1	90·0	17·9	31·1	+0·4	+1·2	−0·8
7. Chota Nagpur	102·9	78·0	90·4	24·9	36·8	−0·7	−0·2	−0·5

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
8. Bihar	99·5	76·9	88·2	22·6	36·7	—0·6	—0·5	—0·1
9. United Provinces, East	104·1	77·9	90·9	26·2	40·5	—0·5	—0·8	+0·3
10. Do. do., West	106·4	79·2	92·8	27·1	43·5	+0·6	+0·1	+0·5
11. Punjab, East and North	104·0	75·5	89·8	28·6	49·9	—0·1	—0·2	+0·1
12. Do., South-west	105·9	78·0	92·0	27·9	52·9	—0·7	+0·2	—0·9
13. Kashmir	67·5	44·5	56·0	23·0	44·5	—2·9	—0·9	—2·0
14. North-West Frontier Province	101·6	73·1	87·3	28·5	52·5	+0·2	+0·7	—0·5
15. Baluchistan	93·0	63·4	78·3	29·6	50·7	—0·9	—2·3	+1·4
16. Sind	104·1	78·6	91·4	25·5	44·8	+1·5	+0·2	+1·3
17. Rajputana, West	108·7	82·3	95·5	26·4	47·6	+1·6	+0·5	+1·1
18. Do., East	107·7	82·5	95·1	25·2	42·1	+1·2	+1·2	0
19. Gujarat	100·2	78·5	89·3	21·7	35·7	+1·4	+0·9	+0·5
20. Central India, West	104·9	78·1	91·5	26·7	43·5	+1·5	+1·7	—0·2
21. Do., East	107·2	79·9	93·5	27·3	44·8	+0·7	+0·3	+0·4
22. Berar	107·1	81·3	94·2	25·8	39·3	+1·5	+1·8	—0·3
23. Central Provinces, West	106·8	80·3	93·5	26·5	42·1	+0·7	+1·3	—0·6
24. Do., East	105·1	79·9	92·5	25·2	42·9	—0·3	+0·5	—0·8
25. Konkan	91·1	81·2	86·2	9·9	19·3	+0·8	+0·9	—0·1
26. Bombay Deccan	102·3	73·5	87·9	28·8	42·0	+2·2	+0·5	+1·7
27. Hyderabad, North	105·3	79·9	92·7	25·5	38·9	+1·9	+0·8	+1·1
28. Do., South	105·7	80·5	93·1	25·1	38·5	+1·5	+0·9	+0·6
29. Mysore	93·2	70·7	81·9	22·4	30·8	+2·0	+1·7	+0·3
30. Malabar	90·1	78·7	84·4	11·4	18·4	+0·8	+1·4	—0·6
31. Madras, South-east	99·2	79·8	89·5	19·4	31·3	+0·5	+1·1	—0·6
32. Do., Deccan	106·4	82·1	94·2	24·3	34·0	+1·9	+1·4	+0·5
33. Do. Coast, North	97·8	82·0	89·9	15·7	30·8	+0·5	+0·5	0

TABLE 12.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·0	+0·7	+0·8
Assam	—0·3	+0·1	—0·1
Bengal	—0·7	—0·2	—0·4
Bihar and Orissa	—0·3	+0·2	0
United Provinces	0	—0·4	—0·2
Punjab	—0·3	—0·1	—0·2
North-West Frontier Province	+0·2	+0·7	+0·5

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Sind	+1·5	+0·2	+0·9
Rajputana	+1·3	+0·9	+1·2
Bombay	+1·5	+0·8	+1·1
Central India	+1·1	+1·0	+1·1
Central Provinces	+0·7	+1·2	+0·9
Hyderabad	+1·6	+0·9	+1·2
Mysore	+2·0	+1·7	+1·9
Madras	+0·8	+1·1	+0·9

Winds.

12. (*a*) The air movement was of about the average strength in Madras, Mysore, the Central Provinces, Bihar and Orissa, Rajputana and the Punjab and appreciably weaker than usual elsewhere, but particularly so in Bengal.

(*b*) The steadiness was low in Bengal, Rajputana, Central India and the whole of the Peninsula including the Central Provinces, while in the United Provinces, the Punjab and the North-West Frontier Province the direction of movement was remarkably steady.

(*c*) The direction of air motion was less southerly or more westerly than usual at Port Blair, Diamond Island and Bassein, but elsewhere the deviations from the normal were of no great significance.

TABLE 13.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	—0·6	— 1
Assam	—0·6	+ 3
Bengal	—1·4	—13
Bihar and Orissa	—0·2	+ 6
United Provinces	—0·8	+12
Punjab	+0·3	+10
North-West Frontier Province	—0·8	+11
Sind	—1·4	+ 4
Rajputana	+0·3	—22
Bombay	—1·0	— 5
Central India	—0·5	—13
Central Provinces	+0·1	— 9
Hyderabad	—1·2	—10
Mysore	+0·3	— 8
Madras	0	— 8

Humidity and cloud.

13. The air was, both absolutely and relatively, drier than usual in Khandesh, the Central Provinces, Central India, Rajputana, the Punjab and parts of the United Provinces, but elsewhere the humidity differed to no great extent from the normal according to either estimation.

The proportion of cloud was much below the average on the Burma coast, in Assam, Bihar, lower Sind, Gujarat, Hyderabad and the Madras Deccan, greater than usual in the North-West Frontier Province, Central India and the south of the Peninsula and about the average over the rest of the country.

TABLE 14.

Division.	Hygrometry; 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	78	— 3	·849	—·012	5·2	—0·9
Assam	86	— 2	·802	—·004	5·5	—2·0
Bengal	83	+ 1	·902	—·008	5·5	+0·1
Bihar and Orissa	68	+ 1	·817	+·021	2·9	—0·4
United Provinces	43	— 3	·569	—·040	1·4	0
Punjab	37	—4	·454	—·066	1·9	+0·4
North-West Frontier Province.	49	+ 4	·574	+·029	2·3	+0·9
Sind	60	0	·787	+·058	0·9	—0·9
Rajputana	30	—10	·427	—·119	0·7	—0·5
Bombay	63	— 1	·751	+·002	2·3	—0·7
Central India	35	— 6	·472	—·072	2·3	+1·2
Central Provinces	33	— 7	·455	—·080	1·7	—0·2
Hyderabad	44	— 5	·565	—·023	2·4	—1·1
Mysore	71	— 2	·662	+·003	5·2	0
Madras	70	0	·875	+·021	4·5	—0·2

Rainfall.

14. In the north unsettled weather was experienced oftener than usual, and snowfall was of almost daily occurrence in some places. In north-east India the usual influx of moist air from the Bay was weak and was directed chiefly to Assam, with the result that over practically the whole of the region extending westwards from Bengal to the Indus valley, the weather was remarkably dry. In the Peninsula generally, but particularly in the interior districts, thunderstorms were not so frequent as is ordinarily the case in May; while in Lower Burma the month was rainier than usual.

In the sea area also conditions were much less disturbed than usual, and although there were two advances of the monsoon over the Bay and one over the Arabian Sea no cyclonic storm of any severity occurred.

The aggregate precipitation of the month was normal or within 10 per cent. of normal in Upper Burma, Bengal, Bihar and Malabar; in excess by 13 per cent. in Lower Burma and by 38 per cent. in Kashmir and deficient in all other parts of the country. The defect in the region of scanty precipitation was less than half an inch in amount except in Madras, Mysore, Hyderabad South (each about 0·64″), the Bay Islands (nearly 3½″), Assam (2½″), Orissa (2″) and Chota Nagpur (1″).

TABLE 15.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			″	″	″	
1. Bay Islands	9·0	16·1	6·29	13·07	—6·78	— 52
2. Lower Burma	11·2	13·6	14·39	12·68	+1·71	+ 13
3. Upper Burma	7·3	8·3	5·53	5·89	—0·36	— 6
4. Assam	13·6	14·3	9·43	11·88	—2·45	— 21
5 Bengal	9·3	8·0	7·84	7·84	0	0
6. Orissa	2·9	4·9	1·50	3·46	—1·96	—57
7. Chota Nagpur	2·9	3·8	1·35	2·30	—0·95	—41
8. Bihar	3·8	3·3	2·50	2·32	+0·18	+ 8
9. United Provinces, East	1·0	1·3	0·57	0·67	—0·10	— 15
10. Do., West	0·8	1·4	0·28	0·60	— 0·32	— 53
11. Punjab, East and North	0·9	1·5	0·30	0·65	—0·35	— 54
12. Do., South-west	0·7	0·9	0·26	0·41	—0·15	— 37
13. Kashmir	3·8	3·7	2·30	1·67	+0·63	+ 38
14. North-West Frontier Province	1·6	1·6	0·44	0·72	—0·28	— 39
15. Baluchistan	0·5	0·5	0·13	0·18	—0·05	— 28
16. Sind	0·1	0·3	0·05	0·10	—0·05	— 50
17. Rajputana, West	0·4	0·7	0·21	0·31	—0·10	— 32
18. Do., East	0·4	1·1	0·13	0·43	—0·30	— 69
19. Gujarat	0·1	0·4	0·03	0·23	—0·20	— 87
20. Central India, West	0·3	0·6	0·10	0·26	—0·16	— 62
21. Do., East	0·6	0·9	0·17	0·37	—0·20	— 54
22. Berar	0·4	0·8	0·09	0·42	—0·33	— 79
23. Central Provinces, West	0·2	0·9	0·07	0·39	—0·32	— 82
24. Do., East	0·7	1·4	0·29	0·72	—0·43	— 60

Subdivision.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
25. Konkan	1·7	1·8	1·16	1·47	—0·31	— 21
26. Bombay Deccan	2·1	2·4	1·09	1·34	—0·25	— 19
27. Hyderabad, North	1·2	1·5	0·36	0·68	—0·32	— 47
28. Do., South	1·0	1·9	0·35	0·99	—0·64	— 65
29. Mysore	4·9	5·4	2·76	3·39	—0·63	— 19
30. Malabar	8·4	7·7	6·54	7·18	—0·64	— 9
31. Madras, South-east	3·8	3·8	2·15	2·67	—0·52	— 19
32. Do. Deccan	1·9	2·9	0·72	1·63	—0·91	— 56
33. Do. Coast, North	2·3	3·0	1·27	2·03	—0·76	— 37

TABLE 16.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	9·65	9·05	+0·60	+ 7
Assam	9·43	11·88	—2·45	— 21
Bengal	7·84	7·84	0	0
Bihar and Orissa	2·06	2·57	—0·51	— 20
United Provinces	0·43	0·64	—0·21	— 33
Punjab	0·29	0·60	—0·31	— 52
North-West Frontier Province	0·44	0·72	—0·28	— 39
Sind	0·05	0·10	—0·05	— 50

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Rajputana	0·16	0·40	—0·24	— 60
Bombay	0·76	1·01	—0·25	— 25
Central India	0·12	0·30	—0·18	— 60
Central Provinces	0·13	0·47	—0·34	— 72
Hyderabad	0·35	0·85	—0·50	— 59
Mysore	2·76	3·39	—0·63	— 19
Madras	2·11	2·76	—0·65	— 24
Mean of India	2·44	2·75	—0·31	— 11

Snowfall.

I.—AFGHANISTAN.

15. No snow fell during the month in or around Kabul. At the close of the month some snow remained unmelted on the summits of the hills.

II.—NORTH-WEST FRONTIER PROVINCE.

(a) *Wano.*—
(b) *Dera Ismail Khan.*—
(c) *Kohat.*—
(d) *Hazara.*—
(e) *Khyber.*—
} No snow fell.

(f) *Tochi* (North Waziristan).—Weather was showery and cool but no snowfall occurred.

(g) *Kurram.*—Snow is reported to have fallen on the Sufed Koh on no less than fourteen occasions.

(h) *Malakand.*—Snow fell on the Lowarai pass on the 1st and 3rd to a total depth of about 15 inches.

III.—KASHMIR.

Occasional falls occurred on the mountains around Srinagar, Sonamarg, Kargil and Skardu and three falls at Gulmarg.

There was a good deal of rainfall on the lower elevations. On the higher hills near Kargil snow lay five feet deep in the beginning of June.

On the hills near Leh snow storms are said to have been of almost daily occurrence.

IV.—PUNJAB.

(a) Chamba.—Rain fell daily during the first twenty-six days, and a snow storm on the 25th gave snow as low down as 10,000 feet. Owing to the abnormally unsettled weather the melting of the accumulations was considerably retarded with the result that at the end of the month the snow-covering was thicker than usual.

(b) Kangra.—Hail and sleet were of frequent occurrence during the month and on the 25th snow fell in places down to about 10,000.

(c) Kilba (Simla Hills).—On the ranges near Kilba there were altogether six falls of snow and one of these descended as low as 9,000 feet.

At the end of the month all the passes were open to traffic.

V.—UNITED PROVINCES.

(a) Garhwal.—Snow storms occurred on the highest peaks on the 2nd, 3rd, 8th, 12th, 18th, 26th and 29th.

(*a*) *Almora.*—The total snowfall of the month was estimated at about 8 feet in Malla Darma, 7 feet in Byans, 5½ feet in Chaudas, 3½ feet in Malla Danpur and 3 feet in Malla Johar.

The snowline came down to a distance of about half a mile from the region of perpetual snows.

SUMMARY.

16. Weather was more disturbed than usual in the Punjab and Kashmir hills as well as in parts of the North-West Frontier Province, but there is no evidence of any heavy or extensive snowfall. In the Chamba and Kulu hills snow fell however as low as 10,000 feet on the 25th.

The depth of the accumulations existing at the end of the month was on the whole greater than usual.

HEM RAJ.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 17 stations in India, etc., in May, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs.

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
6	Calcutta	21	29·742	29·622	·120	29·634	+·023	29·651	95·1	78·1	17·0	102·2	70·8	31·4	88·5	92·5	86·3	+0·6	75·0	80·6	80·6	78·7
	IV.—United Provinces of Agra and Oudh.																					
10	Allahabad	309	·403	·276	·127	·337	+·023	·586	107·9	79·5	28·4	113·9	72·9	41·0	99·1	105·4	92·9	+0·4	68·0	73·7	73·5	71·7
	V.—Punjab.																					
12	Lahore	702	28·979	28·894	·085	28·931	+·026	·571	105·7	76·3	29·4	117·1	67·2	49·9	96·6	103·3	90·7	+1·8	64·8	71·8	72·3	69·6
	VIII.—Rajputana.																					
19	Jaipur	1,431	·319	·217	·102	·263	+·019	·572	107·6	78·7	28·9	116·3	70·9	45·4	98·2	103·5	92·3	+0·7	63·0	71·0	70·3	68·1
	IX.—Bombay.																					
26	Bombay	37	29·844	29·735	·109	29·788	+·014	·765	92·2	81·1	11·1	95·0	78·1	16·9	87·4	89·2	85·5	+0·9	76·4	79·2	79·8	78·8
	XIII.—Mysore.																					
30	Bangalore	3,021	26·927	26·802	·125	26·872	+·029	·634	95·0	71·0	24·0	98·1	64·8	33·3	84·3	91·9	81·3	+2·8	66·8	71·5	71·0	69·8
	XIV.—Madras.																					
32	Pudukkottai	318	29·534	29·403	·131	29·469		·710	101·8	79·9	21·9	106·0	70·8	35·2	91·1	97·7	90·9		76·5	79·5	81·2	79·1
	Madras	22	·793	·678	·115	·744	+·011	·697	100·2	82·5	17·7	111·6	76·4	35·2	95·4	91·7	90·2	+1·5	78·6	82·4	83·0	81·3
	Hill Stations, excluding Kashmir and Baluchistan.																					
	Simla	7,232	23·130	23·088‡	·042	23·109	+·045	23·062	71·9	58·1	13·8	82·1	48·6	33·5	66·6	67·9‡	65·1	−0·9	47·5	52·8	53·4‡	51·2
	Sarain		·158	·116	·042	·128		·090	70·6	48·8	21·8	83·8	37·2	46·6	65·5	66·4	59·8			52·7	53·9	
	Kalabagh		20·160§	20·127‖	·033	20·134		20·095§	55·2‖	44·2§	11·0	63·6	36·1	27·5	52·2§	51·8‖	49·8§			42·6§	43·5‖	
	Mukteswar	7,592	22·863	22·803	·060	22·824		22·782	72·7	52·7	20·0	78·7	42·4	36·3	65·8	67·2	62·8		44·9	53·2	54·5	50·9
	Katmandu	4,388	25·632	25·545	·087	25·585	+·092†	25·538	84·2	59·6	24·6	89·4	52·2	37·2	76·0	78·3	72·0	+1·2†	57·2	67·1¶	66·4¶	63·6
	Ootacamund	7,397	23·082	23·012	·070	23·047		22·983	71·7	53·9	17·8	77·0	51·2	25·8	68·4‡	65·3‡	62·9		52·2	58·3‡	58·6‡	56·4
	Kodaikanal	7,688	22·861	22·795	·066	22·828		22·763	70·8	55·3	15·5	77·3	52·8	24·5	67·2	63·0	63·0		51·1	59·0	59·0	56·4
	Dodabetta	8,539	22·113	22·044	·069	22·079		22·016	65·5	52·5	13·0	70·9	49·0	21·9	63·0	60·2	59·1		47·9	55·4	55·2	52·8
	Extra India.																					
	Minicoy	7																				
	Diego Garcia																					
	Seychelles	15	29·960	29·868	·092	29·915	−·026†	29·853	86·1	79·2	6·9	88·2	73·7	14·5	83·8	84·8	81·2	+1·7†	72·9	77·7	77·9	76·2
	Mauritius	181																				

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

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

‡ Mean of 30 days. § Mean of 19 days. ‖ Mean of 20 days. ¶ Mean of 15 days.

A.

at 17 stations in India, etc., in May, 1912.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind direction.											Wind steadiness.		Wind velocity.		Rainfall.		Station.	Number of subdivision.
														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.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·830	·937	·884	·893	+·010	86	70	59	75	0	5·2	4·5	4·9	+0·6	2	1	4	9	10	15	20	1		S 6° E	S 9° W	53	67	101*	168	4·84	1·41	Calcutta . .	6
																															IV.—United Provinces of Agra and Oudh.	
·537	·496	·400	·491	−·030	53	27	19	35	−4	0·8	3·1	1·9	+0·3	11	9	8	8	2	1	3	7	13	N 10° W	N 6° W	32	24	68	163	0·11	0·08	Allahabad .	10
																															V.—Punjab.	
·462	·449	·379	·441	−·013	52	27	19	33	−3	1·4	2·6	2·0	−0·2	6	6	8	7	10	2	2	5	16	N 9° E	N 12° E	21	18	64	77	0·10	0·10	Lahore . .	12
																															VIII.—Rajputana.	
·386	·420	·328	·335	−·063	39	23	17	28	−7	0·7	3·1	1·9	−0·4	1	4		1	4	6	11	19	16	S 83° W	N 72° W	55	48	110*	151	0·94	0·60	Jaipur . .	19
																															IX.—Bombay.	
·839	·886	·890	·885	−·004	79	69	65	74	−2	3·3	3·3	3·3	+0·7						2	17	30	13	S 85° W	N 83° W	82	71	138*	242	0·43	0·43	Bombay . .	26
																															XIII.—Mysore.	
·607	·620	·545	·605	0	80	53	35	58	−5	3·5	5·9	4·7			2	1	5	3	1	9	23	18	N 80° W	S 81° W	56	66	136	151	1·44	0·64	Bangalore . .	30
																															XIV.—Madras.	
·870	·854	·844	·856		85	59	48	64		5·4	6·3	5·9		35				5	2	11	4	5	S 51° W		24		82		1·53	0·73	Pudukkottai .	32
·924	·929	1·006	·967	+·071	84	56	68	71	+1	3·1	2·0	2·5	−1·2		1	2	4	28	7	12	8		S 15° E	S 9° E	55	66	152*	218	0	0	Madras.	
																															Hill Stations, excluding Kashmir and Baluchistan.	
·219	·259	·261‡	·240	−·029	47	40	39‡	42	−4	2·6	5·1	3·9	0																2·62	0·61	Simla.	
	·268	·287				45	47			4·2	7·1	5·7		18	5	12			11	12	3	1	S 32° W		11		28		2·36	1·02	Sarain.	
	·191§	·213‖				49§	55‖			4·5‖	7·5‖	6·0		5	10	1		4	5	1	1	11	N 30° W		29		171§		1·22	0·77	Kalabagh. ††	
·219	·281	·300	·261		56	45	45	49		3·5	5·9	4·7		7	2	2	5		1		43	2	N 84° W		61		170		2·90	0·90	Mukteswar.	
·440	·545¶	·511¶	·493	+·003	86	¶ 59	¶ 53	66	−2	3·3	6·7	5·0	−0·2	60			1				1		••	S 89° W		39	26*	43	4·13	0·76	Katmandu.	
·372	·382‡	·422‡	·389		90	55‡	69‡	71		5·4	8·2	6·8		10	4	10	19	4	5		4	6	N 70° E		35		37		4·63	0·97	Ootacamund.	
·337	·420	·461	·406		77	63	80	73		4·6	8·1	6·3		1	14	7	15	9	3			13	N 43° E		42		170*		5·95	1·27	Kodaikanal.	
·286	·366	·381	·344		72	64	74	70		6·3	8·0	7·1		4	19	16	11	7	1			4	N 42° E		63		255		3·64	0·55	Dodabetta.	
																															Extra India.	
																															Minicoy.	
													Observations not received.																		Diego Garcia.	
·729	·872	·864	·835	−·011	74	75	72	76	−4	5·6	5·5	5·5	†+0·4	8	3		6	10	18	4	5	8	S 1° W	S 43° E	31	59	104*	165	9·18	1·53	Seychelles.	
													Observations not received.																		Mauritius.	

* Uncorrected for scale error. † Departure from old normal. •• Indeterminate. †† Wind observations less 24.

Table B.—Abstract of observations taken at 8 hrs. at 219 stations in India, etc., in May, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

	Pressure departure from normal.	Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
		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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·019	93·7	+1·0	77·2	+0·7	85·4	+0·8	16·5	29·6	−0·6	−1	78	−3	·849	−·012	5·2	−0·9	9·65	9·05	+0·60
Assam	+·025	86·7	−0·3	72·4	+0·1	79·6	−0·1	14·3	25·7	−0·6	+3	86	−2	·802	−·004	5·5	−2·0	9·43	11·88	−2·45
Bengal	+·034	91·7	−0·7	76·1	−0·2	83·9	−0·4	15·6	28·3	−1·4	−13	83	+1	·902	−·008	5·5	+0·1	7·84	7·84	0
Bihar and Orissa	+·032	100·1	−0·3	78·6	+0·2	89·4	0	21·5	34·8	−0·2	+6	68	+1	·817	+·021	2·9	−0·4	2·06	2·57	−0·51
United Provinces of Agra and Oudh	+·034	105·1	0	78·5	−0·4	91·8	−0·2	26·6	41·9	−0·8	+12	43	−3	·569	−·040	1·4	0	0·43	0·64	−0·21
Punjab	+·033	104·6	−0·3	76·2	−0·1	90·4	−0·2	28·4	50·8	+0·3	+10	37	−4	·454	−·066	1·9	+0·4	0·29	0·60	−0·31
North-West Frontier Province	+·018	101·6	+0·2	72·1	+0·7	87·3	+0·5	28·5	52·5	−0·8	+11	49	+4	·574	+·029	2·3	+0·9	0·44	0·72	−0·28
Sind	+·026	104·1	+1·5	78·6	+0·2	91·4	+0·9	25·5	44·8	−1·4	+4	60	0	·787	+·058	0·9	−0·9	0·05	0·10	−0·05
Rajputana	+·016	108·1	+1·3	82·4	+0·9	95·2	+1·2	25·7	44·3	+0·3	−22	30	−10	·427	−·119	0·7	−0·5	0·16	0·40	−0·24
Bombay	+·015	98·5	+1·5	77·6	+0·8	88·0	+1·1	20·8	33·4	−1·0	−5	63	−1	·751	+·002	2·3	−0·7	0·76	1·01	−0·25
Central India	+·026	106·1	+1·1	79·0	+1·0	92·5	+1·1	27·1	44·1	−0·5	−13	35	−6	·472	−·072	2·3	+1·2	0·12	0·30	−0·18
Central Provinces	+·020	106·3	+0·7	80·4	+1·2	93·4	+0·9	26·0	41·7	+0·1	−9	33	−7	·455	−·080	1·7	−0·2	0·13	0·47	−0·34
Hyderabad	+·017	105·6	+1·6	80·3	+0·9	92·9	+1·2	25·3	38·6	−1·2	−10	44	−5	·565	−·023	2·4	−1·1	0·35	0·85	−0·50
Mysore	+·020	93·2	+2·0	70·7	+1·7	81·9	+1·9	22·4	30·8	+0·3	−8	71	−2	·662	+·003	5·2	0	2·76	3·39	−0·63
Madras	+·017	98·2	+0·8	80·5	+1·1	89·3	+0·9	17·7	29·3	0	−8	70	0	·875	+·021	4·5	−0·2	2·11	2·76	−0·65

Table

(2) *Abstract of observations taken at 8 hrs. at 219 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·769		29·845	29·839	4th	29·713	31st	·126	81·5	88·1		76·9		82·5		11·2	92·1	12th	74·7	4 days	17·4
	Mergui	65	29·836	+·022	29·831	29·915	4th	29·757	31st	·158	81·7	90·5	+1·4	75·1	+1·3	82·8	+1·3	15·4	95·0	12th	70·8	15th	24·2
	Tavoy	19	29·881	+·008?	29·833	29·963	4th	29·804	31st	·159	81·2	91·5	+3·1	77·2	+2·0	84·3	+2·5	14·3	99·5	6th	74·8	17th & 23rd.	24·7
	Moulmein	94	29·791	+·028	29·822	29·867	4th	29·710	31st	·157	80·4	90·7	+1·4	77·3	+1·5	84·0	+1·5	13·4	97·0	4 days	72·3	3rd & 17th.	24·7
	Rangoon	18	29·851	+·013	29·807	29·937	4th	29·774	31st	·163	82·5	93·7	+1·8	77·3	0	86·5	+0·9	16·4	102·0	1st & 2nd	72·5	17th	29·5
	Bassein	27?	29·822	+·021	29·786	29·912	4th	29·732	16th	·180	83·9	94·3	+2·8	78·5	+1·5	86·4	+2·1	15·8	100·7	1st	74·9	18th	25·8
	Diamond Island	41	29·821	+·023	29·797	29·916	4th	29·740	18th	·176	84·9	88·1	−0·5	78·1	−0·7	83·1	−0·6	10·0	90·4	7 days	72·2	22nd	18·2
	Toungoo	164	29·686	+·024	29·792	29·773	4th	29·579	16th	·194	83·3	95·9	+0·2	77·4	+0·7	86·6	+0·5	18·5	105·0	4 days	72·1	16th	32·9
	Kyaukpyu	18	29·804		29·762	29·931	4th	29·673	16th	·258	82·9	89·6		78 3		83·9		11·3	94·0	12th	69·4	15th	24·6
	Akyab	20	29·813	+·020	29·773	29·967	4th	29·622	21st	·345	82·6	89·8	−0·8	78·1	−0·1	83·9	−0·5	11·7	95·9	12th	69·5	16th	26·4
3	Thayetmyo	121	29·694	+·009	29·756	29·782	4th	29·581	16th	·201	84·5	96·4	−2·0	78·6	+0·9	87·5	−0·5	17·8	106·9	8th	69·9	17th	37·0
	Minbu	*165*	29·644	+·021	29·751	29·761	4th	29·550	15th	·211	83·7	97·7	+0·2	78·7	+1·0	88·2	+0·6	19·0	108·8	8th	70·0	17th & 18th.	38·8
	Yamethin	657	29·151	+·006	29·753	29·239	4th	29·038	16th	·201	82·4	98·2	+2·9	77·7	+1·5	87·9	+2·2	20·5	107·8	9th	72·0	16th	35·8
	Mandalay	250	29·556	+·012	29·751	29·671	4th	29·429	16th	·242	86·2	101·3	+2·3	79·4	+0·4	90·3	+1·3	21·9	110·7	8th	74·1	15th & 17th.	36·6
	Monywa	*980*	29·537		29·760	29·694	5th	29·373	16th	·321	85·0	101·8		79·4		90·6		22·4	110·8	8th	74·1	17th	36·2
	Lashio	*2,820*	27·068	+·015	29·769	27·183	4th	26·908	16th	·275	73·7			66·5	−0·3						57·0	15th	
	Bhamo	*381*	29·436	+·028	29·771	29·578	4th	29·256	16th	·322	77·9	93·4	−0·3	71·7	−1·0	82·5	−0·7	21·7	102·4	13th	63·6	9th	38·8
	Myitkyina	458	29·334		29·753	29·490	4th	29·147	16th	·343	76·3	91·5		72·3		81·9		19·2	100·2	13th	69·0	4th & 10th.	21·2
	II.—Assam.																						
4	Dibrugarh	353	29·463		29·780	29·607	4th	29·285	16th	·322	75·7	84·7		71·6		78·2		13·1	91·4	18th & 19th.	65·6	5th	25·8
	Sibsagar	333	29·489	−·018	29·783	29·651	4th	29·298	16th	·353	76·6	85·8	−0·1	71·7	0	78·8	−0·1	14·1	91·1	12th	67·0	4th, 5th & 9th.	24·1
	Tezpur	252	29·558		29·771	29·703	4th	29·362	16th	·343	76·9	87·6		72·6		80·1		15·0	94·1	20th	68·2	4 days	25·3
	Gauhati	195	29·627		29·780	29·735	4th	29·437	16th	·348	78·6	88·1		72·8		80·5		15·3	92·8	20th & 21st.	67·1	8th	25·7
	Dhubri	115	29·686	+·030	29·756	29·858	4th	29·486	16th	·367	77·5	85·8	−0·1	72·8	+0·4	79·2	−0·3	13·0	90·0	21st	65·6	3rd	24·4
	Silchar	104	29·725	+·027	29·782	29·877	4th	29·518	16th	·359	77·9	88·1	−0·6	73·1	+0·6	80·6	0	15·0	95·3	20th	66·3	8th	29·0
	III.—Bengal.																						
5	Cox's Bazar	36	29·778		29·759	29·942	4th	29·564	21st	·378	81·8	87·9		75·7		81·8		12·2	94·2	12th	70·2	16th	24·0
	Chittagong	87	29·724	+·021	29·757	29·880	4th	29·510	16th	·370	81·0	88·2	−0·4	75·3	−0·1	81·7	−0·3	12·9	92·0	11th & 13th.	68·5	2nd	23·5
	Noakhali	43	29·766		29·756	29·929	4th	29·584	16th	·345	81·6	87·5		76·4		81·9		11·1	92·8	12th	68·9	3rd	23·9
	Barisal	12	29·778	+·024	29·737	29·950	4th	29·538	16th	·412	83·0	90·7	−1·2	76·2	−1·2	83·4	−1·2	14·5	94·3	7th	68·6	15th	25·7
	Narayanganj	26	29·757	+·026	29·732	29·920	4th	29·533	16th	·387	81·8	90·1	−1·2	76·2	+0·4	83·1	−0·4	13·9	94·5	31st	71·3	3rd & 23rd	23·2
	Mymensingh	63	29·744	+·039	29·759	29·912	4th	29·546	16th	·366	79·4	88·8	+0·2	75·4	+1·6	82·1	+0·9	13·4	94·1	12th	70·1	2nd	24·0
	Bogra	75	29·716	+·053	29·742	29·878	4th	29·523	16th	·355	79·8	90·4	−2·1	74·1	−0·4	82·2	−1·3	16·3	99·2	18th	68·2	2nd	31·0
	Dinajpur	123	29·654	+·043	29·732	29·815	4th	29·460	16th	·355	78·7	90·4	−1·3	73·2	−1·1	81·8	−1·2	17·2	95·8	13th	67·0	3rd	28·8
	Jalpaiguri	225	29·515	+·034	29·757	29·868	4th	29·320	16th	·348	77·6	90·3	+2·0	72·5	+6·2	81·4	+1·1	17·8	95·4	19th	65·9	3rd & 10th	29·5
	Saugor Island	25	29·736	+·027	29·706	29·920	4th	29·508	15th	·412	85·2	90·8	−1·0	80·9	−0·1	85·9	−0·5	9·9	92·7	26th & 27th.	71·2	15th	21·5
	Midnapore	149	29·588		29·692	29·778	4th	29·372	15th	·406	84·7	99·1		77·9†		88·5†		21·2	104·3	29th	70·7	11th	33·6
	Calcutta	21	29·732	+·030	29·706	29·916	4th	29·517	16th	·399	83·5	95·1	+0·6	77·8	+0·3	86·4	+0·5	17·3	102·1	7th	71·0	15th	31·1

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

† Mean of 30 days.

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau

B.

in India, etc., in May, 1912.

Wind direction. Number of winds from: Calm	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 in inches of mercury	Cloud. Mean amount at 8 hrs.	Departure from normal	Rainfall. Number of rainy days	Normal number of rainy days	Departure from normal	Rainfall of month	Normal rainfall of month	Departure from normal	Total rainfall from 1st to 31st May, 1912	Normal rainfall for period, 1st to 31st May	Departure from normal of period, 1st to 31st May, 1912	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	56	57
																																I.—Burma.
3	2	5	6	10	3	1	1		S 71° E		3·8*			53		85		·911		5·5		19			13·97			13·97			2·28	Victoria Point
30		1							N 45° E	S 81° W	2·8	1·4	+1·4	3	−20	85	− 3	·921	+·016	4·2	−2·1	12	18·00	−6·00	11·88	18·20	− 6·32	11·88	18·20	− 6·32	2·20	Mergui.
31									(a)	S 61° W	1·6*	1·2	+0·4			84	− 4	·899	+·005	4·6	−2·2	12	17·70	−5·70	12·53	25·49	−12·96	12·53	25·49	−12·96	3·63	Tavoy.
9		3	11	4	2		2		S 79° E	S 47° E	3·1	2·5	+0·6	46	+10	86	− 2	·898	+·011	6·8	−0·5	13	17·40	−4·40	22·21	20·89	+ 1·32	22·21	20·89	+ 1·32	7·90	Moulmein.
4	1	1	1	4	7	6	5	2	S 30° W	S 39° W	2·3	3·4	−1·1	43	−11	81	− 7	·911	−·007	7·7	+0·7	15	14·00	+1·00	9·90	12·23	− 2·33	9·90	12·23	− 2·33	1·68	Rangoon.
12				3	3	1	3	9	N 86° W	S 51° W	4·7	3·5	+1·2	27	− 2	80	− 6	·933	−·002	5·3	−0·7	8	12·10	−4·10	4·79	10·27	− 5·48	4·79	10·27	− 5·48	1·09	Bassein.
1	1	1	1	3	4	4	7	9	S 86° W	S 64° W	6·9	5·7	+1·2	40	0	75	− 4	·901	−·005	5·5	−1·7	11	11·18	−0·18	10·20	11·16	− 0·96	10·20	11·16	− 0·96	3·17	Diamond Island.
7				10	11	3			S 14° E	S 28° E	2·1	3·4	−1·3	69	+ 1	79	− 4	·879	−·044	5·9	−1·0	10	10·10	−0·10	9·02	6·98	+ 2·04	9·02	6·98	+ 2·04	1·83	Toungoo.
2	1	12	1	7	2	1		5	N 62° E		4·3*			37		79		·881		5·1		13			22·88?			22·88?			7·99	Kyaukpyu.
3	5	5	9	4	3	1		1	N 79° E	N 81° E	3·7	2·6	+1·1	46	− 4	84	0	·916	−·051	4·6	−2·3	11	11·50	−0·50	26·18	11·62	+14·56	26·18	11·62	+14·56	7·37	Akyab.
12			2	3	10	4			S 5° E	S 5° E	2·9*	5·2	−2·3	49	−26	76	+ 4	·897	+·054	5·9	+0·8	9	6·90	+2·10	5·90	4·53	+ 1·37	5·90	4·53	+ 1·37	2·17	Thayetmyo.
1				30					S 45° E	S 38° E	2·9	7·5	−4·6	96	+22	77	0	·869	+·027	4·1	−0·3	8	6·40	+1·60	6·42	5·00	+ 1·42	6·42	5·00	+ 1·42	2·86	Minbu.
3		1		18	9				S 33° E	S 28° E	4·0	5·9	−1·9	79	+ 5	73	− 4	·794	−·029	3·5	−0·3	5	8·10	−3·10	3·71	6·15	− 2·44	3·71	6·15	− 2·44	1·23	Yamethin.
2				9	14	6			S 5° E	S 4° E	4·3	5·4	−1·1	82	+21	62	− 8	·761	−·084	3·1	−1·8	9	6·60	+2·40	5·56	5·65	− 0·09	5·56	5·65	− 0·09	1·28	Mandalay.
6	6		1	12	3			3	S 65° E		2·1			23		65		·769		5·3		6	7·20	−1·20	2·63	5·94	− 3·31	2·63	5·94	− 3·31	0·72	Monywa.
16	1	6	3	1	1	2	1		N 69° E		2·3*			17		77	− 7	·626	−·044	6·8	0	9			7·09	6·05	+ 1·04	7·09	6·05	+ 1·04	1·63	Lashio.
27	1	2				1			N 24° E	N 53° W	1·1	2·3	−1·2	7	−13	81	+ 1	·779	−·012	5·0	−0·6	9	10·40	−1·40	5·31	5·80	− 0·49	5·31	5·80	− 0·49	1·15	Bhamo.
28				1	1			1	S		0·9			3		81		·740		5·5		6			7·24	5·42	+ 1·82	7·24	5·42	+ 1·82	3·41	Myitkyina.
																																II.—Assam.
30		1							N 45° E		0·9			3		90		·785		6·0		16	15·20	+0·80	7·57	9·22	− 1·65	7·57	9·22	− 1·65	1·11	Dibrugarh.
10	7	9	1	1	1	2			N 33° E	N 60° E	2·3	2·1	+0·2	40	+ 7	87	− 5	·766	−·028	6·5	−1·6	15	15·90	−0·90	11·35	11·77	− 0·42	11·35	11·77	− 0·42	3·04	Sibsagar.
2	2	8	13	2	1	2	1		N 78° E		2·7			59		84		·772		5·5		15	14·10	+0·90	7·96	8·25	− 0·29	7·96	8·25	− 0·29	1·08	Tezpur.
30		1							N 45° E		1·2			3		83		·814		4·9		12	14·20	−2·20	8·26	9·45	− 1·19	8·26	9·45	− 1·19	2·00	Gauhati.
3		11	11	2	2	1	1		N 79° E	N 67° E	4·3	5·2	−0·9	59	+ 5	86	− 1	·815	+·014	6·1	−0·9	18	15·70	+2·30	17·05	14·94	+ 2·11	17·05	14·94	+ 2·11	3·90	Dhubri.
22		5	1		1	2			N 71° E	N 84° E	1·3	2·3	−1·0	10	− 3	86	0	·830	+·002	3·8	−3·5	15	16·50	−1·50	13·93	15·22	− 1·29	13·93	15·22	− 1·29	4·89	Silchar.
																																III.—Bengal.
	1	4	8	13	5				S 62° E		4·4*			72		86		·933		5·0		10			15·88			15·88			3·52	Cox's Bazar.
8		4	5	12	2				S 65° E	S 50° E	2·4	4·7	−2·3	59	− 6	82	0	·869	−·039	6·3	+0·2	14	10·55	+3·45	11·16	9·31	+ 1·85	11·16	9·31	+ 1·85	2·38	Chittagong.
4			2	15	4	5		1	S 25° E		2·2			61		85		·921		5·0		10	10·45	−0·45	7·60	11·66	− 4·06	7·60	11·66	− 4·06	1·57	Noakhali.
18	2	1	1	1	6	2			S 10° E	S 9° E	0·8	3·7	−2·9	17	−33	83	+ 1	·931	−·037	6·5	+0·2	9	9·84	−0·84	8·72	8·89	− 0·17	8·72	8·89	− 0·17	1·85	Barisal.
9		2	7	5	7	1			S 49° E	S 28° E	2·8	4·9	−2·1	49	− 5	83	− 2	·894	−·035	7·5	+1·2	9	11·53	−2·53	8·20	8·94	− 0·74	8·20	8·94	− 0·74	2·53	Narayanganj
12		1	9	8	1				S 69° E	S 81° E	1·6	3·0	−1·4	53	−15	84	− 1	·856	+·016	6·2	0	12	13·48	−1·48	10·04	13·03	− 2·99	10·04	13·03	− 2·99	2·26	Mymensingh.
12		4	10	2	3				S 84° E	S 72° E	0·9	3·2	−2·3	46	−14	86	+ 4	·885	+·034	5·8	+1·1	14	9·77	+4·23	6·56	8·34	− 1·78	6·56	8·34	− 1·78	1·68	Bogra.
1	3	7	15	2	1			2	N 71° E	N 88° E	2·5	3·4	−0·9	69	− 3	85	+ 5	·837	+·034	8·9	−2·0	15	8·23	+6·77	13·40	7·49	+ 5·91	13·40	7·49	+ 5·91	3·60	Dinajpur.
22		3	1	4		1			S 75° E	N 88° E	1·2			17	−15	83	− 1	·801	+·001	3·5	−0·8	14	12·42	+1·58	11·68	11·39	+ 0·29	11·68	11·39	+ 0·29	2·82	Jalpaiguri.
	1	1	1	1	16	11			S 13° W	S 5° W	11·8	12·3	−0·5	79	+ 4	85	+ 4	1·026	+·017	6·4	−0·6	4	6·71	−2·71	1·97	4·48	− 2·51	1·97	4·48	− 2·51	0·78	Saugor Island.
2	3	2	1	7	12	3	1		S 15° E		3·1			52		82		·967		3·1		6	7·05	−1·05	3·89	5·05	− 1·16	3·89	5·05	− 1·16	1·15	Midnapore.
	2	2	4	6	6	9		2	S 10° E	S 6° W	4·3*	5·1	−0·8	40	−28	83	+ 4	·954	+·010	5·9	+0·9	7	7·46	−0·46	4·84	5·74	− 0·90	4·84	5·74	− 0·90	1·41	Calcutta.

(a) Indeterminate.

* Uncorrected for scale error.

Stations, the elevations of which exceed 3,200 feet.

Table

(2) *Abstract of observations taken at 8 hrs. at 219 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal—*concld.*																						
5	Jessore	32	29·743	+·033	29·723	29·914	4th	29·527	16th	·387	81·8	92·0	−2·8	75·8	−1·0	83·9	−1·9	16·2	97·5	8th	68·7	2nd	28·8
	Burdwan	99	29·655	+·036	29·701	29·821	4th	29·458	16th	·363	82·6	97·9	−0·5	77·2	−0·6	87·5	−0·5	20·7	108·9	6th	71·8	15th	37·1
	Berhampore	67	29·699	+·037	29·715	29·866	11th	29·512	16th	·354	81·3	96·2	−0·3	76·2	−0·4	86·2	−0·3	20·0	107·6	6th & 7th	68·2	15th	39·4
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·702	+·037	29·696	29·893	4th	29·474	16th	·419	85·7	96·6	−1·0	79·2	+0·5	87·9	−0·3	17·4	106·4	16th	72·1	24th	34·3
	False Point	21	29·745	+·029	29·709	29·943	4th	29·512	16th	·431	86·7	91·6	+0·6	80·7	+1·0	86·2	+0·8	10·9	94·2	17th	75·6	2nd	18·6
	Cuttack	80	29·676	+·030	29·696	29·856	4th	29·443	16th	·413	87·0	103·9	+2·3	81·7	+1·6	92·8	+1·9	22·2	113·4	17th	76·2	3rd	37·2
	Puri	24	29·738		29·701	29·923	4th	29·514	16th	·409	85·0	91·2		81·7		86·4		9·5	95·1	13th	77·1	26th	18·0
	Angul	455	29·294		29·704P	29·455	4th	29·079	16th	·376	86·8	104·2		79·9		92·0		24·3	114·1	17th	74·0	5th & 10th	40·1
	Sambalpur	486	29·249	+·017	29·673	29·421	4th	29·047	16th	·374	89·4	106·5	−0·4	83·3	+1·7	94·9	+0·7	23·2	115·1	17th	76·6	5th	38·5
7	Chaibasa	*733*	28·998	+·031	29·673	29·178	4th	28·788	15th	·390	85·2	103·9	−1·2	79·2	−0·4	91·5	−0·8	24·7	110·1	16th	74·3	25th & 27th.	35·8
	Ranchi	2,128	27·648	+·041	29·655	27·831	4th	27·457	15th & 16th.	·374	83·2	99·3	−0·3	76·0	0	87·7	−0·1	23·3	105·2	16th	69·9	15th	35·3
	Purulia	*816*	28·911		29·674	29·090	4th	28·734	16th	·356	80·8	101·5		77·3		89·4		24·2	109·0	31st	71·1	25th	37·9
	Daltonganj	*730*	28·892‡		29·670‡	29·200	4th	28·812	15th	·388	87·3	106·9		79·4		93·1		27·5	111·6	15th & 30th.	73·5	4 days	38·1
8	Purnea	134	29·641	+·043	29·730	29·814	11th	29·456	16th	·358	80·6	92·5	−2·3	75·5†	+0·1†	83·6†	−1·1	17·0	98·6	13th	69·8	24th	28·8
	Monghyr	155	29·583‡		29·689‡	29·751	4th	29·424	15th	·327	84·7	98·5‡		76·0		87·2‡		22·5	104·2	6th	68·9	15th	35·3
	Darbhanga	165	29·582	+·033	29·702	29·741	11th	29·417	15th	·324	81·8	95·8	+0·2	74·7	−1·6	85·2	−0·7	21·1	102·6	7th	65·2	16th	36·4
	Pusa	188	29·552		29·411P	29·722	4th	29·392	15th	·330	83·9	98·3		74·5		86·4		23·8	105·7	7th	67·1	15th	38·6
	Patna	183	29·541	+·026	29·678	29·707	4th	29·378	15th	·329	85·2	98·9	−1·3	77·7	0	88·3	−0·7	21·2	103·5	7th	71·2	15th	32·3
	Buxar	239	29·464		29·658	29·641	4th	29·307	16th	·334	86·1	103·2		79·5		91·3		23·7	108·0	31st	72·1	15th	35·9
	Gaya	372	29·338	+·022	29·655	29·525	4th	29·170	15th	·355	89·2	105·3	+0·4	80·4	+0·9	92·9	+0·7	24·9	111·9	31st	73·2	22nd	38·7
	Naya Dumka	489	29·265	+·045	29·705	29·452	11th	29·089	16th	·363	81·7	96·6	−1·8	75·8	−1·4	86·2	−1·6	20·8	106·9	7th.	67·0	11th	39·9
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·471	+·033	29·684	29·634	12th	29·317	15th	·317	84·1	99·2	−1·8	73·8	−3·5	86·5	−2·7	25·4	104·6	6th, 7th & 31st.	65·3	5th	39·3
	Benares	267	29·442	+·030	29·658	29·637	4th	29·273	16th	·364	89·2	106·5	+1·0	79·2	+0·3	92·8	+0·7	27·3	112·6	31st	72·6	5th	40·0
	Allahabad	309	29·395	+·028	29·653	29·616	4th	29·222	15th & 16th.	·394	90·3	107·8	+0·8	79·5	0	93·6	+0·4	28·3	112·6	15th & 31st	73·0	4th	40·6
	Cawnpore	416	29·280	+·035	29·644	29·487	4th	29·104	16th	·383	89·1	106·5	+0·3	79·4	−1·2	92·9	−0·5	27·1	113·2	15th	70·9	4th	42·3
	Lucknow	368	29·351	+·046	29·671	29·539	4th	29·184	15th	·355	87·5	104·1	−0·3	78·1	+0·3	91·1	−0·3	26·0	111·0	31st	70·1	3rd	40·9
	Bahraich	401	29·318	+·047	29·674	29·526	12th	29·166	15th	360	85·7	100·4	−2·6	77·2	−0·7	88·8	−1·7	23·2	106·1	6th & 31st	66·0	5th	40·1
10	Jhansi	824	28·893	+·013	29·645	29·112	4th	28·690	16th	·422	94·9	109·4	+1·1	83·5	−0·1	96·4	+0·5	25·9	117·5	17th	76·0	4th	41·5
	Agra	556	29·142	+·019	29·645	29·364	4th	28·951	16th	·413	90·8	108·6	+1·4	82·0	+0·5	95·3	+0·9	26·6	116·0	17th	73·5	8th	42·5
	Mainpuri	516	29·183	+·040	29·647	29·392	4th	29·001	16th	·391	89·1	108·3	+0·8	78·9	−0·9	93·6	−0·1	29·4	114·3	15th & 31st	69·1	4th	45·2
	Bareilly	568	29·141	+·039	29·661	29·314	11th	28·998	15th	·316	86·7	103·2	0	76·7	+0·3	89·9	+0·1	26·5	108·3	2nd	65·0	24th	43·3
	Roorkee	899	28·815	+·044	29·664	28·994	4th	28·642	15th	·352	86·7	102·3	−0·5	75·1	+0·5	88·7	0	27·2	109·5	31st	64·4	5th	45·1
	VI.—Punjab.																						
11	Delhi	718	28·985	+·034	29·656	29·186	4th	28·803	16th	·383	87·0	104·4	−0·3	79·4	−0·8	91·9	−0·5	25·0	111·5	17th	68·3	8th	42·2
	Sirsa	662	29·016	+·028	29·630	29·265	4th	28·781	17th	·484	90·0	107·8	+0·6	78·0	+0·6	92·9	+0·6	29·8	119·8	17th	65·0	3rd	54·8

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

† Mean of 8 days.
‡ " " 30 "
¶ " " 29 "

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau

B—*continued.*

in India, etc., in May, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1912.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.	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	56	57
																																III.—Bengal—*concld.*
13		1	4	8	4	1			S 45° E	S 16° E	3·2	3·4	−0·2	46	− 8	85	+ 1	·921	−·051	5·9	0	9	9·74	− 0·74	9·47	8·05	+ 1·42	9·47	8·05	+ 1·42	2·67	Jessore.
4	2	5	3	2	3	9	3		S 15° W	S 11° W	2·5	3·4	−0·9	17	−37	81	+ 6	·898	+·015	5·8	+0·8	5	7·32	− 2·32	4·48	6·36	− 1·88	4·48	6·36	− 1·88	1·72	Burdwan.
3	1	3	10	3	9	2			S 53° E	S 37° E	2·4‖	3·7	−1·3	53	+ 3	79	− 4	·838	−·066	5·8	+0·2	6	7·74	− 1·74	5·14	5·24	− 0·10	5·14	5·24	− 0·10	1·55	Berhampore.
																																IV.—Bihar and Orissa.
4		1			5	19	1	1	S 40° W	S 29° W	4·0§	6·4	−2·4	69	− 6	71	− 8	·867	−·104P	4·8	−0·7	2	7·74	− 4·74	2·44	4·75	− 2·31	2·44	4·75	− 2·31	1·32	Balasore.
2	1			1	6	19	2		S 37° W	S 27° W	9·7	10·0	−0·3	78	+ 4	78	− 5	·988	−·027	6·4	0	1	4·32	− 3·32	0·18	4·35	− 4·17	0·18	4·35	− 4·17	0·10	False Point.
1		1	1	2	11	12	3		S 23° W	S 46° W	2·9*	3·7	−0·8	69	+29	72	0	·932	+·028	4·6	0	5	5·23	− 0·23	1·18	3·99	− 2·81	1·18	3·99	− 2·81	0·51	Cuttack.
		1		1	4	21	2	2	S 45° W		11·4			74		83		·799		5·6		1	3·39	− 2·39	0·26	2·73	− 2·47	0·26	2·73	− 2·47	0·25	Puri.
3	2	10	2	9	1		2	2	N 76° E		6·1			39	− 3	69		·875		4·6		3			0·44	1·54	− 1·10	0·44	1·54	− 1·10	0·12	Angul.
1		5	1	8	6	8	1	1	S 12° E	S 7° E	3·4	3·1	+0·3	43	− 4	52	+ 1	·713	−·010	3·2	−0·3	1	3·00	− 2·00	0·31	1·31	− 1·00	0·31	1·31	− 1·00	0·31	Sambalpur.
7	1	2			2	17	2		S 48° W	S 58° W	2·7	2·0	+0·7	56	+ 9	63	+ 1	·762	−·027	3·6	+1·1	3	5·65	− 2·65	2·21	3·34	− 1·13	2·21	3·34	− 1·13	1·25	Chaibasa.
3				6	8	9	5		S 21° W	S 43° W	5·1	5·7	−0·6	69		56	+ 5	·624	+·019	2·8	+0·6	2	4·68	− 2·68	0·55	2·29	− 1·74	0·55	2·29	− 1·74	0·22	Ranchi.
15		1	1	3	5	1	3	2	S 9° W		3·3			19		78		·817		1·5		5	5·26	− 0·26	1·58	2·74	− 1·16	1·58	2·74	− 1·16	0·47	Purulia.
17	2	3	6	1				2	N 54° E		3·7			26		47		·606		1·2		2	2·07	− 0·07	0·73	0·51	+ 0·22	0·73	0·51	+ 0·22	0·53	Daltonganj.
4	1	9	13	4					N 79° E	N 82° E	4·2	3·3	+0·9	74	− 3	78	+ 2	·807	−·006	2·4	−2·0	8	5·34	+ 2·66	4·67	4·45	+ 0·22	4·67	4·45	+ 0·22	1·44	Purnea.
2		3	23	3					E		6·4			87		71		·854		1·6‡		3			1·97			1·97			1·13	Monghyr.
3			28						E	S 79° E	3·6	4·5	−0·9	90	+14	81	+13	·907	+·115	1·4	−0·9	4	3·93	+0·07	2·17	2·86	− 0·69	2·17	2·86	− 0·69	1·01	Darbhanga.
1		5	14	11					S 82° E		4·1			87		71		·823		1·8		4			3·14			3·14			1·10	Pusa.
3			26	1	1				S 87° E	N 87° E	6·1	4·2	+1·9	89	+21	68	+ 3	·829	+·063	0·9	−1·1	1	2·97	− 1·97	0·56	1·66	− 1·10	0·56	1·66	− 1·10	0·56	Patna.
		2	22	2		2	1	1	S 63° E		3·9			7		59		·724		1·5		2	1·97	+ 0·03	0·38	0·67	− 0·29	0·38	0·67	− 0·29	0·28	Buxar.
11		7	2	5	3	2	1		S 69° E	S 78° W	2·8	3·9	−1·1	27	− 1	59	+ 1	·813	+·035	1·8	−0·8	1	1·94	− 0·94	0·30	1·03	− 0·73	0·30	1·03	− 0·73	0·21	Gaya.
12		1	7	6	5				S 54° E		2·1			49		71	+ 2	·757		3·4		6	5·21	+ 0·79	4·37	3·46	+ 0·91	4·37	3·46	+ 0·91	1·25	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
3	4	12	8	1		1	1	1	N 51° E	N 76° E	2·3	2·6	−0·3	62	+19	62	− 1	·719	−·015	0·3	−1·3	2	2·40	− 0·40	1·47	1·42	+ 0·05	1·47	1·42	+ 0·05	0·92	Gorakhpur.
8			11	5		4	1	2	S 62° E	N 72° E	2·8	3·7	−0·9	33	+21	47	− 6	·636	−·038	1·2	−0·4	2	1·00	+ 1·00	0·63	0·51	+ 0·12	0·63	0·51	+ 0·12	0·49	Benares.
4	3	6	11	0	0	0	6	1	N 47° E	N 2° E	3·2	5·0	− 1·8	40	+31	38	− 4	·540	−·048	1·2	−0·4	0	0·50	− 0·50	0·11	0·26	− 0·15	0·11	0·26	− 0·15	0·08	Allahabad.
5	4	4	8	2	1	3	2	2	N 61° E	S 56° W	2·5	3·6	−1·1	27	+12	41	− 5	·557	−·075	0·3	−0·9	1	1·00	0	0·23	0·28	−0·05	0·23	0·28	−0·05	0·17	Cawnpore.
11	1		12	2	1	2	1		S 73° E	N 72° E	2·1	2·9	−0·8	40	+27	47	+ 1	·609	+·016P	1·2	−0·2	1	1·50	−0·50	0·36	0·88	−0·52	0·36	0·88	−0·52	0·26	Lucknow.
1	1	2	14	12				1	S 77° E	S 72° E	2·9	3·6	−0·7	76	+30	54	− 6	·662	−·098	1·9	+0·5	1	2·50	−1·50	1·11	1·53	−0·42	1·11	1·53	−0·42	0·99	Bahraich.
2		2	2	5	2	6	7	5	S 58° W	N 70° W	3·9	3·4	+0·5	30	−10	24	− 8	·390	−·093	5·5	+4·5	0	0·70	−0·70	0·01	0·35	−0·34	0·01	0·35	−0·34	0·01	Jhansi.
7	2	2	2	3	2	6	4	3	S 59° W	S 49° W	3·5	4·5	−1·0	20	−19	32	− 6	·450	−·036	1·4	+0·4	0	1·50	−1·50	0·03	0·48	−0·45	0·03	0·48	−0·45	0·03	Agra.
2	2	1	6	8	3	2	5	2	S 38° E	N 84° W	1·9	2·0	−0·1	27	+12	38	− 4	·527	−·040	0	−1·3	0	1·10	−1·10	0·04	0·33	−0·29	0·04	0·33	−0·29	0·04	Mainpuri.
23		1	6	1					E	S 73° E	0·8	3·1	−2·3	24	+11	53	+ 5	·675	+·085	1·8	+0·3	3	2·27	+0·73	1·60	0·70	+0·90	1·60	0·70	+0·90	1·00	Bareilly.
20		3	1	7					S 70° E	S 45° E	2·9	2·7	+0·2	27	−2	39	− 1	·492	+·010	0·8	−0·8	0	2·10	−2·10	0·14	0·83	−0·69	0·14	0·83	−0·69	0·04	Roorkee.
																																VI.—Punjab.
	1	3	7	8	1	2	5	4	S 69° E	S 73° W	4·0	3·2	+0·8	17	− 8	46	+ 8	·579	+·089	2·7	+0·2	2	2·20	−0·20	0·58	0·63	−0·05	0·58	0·63	−0·05	0·27	Delhi.
8		1	7	3	5	3	3	1	S 28° E	S 39° W	4·6	4·5	+0·1	30	+ 5	31	− 6	·408	−·083	0·6	−2·3	1	1·60	−0·60	0·13	0·61	−0·48	0·13	0·61	−0·48	0·13	Sirsa.

stations, the elevations of which exceed 3,200 feet. * Uncorrected for scale error. § Mean of 18 days. ‖ Mean of 28 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 219 stations*

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Punjab—*concld.*																						
11	Patiala	*818*	28·870		29·644	29·025	4th	28·612	16th	·413	86·5	102·9							112·4	16th			
	Ambala	892	28·797	+·041	29·637	29·004	4th	28·618	15th	·386	88·2	105·8	+0·6	76·5	−0·4	91·2	+0·1	29·3	114·5	16th	65·9	8th	48·6
	Ludhiana	812	28·878	+·036	29·647	29·095	4th	28·674	17th	·421	85·1	105·2	+0·8	76·3	+0·9	90·8	+0·9	28·9	116·0	17th	65·5	3rd	50·5
	Lahore	702	28·967	+·027	29·628	29·205	4th	28·683	18th	·522	87·3	105·7	0	76·3	+3·7?	91·0	+1·9?	29·4	116·9	17th	67·2	2nd & 3rd	49·7
	Sialkot	830	28·851	+·032	29·642	29·075	4th	28·588	17th	·487	85·2	100·8	−2·3	73·2	−1·8	87·0	−1·9	27·6	111·0	16th	58·5	3rd	52·5
	Rawalpindi	1,674	28·044	+·033	29·653	28·261	4th	27·729	17th	·532	82·8	98·4	+0·3	68·5	−0·1	83·5	+0·1	29·9	107·9	16th	57·9	3rd	50·0
12	Kohat	612	29·072	+·034	29·684	29·299	4th	28·723	17th	·576	89·3	104·0	−0·9	77·5	+0·2	90·8	−0·3	26·5	116·4	16th & 17th	65·4	7th	51·0
	Montgomery	558	29·103	+·039	29·618	29·365	4th	28·793	17th	·570	90·7	106·5	−1·8	77·7	−0·7	92·1	−1·3	28·8	120·4	17th	64·5	7th	56·9
	Multan	420	29·252	+·030	29·823	29·488	4th	28·955	17th	·533	88·2	107·2	+0·6	78·8	+1·2	93·0	+0·9	28·4	120·3	17th	68·5	7th	51·8
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·699	+·031	29·684	28·818	4th	28·267	18th	·551	82·7	100·2	+1·6	71·2	+1·2	85·7	+1·4	29·0	111·2	16th & 18th	60·9	7th	50·3
	D. I. Khan	590	29·099	+·016	29·652	29·341	4th	28·748	17th	·593	85·9	103·0	−1·2	75·0	+0·1	89·0	−0·5	28·0	115·2	16th	61·1	2nd	54·8
	VIII.—Sind.																						
16	Jacobabad	186	29·489	+·031	29·629	29·703	7th	29·285	16th	·418	93·2	113·8	+2·2	78·8	+0·8	96·3	+1·4	35·0	126·1	16th	69·2	8th	56·8
	Hyderabad	96	29·617	+·024	29·663	29·802	4th	29·398	17th	·404	88·1	109·5	+2·6	78·0	−0·4	93·8	+1·1	31·5	120·5	14th	71·0	7th	49·5
	Karachi	13	29·748	+·023	29·712	29·921	4th	29·577	17th	·344	83·0	89·1	−0·2	79·0	+0·5	84·1	+0·1	10·1	102·5	8th	74·5	7th	28·0
	IX.—Rajputana.																						
17	Bikaner	*771*	28·909	+·018	29·623	29·132	4th	28·690	17th	·442	91·7	109·2	+2·1	83·0	+0·4	96·1	+1·3	26·2	120·0	17th	72·5	7th	47·5
	Jodhpur	780	28·945	+·005	29·665	29·127	4th	28·765	17th	·362	90·1	108·1	+1·1	81·5	+0·7	94·8	+0·9	26·6	120·0	16th	72·3	3rd	47·7
18	Jaipur	1,431	28·313	+·021	29·658	28·504	4th	28·134	17th	·370	90·9	107·5	+0·9	78·6	+0·4	93·0	+0·7	28·9	116·2	16th & 17th	71·1	1st	45·1
	Ajmer	1,611	28·146	+·019	29·661	28·544	4th	27·986	17th	·358	88·0	105·8	+2·0	82·9	+3·6	94·3	+2·8	22·9	114·4	15th & 16th	73·2	9th	41·2
	Kotah	819?	28·889	+·005?	29·638?	29·113	4th	28·728	17th	·385	95·7	109·8	+0·6	86·0	−0·4	97·9	+0·1	23·8	117·6	15th, 17th & 23rd.	77·6	9th	40·0
	X.—Bombay.																						
19	Deesa	466	29·321	+·018	29·733	29·471	4th	29·184	17th	·287	88·4	110·5	+3·8	79·1	+1·6	94·8	+2·7	31·4	121·8	15th	72·9	29th	48·9
	Bhuj	395	29·384	+·024	29·726	29·505	4th	29·246	17th	·259	85·5	103·9	+2·6	76·9	+0·2	90·4	+1·4	27·0	116·0	14th	69·5	4th	46·5
	Jamnagar	61	29·741		29·747	29·886	4th	29·600	17th	·286	86·8	100·0		77·2		88·5		22·8	106·6	14th	70·2	4th	36·4
	Dwarka	37?	29·783	+·005	29·766	29·920	4th	29·662	17th	·258	83·0	88·8	+1·0	80·6	+0·5	84·7	+0·7	8·2	90·8	15th, 30th & 31st.	77·2	4th	13·6
	Rajkot	429	29·384	+·025	29·759	29·500	4th	29·255	17th	·245	85·4	107·0	+1·8	75·8	+0·8	91·4	+1·2	31·2	114·6	14th	69·0	4th	45·6
	Veraval	*18*	29·820	+·011	29·781	29·951	4th	29·718	17th	·233	82·2	86·4	−0·3	79·1	+0·7	82·8	+0·2	7·3	92·6	6th	69·8	4th	22·8
	Bhavnagar Para	55	29·774	−·011	29·772	29·929	4th	29·657	17th	·272	86·9	107·4	+4·5?	79·3	+0·5	93·3	+2·5?	28·1	116·0	16th & 17th.	74·0	6th	42·0
	Surat †	39	29·803	+·016	29·785	29·913	4th	29·700	17th	·213	86·9	97·5	−0·7	80·0	+1·9	88·7	+0·6	17·5	105·9	6th	76·1	6th	29·8
	Ahmadabad	163	29·633	−·004	29·744	29·746	4th	29·512	17th	·234	86·9	109·5	+2·4						117·6	14th			
25	Bombay	37	29·837	+·015	29·814	29·912	4th	29·759	17th	·153	84·7	92·1	+1·4	81·1	+0·4	86·6	+0·9	11·0	95·0	6th	73·0	29th	17·0
	Ratnagiri	110	29·762	+·019	29·809	29·823	4th	29·691	17th	·132	85·3	91·8	+0·7	80·6	+1·0	86·2	+0·9	11·2	96·3	9th	73·4	30th	22·9
	Goa	199	P	P	P	P	P	P	P	P	83·5	88·6	−1·4	81·9	+1·4	85·3	0	6·7	91·1	5th	74·1	30th	17·0
	Marmagao	*60*	29·819	+·008	29·813	29·873	8th	29·759	17th	·114	86·4	92·2	+2·2	81·5	+0·4	86·9	+1·3	10·7	94·0	7 days	73·2	30th	20·8
	Karwar	44	29·845	+·024	29·822	29·891	4th	29·788	17th	·103	84·9	90·8	+1·0	80·9	+1·2	85·8	+1·1	9.9	93·2	31st	72·5	29th	19·7

† Mean of 29 days.

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.

B—*continued.*

***in India, etc., in May, 1912*—continued.**

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1912.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.	Heaviest rainfall during month.	Station.
35	26	27	28	25	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																																VI.—Punjab—*concld.*
2	2		6	11	1	1	3	5	S 66° E		5·8			32		46		·541		0·6		1			0·58	0·63	−0·05	0·58	0·63	−0·05	0·58	Patiala.
4	2	1	13	4	1		2	4	N 82° E	S 49° E	4·5	2·3	+2·2	40	+32	34	−15	·440	−·156	1·0	−0·2	1	1·70	−0·70	0·15	0·60	−0·45	0·15	0·60	−0·45	0·10	Ambala.
17	2	2	1	7	2				S 64° E	S 44° E	1·6	1·9	−0·3	23	+ 9	34	− 6	·404	−·111	1·3	−0·6	1	1·60	−0·60	0·59	0·60	−0·01	0·59	0·60	−0·01	0·51	Ludhiana.
8	5	2	5	6	3			2	N 86° E	N 72° E	2·6	2·3	+0·3	30	+ 8	38	− 3	·483	−·018	2·8	+1·0	1	1·50	−0·50	0·10	0·67	−0·57	0·10	0·67	−0·57	0·10	Lahore.
7	7	6	6	2	1			2	N 45° E	N 41° E	2·6	2·3	+0·3	46	+ 7	46	+ 5	·532	+·014	2·2	+0·7	2	2·30	−0·30	0·39	1·09	−0·70	0·39	1·09	−0·70	0·25	Sialkot.
12	6	1	2		2	1	6	1	N 45° W	N 14° E	2·3	2·2	+0·1	27	+ 9	41	− 3	·442	−·030	4·2	+2·1	5	3·00	+2·00	1·18	1·42	−0·24	1·18	1·42	−0·24	0·39	Rawalpindi.
7	1	6	11		1	1	2	2	N 67° E	N 14° E	5·1	5·1	0	40	+22	27	− 5	·352	−·090	3·1	+2·0	0	1·20	−1·20	0·25	0·77	−0·52	0·25	0·77	−0·52	0·09	Khushab.
6	2	3	5	3	6	2	1	3	S 55° E	S 48° E	5·5	5·5	0	20	+ 6	24	−12	·318	−·202	1·3	+0·1	1	1·00	0	0·18	0·36	−0·18	0·18	0·36	−0·18	0·18	Montgomery.
24	6				3			1	N 11° W	S 12° E	1·0	1·9	−0·9	13	+ 6	39	− 5	·499	−·077	1·2	+0·6	1	0·80	+0·20	0·55	0·29	+0·26	0·55	0·29	+0·26	0·55	Multan.
																																VII.—North-West Frontier Province.
16	4	1	1		2	2	5		N 74° W	N 50° W	2·1	3·4	−1·3	17	+ 6	41	− 1	·443	−·037	3·5	+1·4	3	1·60	+1·40	0·61	0·93	−0·32	0·61	0·93	+0·32	0·22	Peshawar.
14	4	9				1		3	N 17° E	N 16° E	1·5	1·8	−0·3	40	+15	58	+ 9	·705	+·094	1·2	+0·3	1	1·00	0	0·14	0·42	−0·28	0·14	0·42	−0·28	0·12	D. I. Khan.
																																VIII.—Sind.
15		5	3	3		1	1	3	N 59° E	S 53° E	4·4	3·4	+1·0	20	− 9	45	+ 5	·734	+·151	0·7	−0·2	0	0·30	−0·30	0·07	0·14	−0·07	0·07	0·14	−0·07	0·07	Jacobabad.
	1	1		1	10	16	2		S 30° W	S 45° W	6·1	10·6	−4·5	76	−14	54	− 3	·697	+·006	0·4	−0·6	0	0·30	−0·30	0	0·17	−0·17	0	0·17	−0·17	0	Hyderabad.
			1			6	23	1	S 83° W	S 56° W	11·5	12·3	−0·8	89	+35	81	− 3	·930	+·016	1·7	−1·9	0	0	0	0	0·06	−0·06	0	0·06	−0·06	0	Karachi.
																																IX.—Rajputana.
2	1	1	2	4	6	7	6	2	S 33° W	S 36° W	6·5	5·8	+0·7	43	−22	32	−14	·473	−·168	0·5	−0·6	1	1·50	−0·50	0·17	0·64	−0·47	0·17	0·64	−0·47	0·15	Bikaner.
1	2		1		4	17	6		S 51° W		4·2			72		27	−14	·374		0·2		0	1·20	−1·20	0·07	0·25	−0·18	0·07	0·25	−0·18	0·07	Jodhpur.
2	3	7	1		3	4	7	4	N 53° W	S 88° W	4·5*	4·6	−0·1	27	−23	31	− 9	·424	−·112	0·6	−0·9	2	1·50	+0·50	0·94	0·53	+0·41	0·94	0·53	+0·41	0·60	Jaipur.
9				1	3	10	6	2	S 56° W	S 79° W	6·8	6·4	+0·4	53	−22	27	− 7	·493	−·076	0·9	−0·1	0	1·50	−1·50	0·06	0·55	−0·49	0·06	0·55	−0·49	0·04	Ajmer.
4	1		1	1		7	9	8	N 87° W		4·2			59		23	− 5	·369		1·1		0	1·20	−1·20	0·04	0·43	−0·39	0·04	0·43	−0·39	0·04	Kotah.
																																X.—Bombay.
2	2		1	2	3	14	4	3	S 53° W	S 83° W	9·2	9·6	−0·6	56	− 9	50	− 8	·656	−·043	1·2	−1·2	0	0·55	−0·55	0	0·19	−0·19	0	0·19	−0·19	0	Deesa.
	2				1	7	16	5	S 89° W	S 77° W	11·4	12·7	−1·3	79	− 4	63	0	·756	−·014	0·7	−0·6	0	0·30	−0·30	0	0·07	−0·07	0	0·07	−0·07	0	Bhuj.
					2	14	11	4	S 69° W		19·8			82		68		·851		0·3		0			0	0·02	−0·02	0	0·02	−0·02	0	Jamnagar.
				1	3	13	8	6	S 67° W		10·3			76		85	+ 4	·966		2·3		0			0	0·01	−0·01	0	0·01	−0·01	0	Dwarka.
1	1				2	12	11	4	S 73° W	N 89° W	12·4	10·6	+1·9	76	− 6	67	− 4	·806	−·019	0·4	−1·2	0	0·60	−0·60	0	0·17	−0·17	0	0·17	−0·17	0	Rajkot.
8	1					7	12	3	S 85° W	N 89° W	7·5	6·9	+0·6	62	−14	84	+ 3	·918	+·012	3·1	−0·5	0	0·10	−0·10	0	0·05	−0·05	0	0·05	−0·05	0	Veraval.
	2				1	17	9	2	S 67° W	S 62° W	4·6	10·3	−5·7	79	− 2	59	− 7	·750	−·088?	1·5	−2·2	1	0·40	+0·60	0·11	0·15	−0·04	0·11	0·15	−0·04	0·11	Bhavnagar Para.
	2	1			10	15	1		S 32° W	S 54° W	6·7	8·1	−1·4	74	+ 8	69	+ 1	·882	+·035	3·2	−0·[illegible]	0	0·30	−0·30	0	0·10	−0·10	0	0·10	−0·10	0	Surat.
4				2	8	12	2	3	S 35° W	S 81° W	4·8	5·0	−0·3	62	− 1	63	+ 4	·810	+·056	1·3	−1·4	0	0·50	−0·50	0	0·08	−0·08	0	0·08	−0·08	0	Ahmadabad.
	2	1	1	1	2	8	11	5	S 83° W	N 81° W	5·6*	7·4	−1·8	59	+12	74	+ 1	·912	+·033	4·2	+0·1	1	0·70	+0·30	0·43	0·71	−0·28	0·43	0·71	−0·28	0·43	Bombay.
6	6	3	1		1	3	5	6	N 42° W	N 48 W	6·9	7·1	−0·2	40	−17	69	0	·840	+·001	3·7	+0·2	3	1·50	+1·50	2·15	1·17	+0·98	2·15	1·17	+0·98	1·17	Ratnagiri.
	3	5	9	3			2	9	N 31° E	N 38° W	5·5	5·8	−0·3	43	−13	73	0	·829	−·040	5·1	+1·[illegible]	3			2·01	2·09	−0·08	2·01	2·09	−0·08	1·63	Goa.
4	6	3	5	1			9	2	N 19° W	N 28° W	5·9*	8·0	−2·1	30	−32	72	− 4	·899	−·011	5·4	+0·8	2			1·88	1·78	+0·10	1·88	1·78	+0·10	1·50	Marmagao.
1	24	1			1	1		3	N 5° W	N 30° W	3·4	4·2	−0·8	82	+19	72	− 5	·864	+·015	2·6	−1·[illegible]	2	3·60	−1·60	0·93	2·68	−1·75	0·93	2·68	−1·75	0·66	Karwar.

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 219 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay *—concld.*																						
26	Malegaon	1,430	28·394	+·014	29·731	28·492	4th	28·286	17th	·206	89·4	107·3	+3·3	75·6	+0·5	91·5	+1·9	31·7	113·4	15th.	69·1	20th	44·3
	Ahmadnagar	2,154	27·716	+·023	29·735	27·815	4th	27·623	17th	·192	85·1	103·7	+4·4	72·9	+1·1	88·3	+2·7	30·8	110·1	15th & 17th.	65·5	20th	44·6
	Poona	1,846	28·018	+·012	29·783	28·108	4th	27·940	17th	·168	79·0	101·1	+1·9	72·6	+0·7	86·8	+1·3	28·5	106·5	4th & 12th.	64·3	2nd	42·2
	Sholapur	1,590	28·250	+·019	29·748	28·356	4th	28·145	17th	·211	84·4	105·5	+0·7	77·0	+0·5	91·2	+0·6	28·5	113·3	17th	67·1	30th	46·2
	Bijapur	*1,948*	27·911	+·015	29·752	27·991	4th	27·827	17th	·164	82·3	102·7	+2·4	74·9	+0·2	88·8	+1·3	27·8	110·2	17th	70·3	29th	39·9
	Belgaum	2,539	27·352	+·030	29·769	27·441	4th	27·285	17th	·156	77·0	93·6	+0·6	68·3	+0·1	80·9	+0·3	25·3	98·3	4th	63·5	10th	31·8
	XI.—Central India.																						
20	Neemuch	1,624	28·153	+·021	29·676	28·286	4th	28·032	17th	·254	88·4	105·6	+1·6	78·6	+1·5	92·1	+1·5	27·0	116·4	15th	72·5	7th	43·9
	Indore	1,823	27·982	+·030	29·694	28·102	4th	27·861	17th	·241	88·3	104·2	+1·4	77·7	+1·8	91·0	+1·6	26·5	112·1	15th	69·1	8th	43·0
21	Nowgong	754	28·971	+·033	29·661P	29·192	4th	28·778	16th	·414	91·2	107·3	+0·4	79·5	−0·3	93·7	+0·1	28·3	117·0	17th	72·0	4th	45·0
	Sutna	1,041	28·669	+·020	29·635	28·864	4th	28·484	15th	·380	90·6	106·6	+1·1	80·2	+0·9	93·4	+1·0	26·4	114·3	15th	69·7	22nd	44·6
	XII.—Central Provinces.																						
22	Buldana	2,132	27·695		29·699P	27·804	4th	27·589	17th	·215	85·6	102·9		79·1		91·0		23·8	108·8	15th	70·5	29th	38·3
	Akola	945	28·857	+·018	29·705	28·977	5th	28·736	17th	·239	91·6	109·9	+2·2	82·3	+1·2	96·1	+1·7	27·6	116·7	16th	77·6	3rd	39·1
	Amraoti	1,215	28·564	+·026	29·662P	28·700	5th	28·436	17th	·264	91·5	108·5	+0·8	82·4	+2·4	95·4	+1·6	26·1	115·8	16th	75·3	2nd	40·5
23	Khandwa	1,044	28·743	+·022	29·710	28·845	4th	28·628	15th	·217	90·6	108·6	+2·1	82·5	+1·6	95·6	+1·9	26·1	116·2	15th	73·6	3rd	42·6
	Hoshangabad	1,006	28·758	+·012	29·684	28·898	4th	28·622	15th	·276	91·6	108·5	+0·9	81·5	+1·2	95·0	+1·1	27·0	116·1	16th	71·9	2nd & 8th.	41·2
	Saugor	1,807	27·947	+·012	29·631	28·132	4th	27·801	16th	·331	90·9	105·6	+0·5	81·2	+2·7	93·4	+1·6	24·4	113·3	15th & 17th.	76·1	2nd	37·2
	Jubbulpore	1,327	28·407	+·012	29·645	28·599	4th	28·243	15th	·356	89·0	106·0	+0·4	78·7	−0·2	92·3	+0·1	27·3	113·3	15th	71·8	9th	41·5
	Seoni	2,033	27·761	+·030	29·650	27·913	4th	27·611	15th	·302	90·7	103·3	−0·6	74·9	−2·2P	89·1	−1·4P	28·4	112·1	18th	65·5	5th	45·6
	Nagpur	1,017	28·739	+·028	29·672	28·890	5th	28·590	15th	·300	92·7	109·0	−0·3	82·9	+1·0	95·9	+0·2	26·1	117·6	15th	73·3	7th & 8th	44·3
24	Pendra	2,123P	27·741		29·624	27·920	4th	27·551	15th	·369	89·2	101·8		77·8		89·8		24·0	109·3	16th & 17th.	71·7	8th	37·6
	Raipur	970	28·771	+·030	29·669	28·942	4th	28·602	15th	·340	90·2	107·0	−0·4	82·8	+0·8	94·9	+0·2	24·2	116·7	17th	74·6	6th & 7th	42·1
	Chanda	*634*	29·109	+·008	29·673	29·277	5th	28·961	16th	·316	91·3	109·3	−0·2	82·1	+0·2	95·7	0	27·2	119·5	16th	72·5	7th	47·0
	Jagdalpur	1,813	27·993		29·692	28·126	5th	27·854	17th	·272	86·0	102·1		76·7		89·4		25·4	115·2	22nd	70·1	3rd	45·1
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	27·906	+·002	29·741	28·053	4th	27·868	15th	·185	87·0	104·8	+0·4P	75·2†	+0·7†	89·0†	+0·5P	29·6	111·9	15th & 17th.	71·7	24th	40·2
	Nizamabad	1,248	28·514		29·702	28·674	4th	28·413	17th	·261	88·8	107·8	+1·9	81·9	+0·8	94·9	+1·3	25·9	116·4	16th	75·7	9th & 29th.	40·7
	Bidar	*2,165*									86·7	102·9		77·8		90·4		25·1	108·5	17th	71·4	29th	37·1
28	Gulbarga	1,503	28·335	+·015	29·740	28·437	4th	28·227	17th	·210	86·4	106·3	+1·5	78·8	+0·3	92·5	+0·9	27·5	113·0	18th	73·3	29th	39·7
	Raichur	*1,311*	28·533	+·036	29·759	28·625	5th	28·454	17th	·171	85·6	104·5	+1·1	79·2	−0·3	91·8	+0·4	25·3	110·0	18th	71·1	23rd	38·9
	Hyderabad (Deccan).	1,690	28·133	+·023	29·708	28·240	5th	28·040	17th	·200	87·5	105·0	+1·2	81·0	+2·4	93·0	+1·8	24·0	110·8	17th & 18th.	74·2	11th	36·6
	Hanamkonda	877	28·915	+·014	29·714	29·039	4th	28·785	16th	·254	90·1	107·0	+2·4	83·2	+1·2	95·1	+1·8	23·8	114·5	17th	75·7	12th	38·8
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·497	+·021	29·785	27·579	4th	27·435	17th	·144	77·5	94·9	+1·2	72·2	+1·2	83·5	+1·2	22·7	97·1	5th, 6th & 11th.	65·3	1st & 8th.	31·8
	Hassan	3,149	26·805	+·022	29·782	26·867	4th	26·759	17th	·108	75·7	89·9	+2·3	68·8	+2·2	79·4	+2·3	21·1	93·2	11th	65·8	11th	27·4
	Bangalore	3,021	26·923	+·027	29·771	26·992	4th	26·861	17th	·131	77·4	95·1	+3·8	71·0	+1·9	83·0	+2·9	24·1	98·3	19th	64·8	29th	33·5
	Mysore	2,618	27·404	+·009	29·792	27·463	4th	27·367	18th	·096	77·8	92·8	+0·7	71·0	+1·4	81·9	+1·1	21·8	97·0	12th, 17th & 21st.	66·5	23rd & 31st.	30·5

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

† Mean of 8 days.

NOTE.—The barometric readings are not reduced to sea-level, in the

B—*continued.*

in India, etc., in May, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1912.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.	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	56	57
																																X.—Bombay—*concld.*
2	2		2			5	12	8	N 78° W	N 79° W	9·8	9·7	+0·1	62	−18	35	−23?	·473	−·265?	0·7	−1·4	0	1·20	−1·20	0·07	0·86	−0·79	0·07	0·86	−0·79	0·07	Malegaon.
	2			1	3	3	8	14	N 72° W	N 31° W	5·3	10·9	−5·6	66	− 2	37	−23?	·431	−·248?	1·5	−0·6	1	1·80	−0·80	0·35	0·69	−0·34	0·35	0·69	−0·34	0·35	Ahmadnagar
12							19		W	N 80° W	8·4	11·2	−2·8	61	−22	57*	+ 3	·565*	+·017	1·0	−1·6	1	2·10	−1·10	0·32	1·18	−0·86	0·32	1·18	−0·86	0·25	Poona.
2					1	2	3	23	N 56° W	N 55° W	10·4	8·2	+2·2	82	+ 6	49	+ 4	·563	+·035	1·9	−1·2	3	2·00	+1·0	0·90	0·94	−0·04	0·90	0·94	−0·04	0·42	Sholapur.
4					1	8	15	3	S 79° W	N 81° W	9·0	6·1	+2·9	76	− 1	56	− 8	·618	−·064	2·1	−1·1	1	3·30	−2·30	0·39	1·09	−0·70	0·39	1·09	−0·70	0·39	Bijapur.
10	1	1				3	14	2	N 87° W	N 67° W	9·5	12·8	−3·3	56	+ 2	68	− 1	·628	+·011	4·6	+0·9	4	4·70	−0·70	2·41	2·45	−0·04	2·41	2·45	−0·04	1·03	Belgaum.
																																XI.—Central India.
5	1	3	1		2	10	8	1	S 67° W	S 84° W	9·9	8·8	+1·1	46	−23	39	−11	·492	−·146	1·1	+0·2	2	1·00	+1·00	0·27	0·38	−0·11	0·27	0·38	−0·11	0·12	Neemuch.
1	3	2				1	11	13	N 57° W	N 71° W	5·3	4·6	+0·7	76	+ 1	39	−11	·505	−·115	1·9	+0·8	1	1·20	−0·20	0·11	0·47	−0·36	0·11	0·47	−0·36	0·11	Indore.
5	1	1	6	1	1	4	12		S 69° W	N 82° W	2·2	2·7	−0·5	23	−31	30	− 4	·440	−·050	3·0	+1·6	1	0·90	+0·10	0·17	0·29	−0·12	0·17	0·29	−0·12	0·12	Nowgong.
4	2		3	3	2	12	4	1	S 40° W	N 73° W	2·4	5·9	−3·5	43	− 1	32	+ 3	·452	+·024	3·1	+2·1	3	1·10	+1·90	0·81	0·37	+0·44	0·81	0·37	+0·44	0·36	Satna.
																																XII.—Central Provinces.
	1					2	14	14	N 70° W		5·3	8·9	−3·6	84		37		·444		0·8		0			0	0·52	−0·52	0	0·52	−0·52	0	Buldana.
	1			1	1	4	13	11	N 79° W	N 68° W	7·3	7·0	+0·3	76	−10	28	−10	·414	−·105	2·9	+1·0	0	0·80	−0·80	0·03	0·37	−0·34	0·03	0·37	−0·34	0·03	Akola.
1	3	1	1		3	3	11	18	N 76° W	N 77° W	7·4	5·0	+2·4	56	−12	31‡	− 8	·470‡	−·072	1·5	−0·6	0	1·50	−1·50	0	0·54	−0·54	0	0·54	−0·54	0	Amraoti.
1	2	1					12	15	N 58° W	N 70° W	8·1	7·5	+0·6	82	− 4	34	− 9	·474	−·075	1·1	0	0	0·80	−0·80	0	0·33	−0·33	0	0·33	−0·33	0	Khandwa.
5		1	2	1		8	7	7	S 87° W	S 66° W	3·9	3·0	+0·9	46	−16	29	−12	·420	−·133	1·5	+0·2	0	1·00	−1·00	0·05	0·53	−0·48	0·05	0·53	−0·48	0·05	Hoshangabad
	1	3	4	1	3	4	9	6	N 85° W	S 86° W	6·8	3·9	+2·9	30	−20	27	− 9	·377	−·109	1·7	+0·5	0	1·00	−1·00	0	0·46	−0·46	0	0·46	−0·46	0	Saugor.
2			2	5	5	4	8	5	S 48° W	S 78° W	2·0	3·1	−1·1	40	−14	29	− 4	·394	−·070	2·0	+0·6	0	1·30	−1·30	0·02	0·49	−0·47	0·02	0·49	−0·47	0·02	Jubbulpore.
	6	3		3	5	4	2	8	N 58° W	N 39° W	4·1	3·4	+0·7	27	−11	24	− 9	·342	−·119	1·5	−0·3	1	1·90	−0·90	0·21	0·69	−0·48	0·21	0·69	−0·48	0·15	Seoni.
	3	2	3	3	4	4	3	9	N 71° W	N 48° W	4·3	5·8	−1·0	23	−24	29	− 5	·414	−·070	1·9	−0·8	1	1·40	−0·40	0·26	0·75	−0·49	0·26	0·75	−0·49	0·24	Nagpur.
12	3			1	7	7		1	S 29° W		3·7			33		31		·412		2·1		0			0·08	0·91	−0·83	0·08	0·91	−0·83	0·07	Pendra.
6	1	1	1		4	11	6	1	S 53° W	S 76° W	4·8	5·6	−1·0	53	+10	36	+ 1	·491	−·021	0·8	−2·3	2	2·30	−0·30	0·29	0·92	−0·63	0·29	0·92	−0·63	0·10	Raipur.
10				5	4	1	10	1	S 47° W	S 84° W	3·9	3·5	+0·4	33	+10	36	0	·513	−·025	1·7	−0·6	0	1·70	−1·70	0·09	0·65	−0·56	0·09	0·65	−0·56	0·05	Chanda.
5				1	12	4	6	3	S 38° W					53		59		·714		2·7		2			2·53			2·53			1·97	Jagdalpur.
																																XIII.—Hyderabad.
	3	1		1		6	12	8	N 78° W		12·8			66		42	+ 2	517		1·8		1	1·60	−0·60	0·19	0·65	−0·46	0·19	0·65	−0·46	0·11	Aurangabad.
8	1			3	3	5	11		S 55° W		4·1			49		39	−12	·519		2·7		3	1·20	+1·80	0·65	0·31	+0·34	0·65	0·31	+0·34	0·41	Nizamabad.
3	1	1		1		9	6	10	N 81° W		6·9			58		39		·501		3·1		2	2·50	−0·50	0·67	0·80	−0·13	0·67	0·80	−0·13	0·26	Bidar.
1	3	3		2	1	4	8	9	N 66° W	N 41° W	8·1	9·1	−1·0	49	−12	44	−11	·553	−·094	0·9	−2·5	2	2·50	−0·50	0·93	1·01	−0·08	0·93	1·01	−0·08	0·58	Gulbarga.
	2	2	1	2		4	10	10	N 68° W	N 83° W	7·6	8·4	−0·8	56	−13	54	0	·664	+·022	3·1	−0·2	3	1·80	+1·20	0·95	0·64	+0·31	0·95	0·64	+0·31	0·37	Raichur.
14							17		W	S 82° W	2·9	4·7	−1·8	55	− 5	48	− 2	·620	+·002	2·4	−9·5	0			0·06	0·79	−0·73	0·06	0·79	−0·73	0·06	Hyderabad (Deccan).
2	1		1	9	5	3	5	5	S 20° W		7·0			30		43	− 7	·583		3·1		2	1·00	+1·00	0·35	0·52	−0·17	0·35	0·52	−0·17	0·21	Hanamkonda.
																																XIV.—Mysore.
				1		9	17	4	S 81° W	S 81° W	5·2	6·6	−1·4	82	−1	69	− 1	·646	−·018	5·6	+0·1	5	4·60	+0·40	4·07	3·05	+1·02	4·07	3·05	+1·02	1·85	Chitaldrug.
4	1					6	12	8	N 85° W	N 80° W	5·9	2·9	+3·0	71	− 7	75	0	·683	+·024	4·	−1·5	5	7·80	−2·80	1·13	5·24	−4·11	1·13	5·24	−4·11	0·30	Hassan.
			1	1	1	6	19	3	S 81° W	S 75° W	5·8	4·6	+1·2	79	− 4	70	− 6	·659	−·009	4·4	−0·3	3	6·50	−3·50	1·44	4·34	−2·90	1·44	4·34	−2·90	0·64	Bangalore.
2	1	1	1	1	2	8	11	4	S 78° W	S 74° W	5·7	7·4	−1·7	56	−20	72	− 2	·681	+·014	6·6	+1·6	6	8·30	−2·30	4·90	5·06	−0·16	4·90	5·06	−0·16	2·62	Mysore.

case of hill or plateau stations, the elevations of which exceed 3,400 feet.

‡ Mean of 22 days.
* „ 30 „

Table

(2) *Abstract of observations taken at 8 hrs. at 219 stations*

	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras.																						
30	Mangalore	65	29·821	+·005	29·817	29·881	7th	29·762	12th	·119	85·5	93·0	+2·0	80·3	+2·9	86·6	+2·5	12·7	95·8	5th	74·9	7th & 29th.	20·9
	Calicut	27	29·852	—·002	29·808	29·905	7th	29·803	12th	·102	82·9	90·0	—0·4	78·7	+0·8	84·3	+0·2	11·3	91·8	6 days	73·6	12th	18·2
	Cochin	9	29·883	+·008	29·820	29·929	9th	29·841	13th	·088	83·3	89·8	+0·2	77·8	+0·2	83·8	+0·2	12·0	92·7	15th	73·7	26th	19·0
	Trivandrum	198	29·694	+·007	29·822	29·746	7th	29·655	13th	·091	82·0	87·6	+1·3	78·1	+1·8	82·8	+1·5	9·5	90·5	8th	75·0	28th	15·5
31	Pamban	37	29·811	+·006	29·777	29·896	4th	29·710	10th	·186	85·5	92·0	+0·8	80·6	—0·8	86·3	0	11·4	93·7	2nd & 16th.	77·0	10th & 11th.	16·7
	Madura	447	29·417	+·033	29·790	29·502	4th	29·368	20th	·134	86·0	100·1	0	79·1	+1·6	89·6	+0·3	21·0	105·0	21st	73·1	6th & 10th.	31·9
	Pudukkottai	318	29·534		29·779	29·643	4th	29·464	20th	·179	86·1	101·9		79·9		90·9		22·0	106·0	16th	70·8	2nd	35·2
	Negapatam	31	29·805	+·011	29·765	29·909	4th & 5th.	29·733	17th	·176	87·7	97·7	+0·4	82·0	+1·8	89·9	+1·1	15·7	104·5	22nd	72·5	10th	32·0
	Trichinopoly	255	29·598	+·020	29·783	29·695	4th	29·541	16th	·154	86·3	100·0	—1·8	78·9	+0·2	89·5	—0·8	21·1	103·6	16th	72·8	20th	30·8
	Coimbatore	1,341	28·518	+·035	29·778	28·600	4th	28·466	18th	·134	80·9	96·4	+1·4	74·4	+1·0	85·4	+1·2	22·0	100·5	6th	68·3	12th	32·2
	Salem	940	28·948	+·019	29·809	29·036	5th	28·881	9th	·155	84·5	101·5	+2·3	78·2	+2·3	89·8	+2·3	23·3	106·5	16th	73·8	17th & 20th.	32·7
	Cuddalore	37	29·800	+·030	29·767	29·908	4th & 5th.	29·731	20th	·177	87·5	98·1	—0·7	81·1	+1·0	89·6	+0·1	17·0	107·8	20th	77·2	10th	30·6
	Vellore	707	29·122		29·754	29·243	4th	29·040	20th	·203	87·5	103·9		80·7		92·3		22·2	109·2	21st	72·5	1st	36·7
	Madras	22	29·794	+·010	29·748	29·920	5th	29·690	20th	·230	89·3	100·0	+1·5	82·9	+1·8	91·5	+1·7	17·1	111·5	20th	77·0	1st	34·5
32	Cuddapah	433	29·397	+·019	29·757	29·495	5th	29·295	17th	·200	90·8	108·1	+1·8	85·3	+1·8	96·7	+1·8	22·8	112·2	17th & 28th.	80·6	11th	31·6
	Bellary	1,475	28·364	+·013	29·746	28·456	4th	28·280	17th	·176	85·2	104·9	+2·5	79·0	+1·5	92·0	+2·0	25·9	108·0	4 days	74·3	29th	33·7
	Kurnool	923	28·902	+·014	29·748	28·995	4th & 5th.	28·822	17th	·173	86·5	106·2	+1·4	81·9	+0·9	94·0	+1·1	24·3	110·7	18th	74·1	29th	36·6
33	Nellore	66	29·732	+·024	29·731	29·864	4th	29·609	20th	·255	90·9	104·9	—1·1	83·2	+1·2	94·1	+0·1	21·7	112·6	20th	78·1	6th	34·5
	Masulipatam	15	29·780	+·024	29·729	29·934	5th	29·609	19th	·325	90·0	102·5	+2·4	82·3	+0·7	92·4	+1·5	20·2	117·3	20th	71·7	12th	45·6
	Cocanada	26	29·775	+·026	29·738	29·931	4th	29·605	20th	·326	88·4	100·2	—0·5	82·5	—0·3	91·3	—0·4	17·7	111·7	23rd	76·6	26th	35·1
	Waltair (Vizagapatam).	*226*	29·563	+·025	29·727	29·723	4th	29·398	18th	·325	87·0	92·3		81·6		87·0		10·7	101·6	28th	74·9	10th	26·7
	Calingapatam	19	29·761		29·718	29·922	4th	29·596	16th	·326	87·3	95·5		81·4		88·4		14·1	98·8	23rd	75·8	2nd & 3rd.	23·0
	Gopalpur	72	29·725	+·037	29·699	29·889	4th	29·514	16th	·375	85·0	91·2	+1·4	81·1	+0·6	86·1	+1·0	10·1	94·7	22nd	75·0	2nd	19·7
	Bay Islands.																						
1	P. V. Fraser	8	29·786‡		29·711‡	29·986	4th	29·550	16th	·436	85·1												
	Port Blair	58	29·824	+·028	29·812	29·920	4th	29·753	31st	·167	82·7	89·1	+0·1	78·6	+0·2	83·8	+0·1	10·5	94·7	4th	71·0	22nd	23·7
	Sliper Island	90	29·771		29·794	29·873	4th	29·671	16th	·202	84·6	89·6		80·5		85·0		9·1	93·6	6th & 16th.	72·6	18th	21·0
	Kashmir.																						
13	Muzaffarabad	2,475																					
	Srinagar	5,204	24·892	+·041	24·863	25·054	4th	24·685	17th	·369	58·2	72·0	—4·9	50·3	—1·2	61·4	—3·1	21·1	84·1	16th	45·1	3rd	39·0
	Gulmarg†	*8,569*	21·893	+·064	21·861	22·025	11th	21·706	18th	·319	49·1	57·5‡	—6·3	37·1	—2·1	47·3‡	—4·2	20·4	71·2	17th	29·3	3rd	41·9
	Dras	*10,059*	20·850	+·026	20·818	20·973	4th	20·642	2nd	·331	44·1	58·1		32·0		45·0		26·1	70·0	17th	21·5	1st	48·5
	Leh	*11,503*	19·750	+·023	19·718	19·869	11th	19·563	2nd	·306	47·8	64·1	+0·1	37·4	+0·6	50·8	+0·3	26·7	72·9	17th	33·0	5th	39·9
	Skardu	*7,505*	22·891	+·026	22·861	23·032	25th	22·635	2nd	·397	58·1	70·8	—0·4	50·1	+0·6	60·4	+0·1	20·7	82·0	17th	32·8	19th	49·4
	Minimarg	*9,359*																					
	Astor	*7,955*																					
	Gilgit	4,890	25·107		25·080	25·257	3rd	24·919	16th	·338	65·2	82·5	—2·9	58·5	—2·3	71·0	—2·8	23·0	98·2	17th	50·2	19th	48·0

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau stations.

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

† Mean of 30 days. ** Mean of 8 days. ¶ Mean of 7 days.

B—*continued.*

in India, etc., in May, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1912.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.	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	56	57
																																XV.—Madras.
1	6	7	8	1	1	1	2	4	N 36° E	N 18° E	4·4	2·8	+1·6	46	+21	69	− 9	·851	−·025	5·3	−1·1	4	6·90	−2·90	2·64	6·26	− 3·62	2·64	6·26	− 3·62	1·34	Mangalore.
10	3	2	5	1		2	1	7	N 2° W	N 15° W	4·3*	3·2	−3·9	23	−17	81	+ 2	·914	+·034	6·2	+0·8	9	9·00	0	8·10	7·79	+ 0·31	8·10	7·79	+ 0·31	1·59	Calicut.
9	2	5	10	5					N 83° E	N 29° E	4·3*	4·5	−0·2	56	+ 9	81	− 1	·913	+·016	5·7	0	15	12·90	+2·10	10·78	11·39	− 0·61	10·78	11·39	− 0·61	3·72	Cochin.
9	12	3	2	1				4	N 7° E	N 16° W	3·3‡	5·2	−1·9	53	−15	81	0	·884	+·013	8·6	+2·4	12	10·20	+1·80	5·74	8·67	− 2·93	5·74	8·67	− 2·93	1·45	Trivandrum.
5	1		1	1	14	7	2		S 16° W	S 22° W	8·2	8·5	−0·3	66	− 7	79	0	·952		3·5		2	1·20	+0·80	0·52	0·80	− 0·28	0·52	0·80	− 0·28	0·28	Pamban.
5	1		2	1	1	3	9	9	N 77° W	N 35° W	3·7	4·5	−0·8	49	− 8	70	+ 4	·854	+0·40	6·9	+2·9	5	4·20	+0·80	3·12	2·87	+ 0·25	3·12	2·87	+ 0·25	1·17	Madura.
19		1				6	1	4	S 82° W		3·5			23		69		·868		5·7		5			1·53	2·26	− 0·73	1·53	2·26	− 0·73	0·73	Pudukkottai.
				5	3	7	16		S 76° W	S 46° W	5·1*	5·8	−0·7	56	−16	70	+ 2	·916	+·041	4·7	+0·6	1	2·10	−1·10	0·39	1·81	− 1·42	0·39	1·81	− 1·42	0·39	Negapatam.
1	1	1			5	9	10	4	S 70° W	S 76° W	3·4*	4·5	−1·1	62	−13	65	+ 1	·811	+·030	4·5	+0·1	5	3·50	+1·50	2·22	3·24	− 1·02	2·22	3·24	− 1·02	0·75	Trichinopoly.
12	1	3	1	5	5	3	1		S 26° E	S 22° W	5·1	3·3	+1·8	27	−41	86	+ 6	·912	+·095	3·3	−1·0	2	4·70	−2·70	0·67	2·47	− 1·80	0·67	2·47	− 1·80	0·30	Coimbatore.
4	1		3		5	11	4	3	S 49° W	S 48° W	3·5	3·0	+0·5	49	− 1	72	+ 1	·847	+·035	§6·9	+2·7	8	7·10	+0·90	3·88	4·90	− 1·02	3·88	4·90	− 1·02	1·39	Salem.
4	1			3	7	11	4	1	S 34° W	S 47° W	7·1	2·1	+5·0	59	− 9	67	− 6	·876	−·038?	4·8	+0·6	1	1·20	−0·20	0·27	0·74	− 0·47	0·27	0·74	− 0·47	0·27	Cuddalore.
5	2	4	13	3		3		1	N 86° E		4·0*			48		60		·775		2·8		3	4·40	−1·40	0·44	2·76	− 2·32	0·44	2·76	− 2·32	0·16	Vellore.
2	1			2	11	9	4	2	S 32° W	S 41° W	6·3	6·6	−0·3	62	−10	69	+ 5	·957	+·093	3·5	−0·6	0	2·30	−2·30	0	1·08	− 1·08	0	1·08	− 1·08	0	Madras.
1	2	4	5	8	2	4	1	4	S 66° E	N 89° W				23	−38	55	+ 2	·802	+·063	1·8	−1·8	1	2·50	−1·50	0·35	1·58	− 1·23	0·35	1·58	− 1·23	0·35	Cuddapah.
8	2		1			1	11	8	N 67° W	N 74° W	5·3*	6·2	−0·9	56	− 9	54	+ 1	·647	+·021	3·1	−1·6	1	3·20	−2·20	0·20	2·04	− 1·84	0·20	2·04	− 1·84	0·11	Bellary.
1	1		4		6	6	4	9	S 74° W	N 84° W	7·8*			37	+ 1	54	+ 2	·668	−·003	2·0	−1·4	2	2·90	−0·90	0·48	0·95	− 0·47	0·48	0·95	− 0·47	0·22	Kurnool.
7					12	1	7	4	N 47° W	S 69° W	6·3	6·4	−0·1	49	+17	58	− 5	·816	−·066	2·2	−2·0	0	1·60	−1·60	0	0·69	− 0·69	0	0·69	− 0·69	0	Nellore.
	1	1	1	4	8	6	6	4	S 39° W	S 38° W	6·8	6·5	+0·3	46	+ 5	75	− 1	1·047	+·002	3·7	−1·5	1	1·90	−0·90	0·19	1·14	− 0·95	0·19	1·14	− 0·95	0·13	Masulipatam.
3	1	3	3	1	3	10	6	1	S 49° W	S 66° W	5·1	5·9	−0·8	33	−21	71	+ 1	·960	+·039	5·9	+0·9	0	2·80	−2·80	0·08	1·16	− 1·08	0·08	1·16	− 1·08	0·08	Cocanada.
1		3		2	1	24			S 37° W	S 22° W	8·9			69	−14	71	− 4	·900	−·031	5·5	−0·4	1	3·40	−2·40	0·61	2·31	− 1·70	0·61	2·31	− 1·70	0·54	Waltair. (Vizagapatam)
	1	1	1	2	4	16	4	2	S 45° W		10·7			65		77		·986		3·3		3			0·79	2·03	− 1·24	0·79	2·03	− 1·24	0·31	Cavelagapatam.
2	1	1	1		14	12			S 18° W	S 30° W	14·0	12·8	+1·2	72	+ 4	81	− 3	·968	−·018	2·9	−2·5	2	3·30	−1·30	0·58	1·94	− 1·36	0·58	1·94	− 1·36	0·44	Gopalpur.
																																Bay Islands.
3				1	8	16	2	1	S 33° W					78		85		1·026		6·1		5			2·51			2·51			1·40	P. V. Fraser.
6	3				5	2	7	8	N 81° W	S 73° W	6·0	5·4	+0·6	46	−15	81	− 6	·913	−·063	7·1	+0·2	11			5·53	16·90	−11·37	5·53	16·90	−11·37	1·50	Port Blair.
1	2		1	1	5	7	6	8	S 79° W		7·9			49		83		·985		5·0		7			7·06	9·25	− 2·19	7·06	9·25	− 2·19	3·64	Slipper Island.
																																Kashmir.
																																Muzaffarabad.
7	1	3	1	11	3	1		4	S 53° E	S 49° E	1·9	2·1	−1·2	27	− 9	81	0	·894	−·013	4·8	+1·4	6	5·80	+0·20	2·81	2·63	+ 0·18	2·81	2·63	+ 0·18	0·96	Srinagar.
7	1	10	7	1		1	1	2	N 55° E		1·1‡			46		75		·259		5·3		10			7·24			7·24			2·50	Gulmarg.
27						1	3		S 79° W		2·8			13		64	− 9	·182		3·2		6	6·20	−0·20	4·56	3·09	+ 1·47	4·56	3·09	+ 1·47	2·25	Dras.
16				1	8	5	1		S 17° W	S 44° W	3·5	2·3	+1·2	43	− 2	44	− 1	·144	+·003	5·2	+0·5	1	0·90	+0·10	0·20	0·21	− 0·01	0·20	0·21	− 0·01	0·13	Leh.
31			4	1	1	3	1		S 24° E		5·7			17		53	− 4	·248		4·8		3	1·90	+1·10	3·66	1·27	+ 2·39	3·66	1·27	+ 2·39	2·30	Skardu.
																																Minimarg.
																																Astor.
28				1		3	1		S 41° W		1·2			13		57	+13	·248	+·037	3·8	−0·3	2	1·20	+0·20	0·77	0·94	− 0·17	0·77	0·94	− 0·17	0·41	Gilgit.

stations, the elevations of which exceed 3,200 feet. § Mean of 30 days. ‡ Mean of 29 days. * Uncorrected for scale error. ‖ Since 3rd May 1912.

Table

(2) *Abstract of observations taken at 8 hrs. at 219 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Baluchistan.																						
15	Fort Sandeman		25·315		25·334	25·507	4th	25·194	17th	·313	76·0	91·8		62·6		77·2		29·2	103·4	16th & 17th.	53·6	6th & 7th	49·8
	Quetta	5,502	24·623	+·039	24·583	24·738	5th	24·498	17th	·240	70·4	84·4	+0·9	51·5	—0·7	67·9	+0·1	32·9	94·6	16th	41·7	2nd	52·9
	Chaman	4,311	25·645	+·014	25·607	25·900	5th	25·624	17th	·276	79·2	91·1	—2·6	63·8	—3·8	77·4	—3·2	27·3	102·8	16th	50·8	2nd & 21st.	52·0
	Kalat	6,630	23·839		23·801	23·956	5th	23·743	29th	·223	59·7	81·3		41·7‖		62·3‖		39·6	93·5	16th	33·2	21st	60·3
	Dalbandin	2,779	27·048		29·657	27·245	5th	26·927	16th	·318	85·7	102·4		68·6		85·5		33·8	111·8	16th	54·3	2nd	57·5
	Pasni		29·751		29·711	29·936	4th	29·569	17th	·367	80·0	93·5		76·2		84·9		17·3	102·0	20th	70·0	3rd	32·0
	Panjgur		26·673		26·631	26·822	5th	26·491	17th	·331	74·8	98·5		67·9		83·2		30·6	108·6	15th	58·0	2nd	50·8
	Robat		26·725		26·683	26·920	5th	26·572	15th	·348	82·3	100·7		74·9		87·8		25·8	110·0	16th	59·8	1st	50·2
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*									65·7	81·7		54·5		68·1		27·2	91·8	16th	46·2	3rd	45·6
	Para Chinar	6,000	24·409		24·385	24·572	4th	24·186	18th	·386	69·0	79·8		55·5		67·7		24·3	92·2	16th	45·1	2nd	47·1
	Cherat	*4,256*	25·643	+·050	25·611	25·814	4th	25·382	18th	·432	73·5	85·7	—3·9	66·0	—2·3	75·8	—3·1	19·7	97·2	16th & 18th.	49·4	6th	47·8
	Murree	6,333	23·826	+·029	23·794	23·975	4th	23·631	18th	·344	65·8	75·0	—1·9	62·7	+3·2	68·8	+0·7	12·3	84·6	16th	48·7	3rd	35·9
	Simla	7,232	23·113	+·048	23·075	23·241	11th	23·005	15th	·236	63·9	71·9	—1·2	58·5	—0·1	65·2	—0·7	13·4	82·1	18th	48·6	7th	33·5
	Sarain		23·143		23·110	23·261	4th	23·029	15th	·232	61·0	70·7		48·9		59·8		21·8	83·8	17th	37·2	3rd	46·6
	Kalabagh§		20·144		20·106	20·238	27th	20·061	21st	·177	50·2	55·4		44·3		49·9		11·1	63·6	17th	36·1	21st & 23rd.	27·5
	Chakrata	7,022	23·294	+·048	23·254	23·401	11th	23·137	15th	·264	64·1	74·4	+0·1	54·6	—2·0	64·3	—0·9	19·8	80·2	30th & 31st.	45·2	8th	35·0
	Mukteswar	7,592	22·849	+·014	22·808	22·974	11th	22·693	15th	·281	61·3	72·6	—2·9	53·0	—2·5	62·9	—2·7	19·6	78·5	17th	42·5	7th	36·0
	Darjiling	7,376	22·985	+·004	22·940	23·119	11th	22·809	16th	·310	57·9	64·8	+1·0	52·4	—0·2	58·6	+0·4	12·4	69·8	18th & 19th.	47·2	8th	22·6
	Shillong	4,920	25·100		25·052	25·286	11th	24·901	16th	·385	67·4	74·3		58·6		66·5		15·7	79·4	20th	54·7	1st, 2nd & 16th.	24·7
	Cherrapunji	4,309	25·664		25·615	25·796	4th & 11th.	25·469	16th	·327	67·2	73·5		60·8		67·2		12·7	78·7	12th	43·1	8th	35·6
	Maymyo	3,545	26·396	+·012	26·341	26·507	4th	26·251	16th	·256	71·6	82·5	—0·4	64·3	+0·7	73·4	+0·1	18·2	91·0	8th	59·6	3rd & 6th	31·4
	Pachmarhi	3,528	26·338	+·021	26·335	26·527	4th	26·265	16th & 17th.	·262	85·0	97·4	+2·3	74·5	—0·6	86·0	+0·9	22·9	104·5	16th	69·1	10th & 24th.	35·4
	Mount Abu	3,945	26·020	+·040	25·970	26·154	4th	25·884	17th	·270	81·8	90·8	+2·6	74·6	+3·5	82·7	+3·1	16·2	100·2	14th & 15th.	67·9	2nd & 24th.	32·3
	Mercara	3,781	26·221	+·022	26·154	26·272	4th	26·187	12th & 31st.	·085	70·9	81·6	+1·3	65·9	+1·0	73·7	+1·1	15·7	87·0	5th	62·0	8th & 12th.	25·0
	Ootacamund	*7,327*	23·079		23·015	23·130	4th	23·047	17th	·083	63·6	71·5		53·8		62·7		17·7	77·0	20th	51·2	24th, 27th & 29th.	25·8
	Kodaikanal	7,683	22·849	+·010	22·784	22·898	4th	22·819	17th	·079	62·7	70·9	+1·6	55·3	+0·4	63·1	+1·0	15·6	78·0	24th	53·0	12th, 20th & 28th.	25·0
	Extra India.																						
	Singapore (*a*)	10	29·922		29·853	29·994	12th	29·859	19th	·135	84·0	88·1		76·5		82·3		11·6	90·6	11th	70·8	28th	19·8
	Penang (*a*)	20	29·849		29·794	29·905	8th	29·725	18th	·180	84·3	9·00		76·9		83·5		13·1	93·0	14th & 18th.	7·00	22nd	23·0
	Trincomalee	99	29·755		29·783	29·848	4th	29·682	20th	·166	79·6	95·2	+2·2	76·5	—2·3	85·8	—0·1	18·7	98·5	24th	71·0	24th	27·5
	Colombo	24	29·863	—·009	29·813	29·919	7th	29·807	2nd	·112	78·5	88·8	+0·8	78·2	—2·2	82·5	—0·7	12·6	92·0	3rd	72·0	24th	20·0
	Minicoy	7	29·908			29·946	4th	29·860	17th	·086													
	Amini Divi	*13*									47·4	66·5		31·0		48·8		35·5	74·2	19th	26·0	4th, 9th & 11th.	48·2
	Gyantse	13,120	17·088		17·048	17·179	11th	16·965	23rd	·214	41·6	49·8		24·7		37·2		24·9	55·1	18th & 19th.	12·1	8th & 10th.	43·0
	Pharijong	14,400									63·3	73·3		57·1		65·2		16·2	80·3	19th	51·3	1st	29·0
	Gangtok	5,660P									34·2	52·9		22·5		37·7		30·4	61·2	27th	18·4	21st	44·8
	Gartok (*b*)	15,100P	17·522			17·600	4th, 19th & 21st	17·450	7th, 27th & 30th.	·150													

N.B.—Elevations in italics indicate barometrical determinations.
(*a*) 9 hrs. observations.
(*b*) Aneroid corrected.

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill

B—*continued.*

***in India, etc., in May, 1912*—continued.**

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st to 31st May, 1912. (53)	Normal rainfall for period, 1st to 31st May. (54)	Departure from normal of period, 1st to 31st May, 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																Baluchistan.
5	3	3	1		1	6	11	1	N 87° W		3·7			43		33		·278		1·2		1			0·21			0·21			0·13	Fort Sandeman,
23	1	1		1		3	1	1	S 80° W	N 80° W	1·6	2·4	−0·8	6	+ 4	40	− 5	·301	−·040	1·0	0	1	1·10	−0·10	0·18	0·38	− 0·20	0·18	0·38	− 0·20	0·15	Quetta,
13				3	3	7	2	3	S 41° W	S 32° W	5·3	5·5	−0·2	33	−13	36	+ 5	·340	+·034	0·7	+0·1	0	0·10	−0·10	0·07	0·11	− 0·04	0·07	0·11	− 0·04	0·06	Chaman.
23		1		2	2			3	S	S 34° W	5·3			2	−35	54		·280		0·1		1	0·90	+0·10	0·37	0·25	+0·12	0·37	0·25	+0·12	0·31	Kalat,
2	1	3	9	4	3	6	1	2	S 53° E		5·6			27		39		·490		0·9		0			0·02			0·02			0·02	Dalbandin.
18			2				9	2	N 81° W		4·6			27		87		·886		0		0			0			0			0	Pasni.
4	1	8	12	3		1		2	N 73° E		6·0			59		46		·394		0·1		1			0·13			0·13			0·13	Panjgur.
11	1	2	4	[illegible]	5	1	1	3	S 58° E		2·0			13		26		·279		1·5		0			0			0			0	Robat.
																																Hill stations, excluding Kashmir and Baluchistan.
26	1			1		1	1	1	N 16° W		2·8			6		57		·332		4·5		2			1·20	1·97	− 0·77	1·20	1·97	− 0·77	0·83	Chitral.
10	1	2	1	3	2	4	4	4	S 72° W		2·8			17		72		·269		2·2		5	6·50	− 1·50	1·46	2·76	− 1·30	1·46	2·76	− 1·30	0·34	Para Chinar.
4	11	2		1	2	3	1	7	N 26° W	N 6° W	7·2	8·8	−1·6	46	− 1	38	+ 4	·297	+·003	4·1	+1·9	2			1·09	1·74	− 0·65	1·09	1·74	− 0·65	0·92	Cherat.
18			1	8	2	2			S 30° E	N 7° E	3·1	5·8	−2·7	33	+18	50	+11	·317	+·060	3·2	+0·4	7	6·30	+0·70	4·16	2·95	+ 1·21	4·16	2·95	+ 1·21	1·86	Murree.
																42	− 3	·248	−·019	2·0	−0·8	6	5·20	+0·80	2·62	2·68	− 0·06	2·62	2·68	− 0·06	0·61	Simla.
20		2	4		4	1			S 59° E		1·2			19		55		·286		2·6		6			2·36	2·04	+ 0·32	2·36	2·04	+ 0·32	1·02	Sarain.
4	4			3	3			5	N 27° W		5·3‖			11		49		·177		3·0		3			1·22‡			1·22‡			0·77	Kalabagh §
11	14	2		1	1	1		1	N 3° E	N 21° E	3·4	5·7	−2·3	46	+36	51	+ 4	·308	+·028	1·9	0	5	5·90	−0·90	2·21	2·46	− 0·25	2·21	2·46	− 0·25	0·99	Chakrata.
9		4	2		1	1	13	1	N 78° W		7·1			33		51	+ 1	·272		2·5		7			2·90	2·09	+ 0·81	2·90	2·09	+ 0·81	0·90	Mukteswar.
18	1	1		2		1	8		S 87° W	S 59° W	2·1	5·0	−2·9	22	+11	87	− 3	·415	−·014	6·8	+0·1	13	13·43	−0·43	3·79	8·74	− 4·95	3·79	8·74	− 4·95	0·65	Darjiling.
21					3	6	1		S 36° W		2·0			30		70		·463		4·8		16	17·80	−1·80	8·95	9·17	− 0·22	8·95	9·17	− 0·22	1·21	Shillong.
22			1			6	2		S 51° W		2·1			23		81		·547		7·2		16	21·10	−5·10	10·78	32·16	−21·38	10·78	32·16	−21·38	2·16	Cherrapunji.
14						17			S 45° W		1·7			56		82	+ 3	·632		5·6		12	12·80	−0·80	8·43	9·31	− 0·88	8·43	9·31	− 0·88	1·95	Maymyo.
	1	4	2	3	2	4	4	11	N 58° W	N 81° W	6·3	5·5	+0·8	30	−33	30	− 7	·357	−·050	1·3	−0·7	1	1·30	−0·30	0·12	0·55	− 0·43	0·12	0·55	− 0·43	0·12	Pachmarhi.
1	4	1		2	1	10	7	5	S 85° W	S 72° W	7·3	7·9	−0·6	49	−19	28	−12	·295	−·065	0·5	−0·3	0	1·30	−1·30	0	0·72	− 0·72	0	0·72	− 0·72	0	Mount Abu.
13	3						6	9	N 53° W	N 45° W	3·0	3·9	−0·9	49	−16	89	+ 4	·668	+·056	6·3	+0·2	10	9·00	+1·00	4·23	5·79	− 1·56	4·23	5·79	− 1·56	0·91	Mercara.
12	2	4	6	6	1				S 88° E		1·4			42		68		·397		5·1		15	9·70	+5·30	4·63	7·84	− 3·21	4·63	7·84	− 3·21	0·97	Ootacamund.
	7	4	5	5				10	N 18° E		7·8*			46		69	+ 3	·393		4·5		9	9·30	−0·30	5·94	5·86	+ 0·08	5·94	5·86	+ 0·08	1·27	Kodaikanal.
																																Extra India.
6				7	6	9	1	2	S 14° W		3·4			56						6·5		12			82·8	5·96	+2·32	8·28	5·96	+2·32	1·91	Singapore.
	1	15	1	6	2			6	N 50° E		8·6			46								16			14·79	8·48	+6·31	14·79	8·48	+6·31	3·83	Penang.
2						29			S 45° W	S 45° W	5·5*	8·8	−3·3	92	− 5	90†	+12	·905†	−·013	6·3	+3·8	5			3·90	2·36	+1·54	3·90	2·36	+1·54	2·23	Trincomalee.
20						9	1	1	S 55° W	S 45° W	3·0*	6·7	−3·7	33	−45	91	+13	·886	−·028	8·5	+2·2	24			18·97	10·70	+8·27	18·97	10·70	+8·27	2·29	Colombo.
	2	1	1		2	11	6	8	S 87° W	N 69° W	6·5	7·4	−0·9	58	−18					5·2	−0·1	8			6·50	5·68	+0·82	6·50	5·68	+0·82	1·85	Minicoy.
																										3·14			3·14			**Amini Divi.**
23	1	2	3	2					N 81° E		P			19		78		·257		0·2		1			0·31			0·31			0·25	Gyantse.
14	3	2		6	2	4			S 31° E		8·3			19		67		·173		4·2		9			3·78			3·78			1·00	Pharijong.
28			1	1			1		S 45° E		1·0			3		85		·493		1·9		20			21·15	19·45	+1·70	21·15	19·45	+1·70	2·56	Gangtok.
5				16	3	7			S 18° E		6·3			65						4·3		0			0			0			0	Gartok.

‡ Rainfall since 13th May 1912.

* Uncorrected for scale error.

† Mean of 30 days

‖ " " 19 "

§ " " 18 "

or plateau stations, the elevations of which exceed 3,200 feet.

Table

(2) *Abstract of observations taken at 8 hrs. at 219 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India—*concld.*																						
	Kashgar (*a*) . .	4,255	25·479			25·650	20th	25·220	2nd	·430	70·0	83·8	+2·9	59·0	+0·9	71·4	+1·9	24·8	93·1	9th	49·3	25th	43·8
	Kabul* . .		24·243		24·212	24·322	30th	24·144	23rd	·178	69·2	84·4	+1·3	66·1	+12·2	75·2	+6·7	18·3	91·5	17th	61·9	13th	29·6
	Meshed . .	3,104	26·742		29·800	26·918	8th	26·461	2nd	·457	64·5	78·7		53·6	−3·6	66·1		25·1	92·9	16th & 29th.	43·1	1st	49·8
	Jask . . .	13	29·750	−·001	29·716	29·951	5th	29·620	25th	·331	81·1	93·2	+0·8	77·7	−0·6	85·4	+0·1	15·5	98·8	31st	71·8	26th	27·0
	Muscat . .	20	29·780	+·046	29·748	29·967	5th	29·650	25th	·317	91·7	100·4	+8·9	85·7	−0·2	93·1	+4·3	14·7	112·3	26th	77·6	2nd	34·7
	Bahrein . .	18	29·831		29·802	29·974	4th	29·691	14th	·283	82·6	89·2		75·9		82·6		13·3	103·3	23rd	65·5	2nd	37·8
	Bushire . .	14	29·795	+·028	29·771	29·946	5th	29·675	14th	·271	80·4	88·1	−1·0	73·7	−1·6	80·9	−1·3	14·4	101·8	24th	65·0	2nd	36·8
	Busrah . .	25	29·814		29·808	30·014	15th	29·594	14th	·420	81·3	90·4		74·5		82·5		15·9	101·5	23rd	61·3	1st	40·2
	Kerman . .										70·8	91·8		53·5		72·6		38·3	99·5	15th	36·5	1st	63·0
	Ispahan (*b*) . .	*5,817*	24·328			24·490	5th	24·160	15th	·330	69·3	84·4	+0·3	55·0	+0·9	69·7	+0·6	29·4	92·4	28th	45·7	1st	46·7
	Tehran (*b*) . .	*4,002*	25·715			25·850	5th	25·540	15th	·310	68·6	79·9	−3·0	59·2	−0·2	69·5	−1·6	20·7	96·3	31st	45·3	1st	51·0
	Baghdad . .	127	29·715	+·003	29·817	29·901	7th	29·481	14th	·420	76·1	85·8	+4·0	66·0†	−2·0†	80·9†	+1·0	29·8	112·6	30th	58·5	15th	54·1
	Beirut ‡ . .				29·927						69·3	74·3		62·1		68·2		12·2	98·8	28th	52·7	14th	46·1
	Aden . . .	94	29·812	+·044	29·838	29·897	7th	29·765	21st	·132	84·8	92·2	−1·1	81·4	+0·4	86·8	−0·3	10·8	96·1	24th & 26th.	75·9	7th	20·2
	Zanzibar . .	72	30·005	−·003	30·003	30·078	30th	29·940	3rd	·138	78·7	85·4	+2·0	76·9	+1·3	81·1	+2·1	8·5	87·1	4th	72·5	9th	14·6

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*) Aneroid corrected.
(*b*) ,, uncorrected.

‡ 8½ hrs. observations.

* Mean of 23 days.
† ,, ,, 30 ,,

B—*concluded.*

in India, etc., in May, 1912—concluded.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1912.	Normal rainfall for period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.	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	56	57
																																Extra India —*concld.*
23						1		7	N 56° W	N 50° W	0·8	3·3	−2·5	26		59		·425		2·8		2			0·58	0·70	−0·12	0·58	0·70	−0·12	0·30	Kashgar.
			5	6	5	3	4		S 15° E	N 34° W				48	+37	59		·419				0			0	0·95	−0·95	0	0·95	−0·95	0	Kabul.*
25	2	1		1			2		N 27° W		1·2			6		60		·366		4·4		3			0·91	1·39	−0·48	0·91	1·39	−0·48	0·30	Meshed.
	2		7	2			8	12	N 42° W	N 60° E	7·2	8·0	−0·8	40	+34	67	− 1	·708	−·115	0	−0·7	0			0	0	0	0	0	0	0	Jask.
1	4		6		1	1	7	11	N 43° W	N 36° W	5·3	3·1	+2·2	46	+ 4	44	−18	·619	−·199	0	−0·4	0			0	0	0	0	0	0	0	Muscat.
	8	1	1		3	3	4	11	N 48° W		6·5			52		60		·663		0·2		0			0	0·10	−0·10	0	0·10	−0·10	0	Bahrein.
12	3	1	1		1	1	2	10	N 38° W	N 25° W	8·9	6·9	+2·0	37	−18	69	+ 9	·710	+·057	0·5	−0·9	0			0	0·02	−0·02	0	0·02	−0·02	0	Bushire
4	2	2		4	1	4	6	8	N 79° W		3·5			32		48		·517		2·5		0			0	0·46	−0·46	0	0·46	−0·46	0	Bushire.
23	3			1	1	1	1	1	N 63° W		2·5			6		39		·294				0			0			0			0	Kerman
28						2	1		S 63° W	N 58° W	3·5	3·4	+0·1	6		39		·285		1·5		0			0	0·25	−0·25	0	0·25	−0·25	0	Ispahan.
18	1	3	3	1		4	1		S 78° E	S 46° W	3·0	2·6	+0·4	6		47		·315		1·0		2			0·34	0·45	−0·11	0·34	0·45	−0·11	0·15	Tehran.
14	2			2	2	1		10	N 50° W	N 1° E	4·1	2·9	+1·2	26		44		·396		1·7		0			0	0·23	−0·23	0	0·23	−0·23	0	Baghdad.
2	1	4	2	1	8	6	6	1	S 32° W					32		69		·489		3·5		3			1·36			1·36			0·53	Beirut.
8		22	1						N 47° E	S 87° E	7·6	8·2	−0·6	72	+33	75	0	·897	−·021	3·0	0	0			0	0·13	−0·13	0	0·13	−0·13	0	Aden.
2				3	12	12	2		S 19° W	S 7° W	4·4	5·9	−1·5	81	− 6	84	− 2	·825	+·018	4·8	−1·6	4			3·45	11·42	−7·97	3·45	11·42	−7·97	1·96	Zanzibar.

Table C.—Abstract of observations taken at 8 hrs. at 62 fourth and fifth class stations in India, etc., in May, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Bishnath‡	77·0	89·1	...	71·5	...	80·3	...	17·6	95·6	20th	66·7	1st	28·9	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	78·7	88·7	...	70·4	...	79·5	...	18·3	96·0	20th	65·7	1st & 4th	30·3	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	75·1	91·2	...	68·8	...	80·0	...	22·4	97·2	13th & 30th.	63·1	2nd	34·1	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	73·2	86·9	...	69·9	...	78·4	...	17·0	94·3	19th	64·2	5th	30·1	...	...	...	...	...	...	...	...	...	...	...
	Dikom	76·0	87·0	...	70·5	...	78·7	...	16·5	94·6	19th	64·0	9th	30·6	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	78·4	79·0	...	71·8	...	75·4	...	7·2	85·4	19th	65·8	3rd	19·6	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	...	...	...	...	...	...	Observations not received.					...	...	...	...	...	...	...	...	...	...	...	...	...
	Jorehat	79·1	87·0	...	71·5	...	79·3	...	15·5	93·1	13th & 20th.	65·8	9th	27·3	...	...	...	...	...	...	...	...	...	...	...
	Lumding	76·1	89·5	...	70·7	...	80·1	...	18·8	95·1	13th	65·0	1st	30·1	...	...	...	...	...	...	...	...	...	...	...
	Messa	82·9	91·6	...	68·8	...	80·2	...	22·8	97·7	20th	62·1	2nd	35·6	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	72·0	87·3	...	67·6	...	77·5	...	19·7	94·4	20th	61·0	16th	33·4	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	79·9	91·0	...	72·3	...	81·7	...	18·7	96·0	7th	64·2	1st	31·8	...	...	...	...	...	...	...	...	...	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	81·9	89·4	...	74·5	...	81·9	...	14·9	94·8	11th	67·5	2nd	27·3	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	83·7	92·3	...	73·6	...	82·9	...	18·7	99·0	7th	67·1	9th	31·9	...	...	...	...	...	...	...	...	...	...	...
	Pabna	81·3	93·2	...	74·5	...	83·9	...	18·7	104·5	6th	66·1	15th	38·4	...	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	77·6	90·9	...	68·9	...	79·9	...	22·0	96·4	19th	58·0	5th	38·4	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	79·2	88·5	...	68·0	...	78·3	...	20·5	93·3	19th	60·1	8th	33·2	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	77·0	87·9	...	70·3	...	79·1	...	17·6	93·1	19th	63·0	8th	30·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

‡ Observations of 24 days.

C.

at 62 fourth and fifth class stations in India, etc., in May, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May 1912.	Normal rainfall of period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	...	...	...	96	...	·893	...	...	...	11	...	...	4·76†	8·15	−3·39	4·76†	8·15	−3·39	0·77	Bishnath.
...	...	...	...	...	80	...	·776	...	...	...	13	...	...	7·24	8·39	−1·15	7·24	8·39	−1·15	1·21	Borjuli.
...	...	...	...	...	91	...	·796	...	...	...	14	...	...	8·26	12·82	−4·56	8·26	12·82	−4·56	1·05	Chandkhira.
...	...	...	...	...	91	...	·739	...	...	...	12	...	...	8·83	7·94	+0·89	8·83	7·94	+0·89	2·58	Doom Dooma.
...	...	...	...	...	85	...	·764	...	...	...	18	...	...	9·01	8·81	+0·20	9·01	8·81	+0·20	2·01	Dikom.
...	...	...	...	...	83	...	·803	...	...	...	14	...	...	10·67	8·25	+2·42	10·67	8·25	+2·42	3·63	Golaghat.
...	...	...	...	...	...	...	Observations not received.					...	...	...	...	...	...	...	...	...	Hailakandi.
...	...	...	...	...	84	...	·826	...	...	...	15	...	...	12·26	8·94	+3·32	12·26	8·94	+3·32	2·44	Jorehat.
...	...	...	...	...	88	...	·788	...	...	...	8	...	..	2·20	...	...	2·20	...	...	0·66	Lumding.
...	...	...	...	...	73	...	·809	...	...	...	13	...	...	8·32	7·76	+0·56	8·32	7·76	+0·56	1·60	Messa.
...	...	...	...	...	95	...	·744	...	...	...	14	...	...	6·11	10·78	−4·67	6·11	10·78	−4·67	0·91	Panerihat.
...	...	...	...	...	86	...	·875	...	...	...	15	...	...	9·54	12·99	−3·45	9·54	12·79	−3·54	2·36	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	13	11·89	+1·11	13·15	11·20	+1·95	13·15	11·20	+1·95	2·67	Comilla.
...	...	...	...	...	79	...	·862	...	...	...	15	...	...	7·97	10·63	−2·66	7·97	10·63	−2·66	2·16	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	11	10·72	+0·28	7·35	8·54	−1·19	7·35	8·54	−1·19	1·11	Faridpur.
...	...	...	...	...	80	...	·919	...	...	...	10	...	...	8·77	7·52	+1·25	8·77	7·52	+1·25	2·23	Goalundo.
...	...	...	...	...	83	...	·882	...	...	...	7	...	...	6·01	6·49	−0·48	6·01	6·49	−0·48	2·28	Pabna.
...	...	...	...	...	...	...	...	...	...	...	6	10·16	−4·16	3·55	7·95	−4·40	3·55	7·95	−4·40	1·00	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	6	7·74	−1·74	3·52	5·61	−2·09	3·52	5·61	−2·09	1·30	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	6	5·58	+0·42	2·55	3·97	−1·42	2·55	3·97	−1·42	0·75	Malda.
...	...	...	...	...	...	...	...	...	...	...	15	11·19	+3·81	8·61	10·11	−1·50	8·61	10·11	−1·50	1·24	Rangpur.
...	...	...	...	...	87	...	·817	...	...	...	18	...	...	16·42	12·26	+4·16	16·42	12·26	+4·16	2·30	Dam Dim.
...	...	...	...	...	80	...	·806	...	...	...	17	...	...	12·05	11·17	+0·88	12·05	11·17	+0·88	1·52	Kalchini.
...	...	...	...	...	81	...	·749	...	...	...	18	...	...	16·26	12·65	+3·61	16·26	12·65	+3·61	2·41	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	17	14·76	+2·24	10·51	15·26	−4·75	10·51	15·26	−4·75	1·70	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	9	7·74	+1·26	9·81	6·08	+3·73	9·81	6·08	+3·73	1·90	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	4	6·19	−2·19	2·33	4·04	−1·71	2·33	4·04	−1·71	1·72	Bankura.
...	...	...	...	...	...	...	...	...	...	...	6	5·18	+0·82	1·26	3·77	−2·51	1·26	3·77	−2·51	0·33	Raniganj.

† Rainfall 8th to 14th not included.

Table

Abstract of observations taken at 8 hrs.

Number of sub division.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	86·5	102·7	...	77·6	...	90·2	...	25·1	107·6	31st	72·4	15th	35·2	...	...	...	...	...	...	...	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XII.—Central Provinces.																								
23	Chhindwara	89·4	104·1	...	77·4	...	90·7	...	26·7	110·7	15th	71·9	3rd & 24th.	38·8	...	2	2	...	1	3	8	3	12	N 79° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	86·0	104·9	...	79·7	...	92·3	...	25·2	108·5	16th	73·5	31st	35·0	...	...	...	...	...	...	...	...	...	...	...
33	Guntur	90·0	106·5	...	81·8	...	94·2	...	24·7	117·2	19th & 20th.	66·0	12th	51·2	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	89·3	99·5	...	76·3	...	87·8	...	23·2	110·6	16th	60·5	3rd	50·1	...	10	13	4	...	4	...	...	...	N 41° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	53·5	68·8	...	43·2	...	56·0	...	25·6	82·7	16th	33·8	19th	48·9	...	17	11	1	...	...	...	...	2	N 15° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C—*continued.*

at 62 fourth and fifth class stations in India, etc., in May, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity, at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1912.	Normal rainfall of period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	3	3·93	−0·93	2·70	2·19	+0·51	2·70	2·19	+0·51	1·57	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	4	4·16	−0·16	2·35	2·87	−0·52	2·35	2·87	−0·52	0·76	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	4	3·65	+0·35	2·01	2·53	−0·52	2·01	2·53	−0·52	1·16	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	4	4·25	−0·25	3·93	2·82	+1·11	3·93	2·82	+1·11	2·97	Motihari.
...	...	...	...	...	...	...	...	...	...	...	1	2·13	−1·13	0·92	1·35	−0·43	0·92	1·35	−0·43	0·87	Chapra.
...	...	...	...	...	...	...	...	...	...	...	2	2·45	−0·45	1·33	1·57	−0·24	1·33	1·57	−0·24	1·18	Arrah.
...	...	...	...	...	...	...	...	...	...	...	1	1·47	−0·47	0·15	0·82	−0·67	0·15	0·82	−0·67	0·11	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	63	...	·799	...	...	...	...	...	...	No	rain g	auge.	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	1	1·50	−0·50	0·28	0·58	−0·30	0·28	0·58	−0·30	0·27	Meerut.
...	...	...	...	...	...	...	...	...	...	...	4	3·40	+0·60	0·57	1·48	−0·91	0·57	1·48	−0·91	0·20	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	1	1·70	−0·70	0·25	0·79	−0·54	0·25	0·79	−0·54	0·19	Udaipur.
																					XII.—Central Provinces.
2·8	...	...	48	...	37	...	·508	...	0·6	...	0	...	...	0·04	...	...	0·04	...	...	0·03	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	5	3·30	+1·70	1·83	1·51	+0·32	1·83	1·51	+0·32	0·77	Tinnevelly.
...	...	...	...	...	58	...	·714	...	3·9	...	2	...	...	0·71	...	...	0·71	...	...	0·48	Anantapur.
...	...	...	...	...	73	...	1·001	...	1·7	...	4	...	...	2·07	...	...	2·07	...	...	1·25	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	14	...	...	17·13	11·91	+5·22	17·13	11·91	+5·22	4·43	Car Nicobar.
																					Kashmir.
...	...	...	65	...	32	...	·430	...	2·3	...	1	...	...	0·44	...	...	0·44	...	...	0·34	Jammu.
...	...	...	...	...	...	...	...	...	...	...	12	...	...	6·38	5·82	+0·56	6·38	5·82	+0·56	1·93	Sonamarg.
...	...	...	87	...	47	...	·186	...	4·5	...	3	...	...	3·97*	...	...	3·97	...	...	2·10	Kargil.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor.

* Rain and snow water.

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	77·0	86·7	...	69·7	...	78·2	...	17·0	91·5	19th	63·4	8th	28·1	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	67·0	72·0	...	61·1	...	66·5	...	10·9	75·7	12th	55·5	8th	20·2	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo*	...	68·2†	...	47·0	...	57·4†	...	21·2	81·7	17th	37·2	3rd	44·5	23	...	...	...	1	...	...	5	1	W	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drosh	64·9	84·2	...	59·5	...	71·9	...	24·7	95·0	17th	46·1	2nd	48·9	6	1	9	12	1	...	2	...	...	N 74° E	...
	Pishin	...	86·7	...	54·1	...	70·4	...	32·6	97·4	16th	43·1	2nd & 19th.	54·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	96·8	...	88·0‡	...	96·4‡	...	8·8	108·8	30th	81·5	24th	27·3	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	50·5	63·1	...	41·3	...	52·2	...	21·8	73·3	17th	33·1	9th	40·2	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	63·5	77·1	...	46·6	...	61·8	...	30·5	90·6	30th & 31st	34·6	7th	56·0	...	...	...	...	...	..	...	...	...	...	...
	Koweit	...	93·2	...	75·3	...	84·3	...	17·9	108·6	29th	61·2	1st	47·4	2	7	...	3	2	1	2	7	7	N 48° W	...
	Maidan	...	98·9	...	71·4	...	85·1	...	27·5	109·2	30th	60·6	1st	48·6	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	93·6	...	74·0	...	83·8	...	19·6	101·4	27th	65·4	1st	36·0	...	...	...	...	...	...	3	...	19	N 56° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	95·7	...	67·3	...	81·5	...	28·4	110·2	16th	52·2	1st	58·0	2	4	...	1	...	...	...	6	18	N 47° W	...

* Observations of 30 days.

† Mean of 25 days.

C—*concluded.*

at 62 fourth and fifth class stations in India, etc., in May, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity, at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st May, 1912.	Normal rainfall of period, 1st to 31st May.	Departure from normal of period, 1st to 31st May, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	76	...	·704	...	...	...	16	...	...	17·54	8·58	+8·96	17·54	8·58	+8·96	2·85	Panighatta.
...	...	...	...	...	84	...	·555	...	...	...	19	...	...	11·41	9·13	+2·28	11·41	9·13	+2·28	2·15	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	26	...	...	19·92	...	...	19·92	...	...	2·60	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	4	...	...	3·59	...	...	3·59	...	...	1·50	Lachung.
...	...	...	16	...	...	...	...	...	3·7	...	3	...	...	0·93	1·05	−0·12	0·93	1·05	−0·12	0·65	Poo.
...	...	...	...	...	...	...	...	...	...	...	Rain fall data not received.					...	...	...	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	5	...	...	2·07	...	...	2·07	...	...	0·95	Bakloh.
...	...	...	60	...	20	...	·308	...	0·7	...	3	...	...	1·89	2·38	−0·49	1·89	2·38	−0·49	0·96	Drosh.
...	...	...	...	...	...	...	...	...	0·6	...	2	...	...	0·45	0·18	+0·27	0·45	0·18	+0·27	0·26	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	2·0	.	0	...	...	0	...	...	0	...	...	0	Ahwaz.
...	...	...	...	...	73	...	·270	...	4·3	...	8	...	...	3·33	...	...	3·33	...	...	0·69	Chumbi.
...	...	...	...	...	47	...	·266	...	...	...	1	...	...	0·20	...	...	0·20	...	...	0·12	Kirmanshah.
...	...	...	39	...	...	...	...	...	1·2	...	0	...	...	0	...	...	0	...	...	0	Koweit.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Maidan.
...	...	...	58	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Muhammerah.
...	...	...	...	...	...	...	...	...	...	...	7	...	...	2·23	18·29	−16·06	2·23	18·29	−16·06	0·30	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.					...	...	...	Prison Island.
7·2¶	...	...	78	...	...	...	...	...	...	...	10	...	...	0	...	...	0	...	...	0	Seistan.

§ Wind variable 9. ‡ Mean of 10 days. ¶ Mean of 29 days.

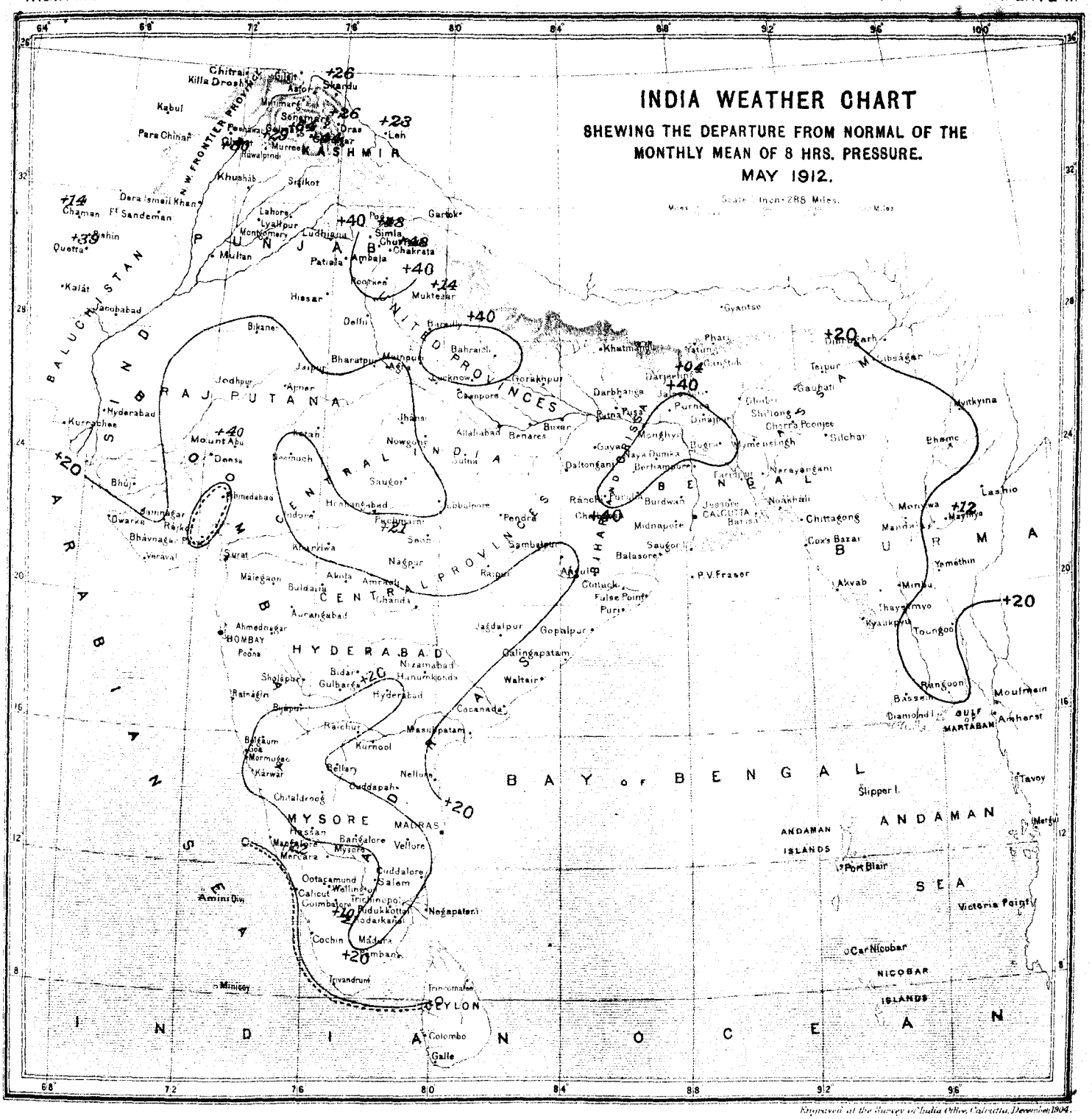
Engraved at the Survey of India Office, Calcutta, December 1904.

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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate up to December 1911 inclusive.



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

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

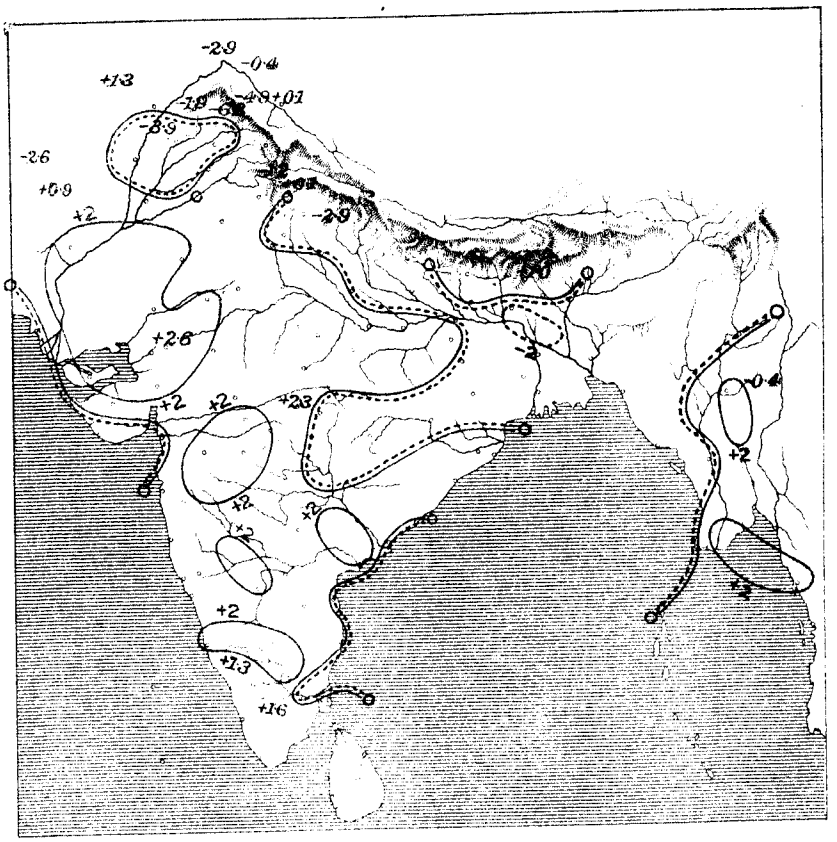


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.

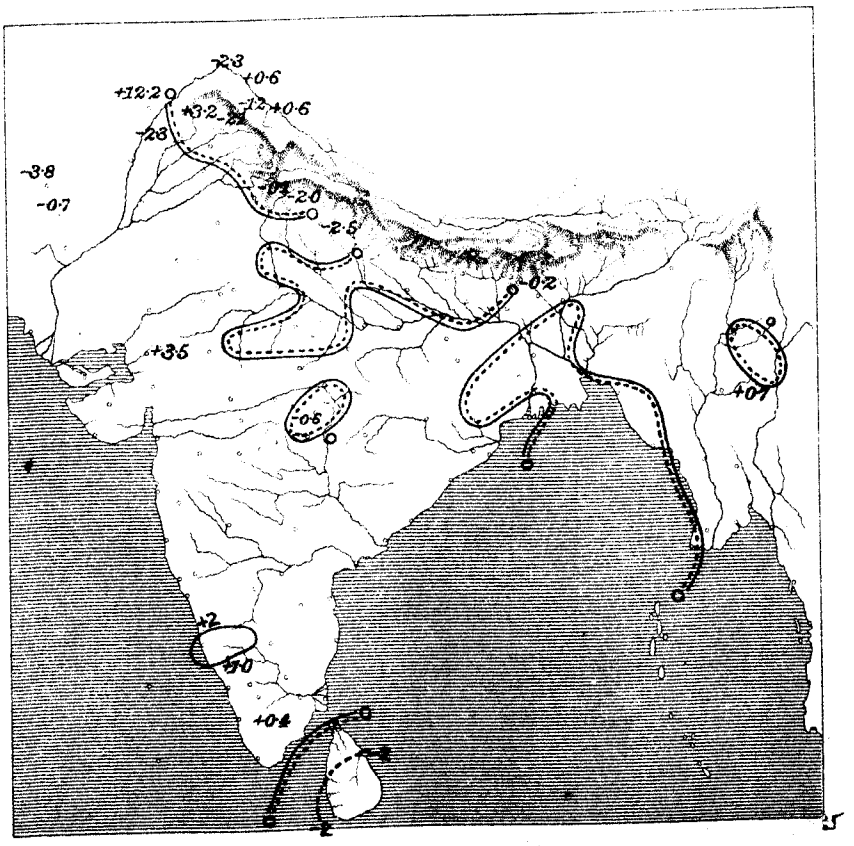


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

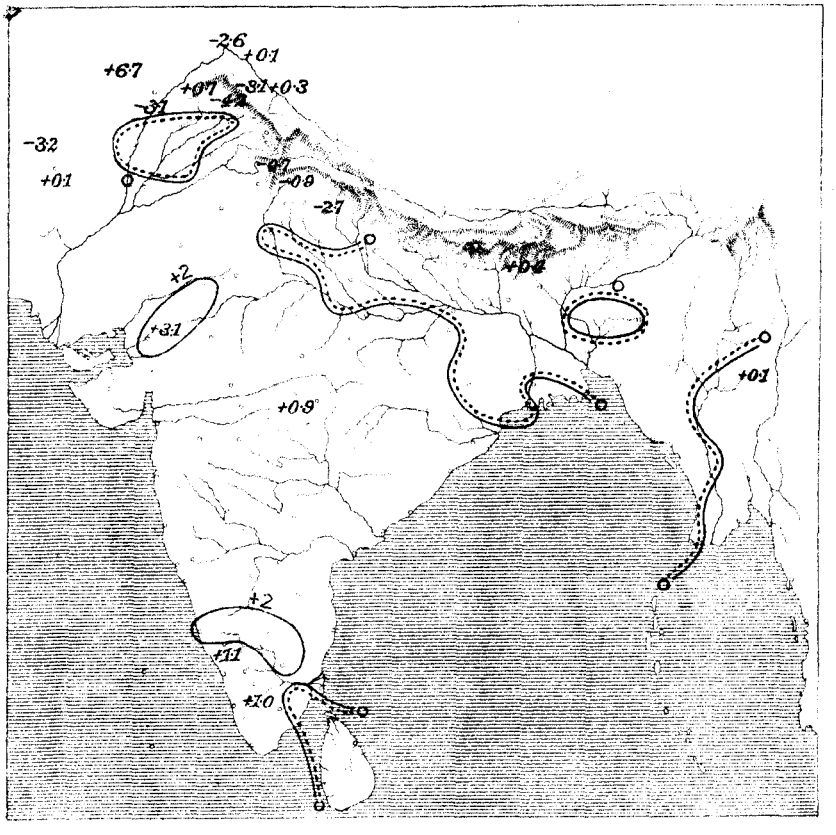


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

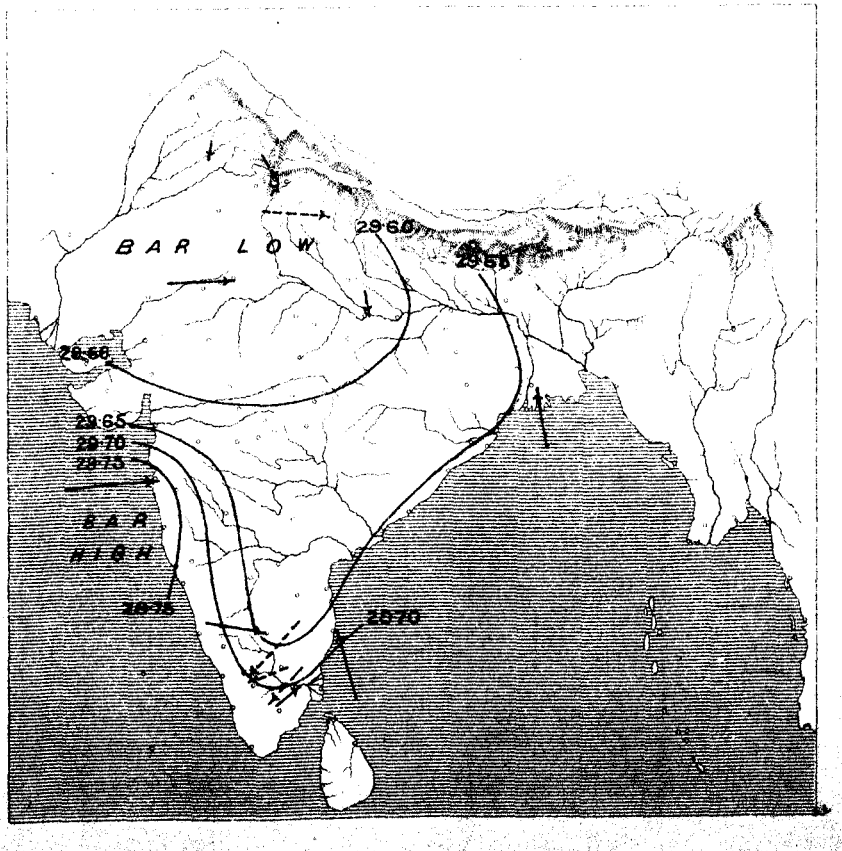


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

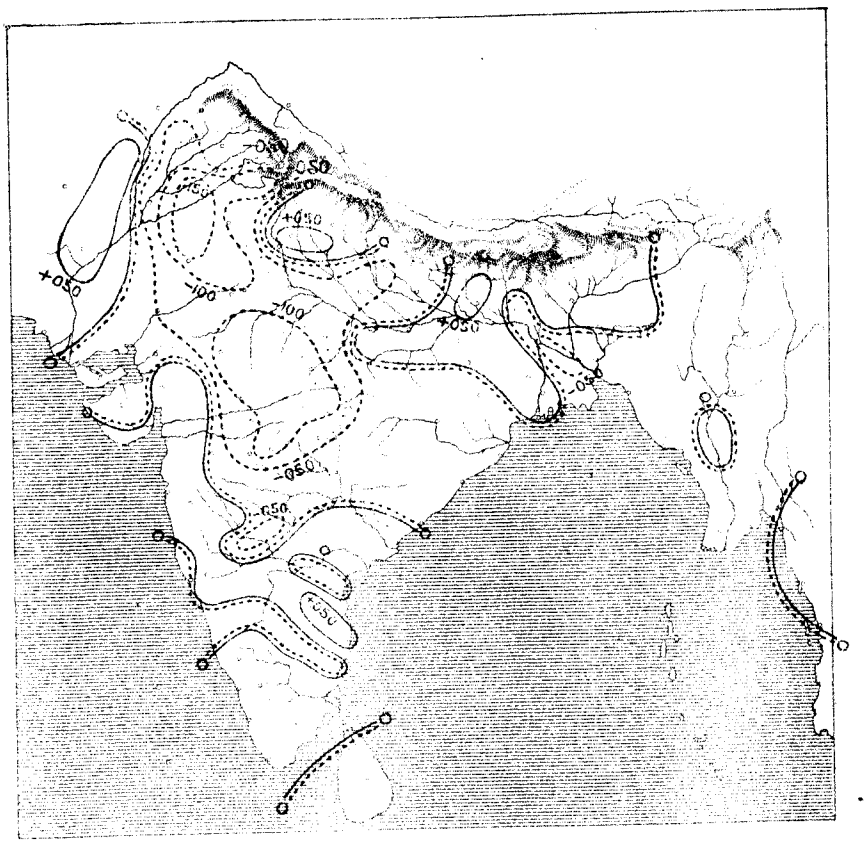


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.

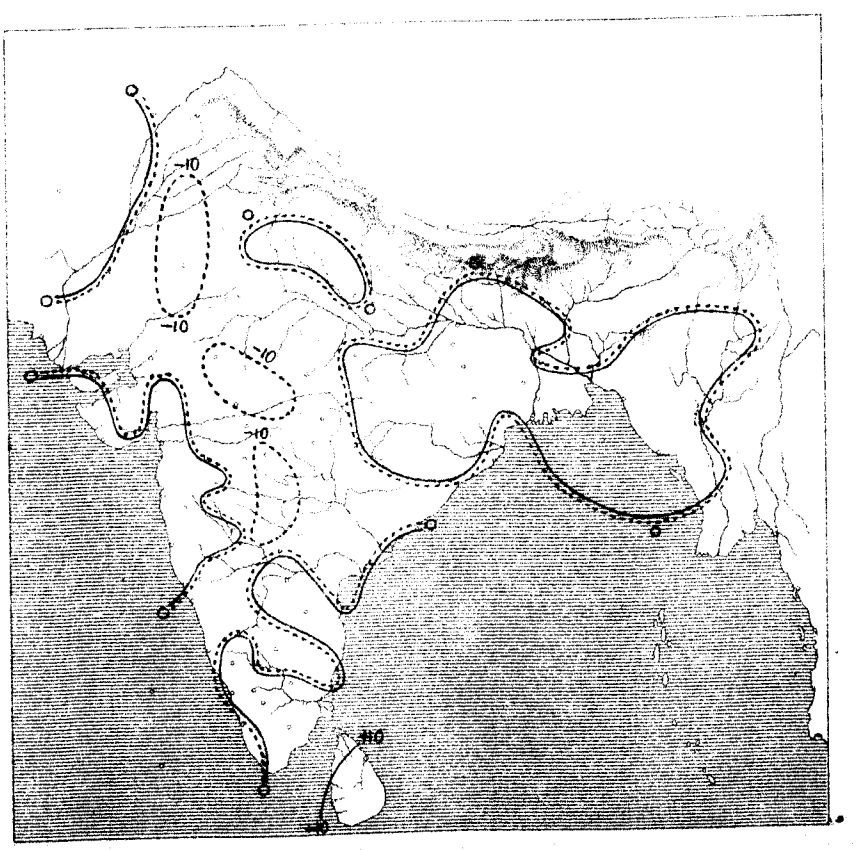


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 HRS.

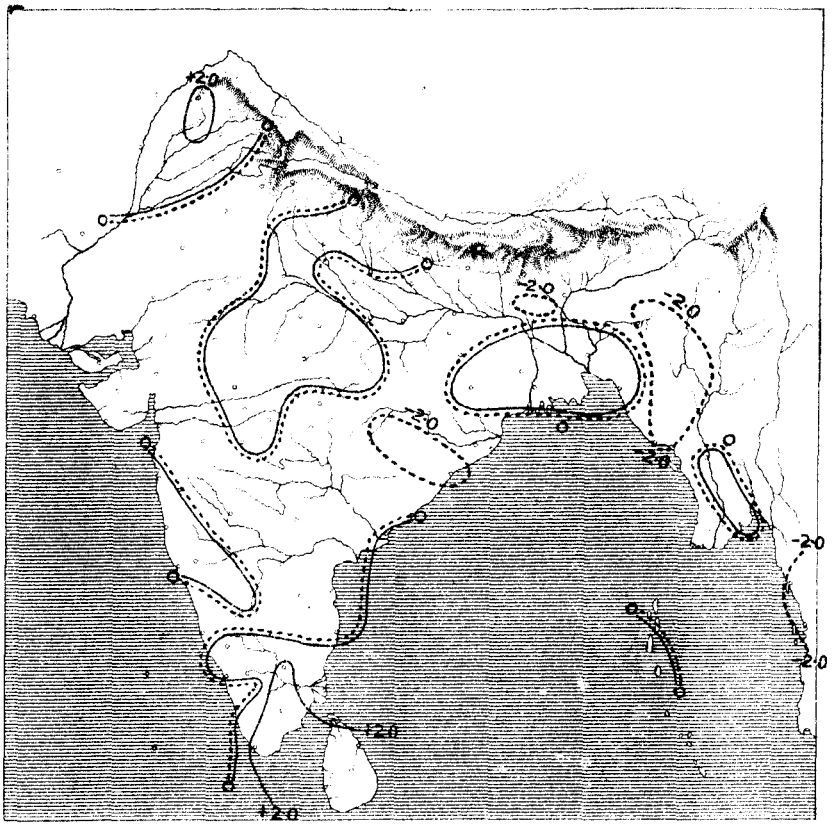
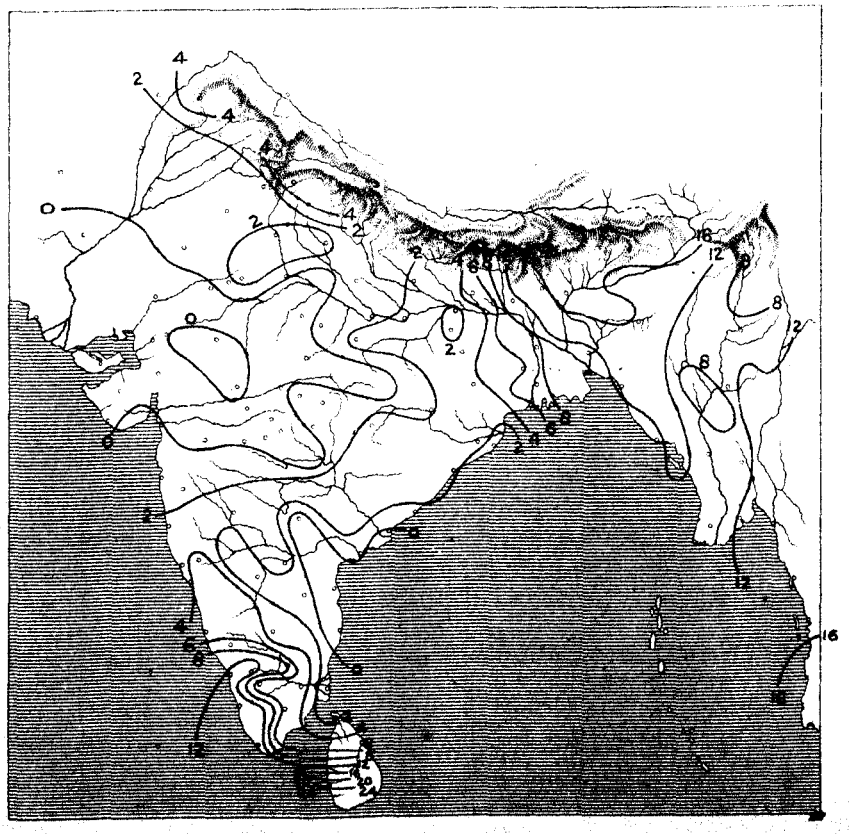


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)



Reg. No. 4195 E., 11.—L.—3800.
Engraved at the Survey of India Offices, Calcutta, December 1904.

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 monthly 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**
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**

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METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JUNE, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of June, 1912, is based on observations taken daily at 8 hrs. at 221 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 17 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. During the first week the permanent advance of the monsoon was in progress over the Arabian Sea and thunderstorms were of almost daily occurrence on the Malabar coast, but it was not until the 8th that there was heavy rainfall such as characterizes the burst of the monsoon. The extension of the monsoon northwards along the west coast took place rather slowly, so that Ratnagiri had its first fall of moderately heavy rain on the 11th, Bombay on the 17th and Gujarat on the 18th. In years of ordinary conditions moderately heavy rainfall is established on June 3rd in Malabar, two days later in the Konkan and on the 15th in Gujarat.

Occasional rain was recorded in the Deccan and the central parts of the country during the last fortnight of the month, but it was due to thunderstorms and duststorms and not to an inrush of regular monsoon winds. Burma, Assam and Bengal had frequent rain in the last two weeks but over the tract of the country lying to the west of Bengal, excluding Gujarat, no regular extension of monsoon winds from the Bay occurred, and it may therefore be said that the rains proper had not been established there by the end of the month.

The total measurements of the month's rainfall fell short of the normal in all parts of India with the exception of Malabar, the Bay Islands and Upper Burma.

The deficiency was large over the greater part of the interior of India and was absolutely greatest in the area comprising Central India East and the Central Provinces proper where it was about 80 per cent. in amount.

In consequence of the scanty precipitation the air was drier, skies less clouded and temperature higher than the average in most parts of the country.

Atmospheric pressure in the plains was ·011″ in defect of the normal.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—On two days during the month no observations of the sun could be made and on 6 other days prominences could not be observed.

Sunspots.—A few small dots that appeared in the western hemisphere of the sun on the last day of May rapidly developed into a double spot group and went round the west limb on the 3rd June. Another moderate

sized spot of regular outline came round the east limb on the 17th and was visible until the 28th. The daily average number was 0·5 for the month.

Prominences.—Twenty-four large and two metallic prominences were observed during the month. The highest recorded was on the 22nd at latitude—25° east. This was 200″ in height at 10h. 31m. but fell to 150″ at 11h. 20m.

Magnetic disturbances.—Moderate disturbances were recorded on the 1st and from the 8th to 11th.

Seismological records.

TABLE 1.

No.	Date.		P. T. commencement. G. M. T.	L. W. commencement. G. M. T.	Maxima. G. M. T.	End. G.M.T.	Maximum amplitude.	Duration.	REMARKS.
	1912.		h. m.	h. m.	h. m.	h. m.	mm.	h. m.	
32	June	1	0 46·3	...	...	0 56·6	...	0 10·3	Widening of line.
33	"	2	12 14·9	...	12 30·2	12 50·7	0·5=0·2	0 35·8	
34	"	3	12?31·0	...	...	12 48·9	...	0 17·9	Hours signal at 12h. 30m.
35	"	5	11?30·5	11 45·8	11 48·1	12 08·8	0·5=0·2	0 38·3	
36	"	7	10 46·4	10 50·8	10 58·2	?	0·8=0·3	1 11·6	
37	"	7	?	11 30·0	11 36·7	11 58·0	0·4=0·2		
38	"	7	13 14·6	...	...	13 38·2	...	0 23·6	Widening of line.
39	"	7	15 10·9	...	...	15 36·2	...	0 25·3	Do.
40	"	7	18 55·1	19 03·3	19 09·5 / 19 26·9	20 09·4	0·9=0·4 / 0·9	1 14·3	
41	"	8	7 40·7	7 47·2	7 51·0	8? 16·0	0·8=0·3	0?35·3	
42	"	8	?	8 25·7	8 37·2	9? 27·0	2·4=1·0	...	
43	"	8	?	9 41·0	9 48·4	10?18·0	1·4=0·6	...	
44	"	8	13 49·9	13 56·9	14 02·0	14 23·1	1·0=0·4	0 33·2	
45	"	10	16 33·1	15 58·6	17 10·1	18?41·0	2·0=0·8	2 07·9	
46	"	18	12 13·3	12 43·3	12 47·4	14 02·8	1·8=0·8	1 49·5	
47	"	26	17 07·8	17 11·4	17 14·4	17 55·0	0·9=0·4	0 47·2	June 28—29 record incomplete.

J. EVERSHED,

Director,

Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of June 1912 the traces showed 13 calm days, and 17 days of small disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 4th, 7th, 16th, 20th, and 26th.

The following table represents the magnetic character of each day during the month :—

TABLE 2.

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

C=calm ; S=small ; M=moderate ; G=great ; V. G.=very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal and declination for the month are as follows :—

Easterly declination	0° 51′ 9″
Horizontal force	0·36877 C. G S. unit.
Vertical force	0·16350 C. G. S. unit.
Inclination	23° 55″·1
Inclination (observed)	23° 53″·4
Horizontal force range	0·00036 C. G. S. unit.
Horizontal force summed range	0·00239 C. G. S. unit.
Declination range	4′·2
Declination summed range	18′·7.

(NOTE :—Summed range means sum without regard to sign of 24 ordinates of the diurnal inequality).

Seismic disturbances.

TABLE 3.

Date.	Commencement.		Maximum.		End.		Maximum amplitude.	Duration.	
	h.	m.	h.	m.	h.	m.	mm.	h.	m.
1912 June 7	10	42·9	10	49·2	Mixed up in begininng of following disturbance.		1·1		
" 7	Mixed up in end of preceeding disturbance.		11	30·5	11	55·3	0·5		
" 7	12	59·7	13	18·1	13	30·0	0·4	0	30·3
" 7	18	56·9	19	12·5	19	51·4	1·0	0	54·5
" 8	7	40·3	8	29·1	Mixed up in beginning of following disturbance.		1·8		
" 8	Mixed up in end of preceeding disturbance.		9	45·0	Mixed up in beginning of following disturbance.		1·3		

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	h. m.	h. m.	h. m.	mm.	h. m.
June 8	Mixed up in the end of preceding disturbance.	11 26·9	12 21·0	0·5	
„ 8	13 45·7	13 52·6	14 29·4	1·3	0 43·7
„ 10	16 39·4	16 59·8	17 44·3	2·5	1 4·9
„ 12	7 53·8	7 58·8	8 14·9	0·5	0 21·1
„ 17	11 58·0	12 1·9	12 17·4	0·7	0 19·4
„ 18	12 16·4	12 50·2	13 49·5	1·0	1 33·1
„ 26	17 2·3	17 9·5	17 26·0	0·6	0 23·7

All times given above denote G. M. T.
Sensibility to tilt 1 mm. = 0″·40.

N. A. F. MOOS,
Director,
Bombay & Alibag Observatories.

CALCUTTA OBSERVATORY.

5.—*List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. commencement G. M. T.	L. W. commencement G. M. T.	Maximum. G. M. T.	End G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
June 5th	10 56·9	...	...	12 18·7	1 21·8	...	Thickening of line.
„ 7th	10 6·3	...	10 42·9	10 44·9	0 38·6	2·00	
„ 8th	8 58·5	9 32·1	9 34·6	12 7·7	3 9·2	3·00	
„ 8th	13 10·7	13 44·8	13 48·4	14 37·7	1 27·0	3·00	
„ 9th	17 49·1	...	18 1·8	?*	?	0·75	*Ends in air tremor.
„ 10th	16 28·5	16 50·9	16 54·0	18 52·4	2 23·9	5·00	
„ 12th	7 44·3	7 49·4	7 51·5	8 29·6	0 45·3	12·5	
„ 12th	13 12·7	14 7·6	14 9·6	15 4·0	1 51·3	0·75	
„ 14th	16 11·9	...	...	16 41·5	0 29·6	...	Thickening of line.
„ 17th	11 36·8	11 53·1	11 56·2	12 34·4	0 57·6	0·75	
„ 18th	12 18·2	12 55·2	12 56·7	14 25·6	2 7·4	3·50	
„ 26th	17 10·1	...	...	17 49·3	0 39·2	...	Thickening of line.
„ 29th	20 17·0	...	...	20 24·1	0 7·1	...	Do.

Sensibility 1 mm. = 0·38″ of tilt.

E. P. HARRISON,
Offg. Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. List of earthquakes recorded by the Omori-Ewing seismographs :—

TABLE 5.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Maximum amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
1st	A	0 33·5	0 35·0	0 36·3	0 36·7	0 57	0 23	0·5	
	B	0 33·5	0 35·0	0 36·3	0 36·9	0 49	0 15	1·0	
5th	A	11 23·4	11 31·5	?	11 32·1	12 13	0 50	Small	
	B	?	11 31·5	11 42·3	11 43·4	12 4	?	0·3	
6th	A	?	?	19 11·7	19 12·2	19 27	?	0·3	
	B	18 46·6	?	19 6·3	19 14·1	20 7	1 20	1·0	Preceded & followed by other slight disturbances.
7th	A	10 17·5	?	10 38·4	10 41·2	11 42	1 24	0·5	Followed by other slight disturbances during day. No disturbance at corresponding part of B trace.
8th	A	13 23·6	?	13 46·1	13 49·3	14 24	1 2	0·6	
10th	A	?	16 38·3	16 48·8	16 51·7	18 12	?	2·7	
18th	A	12 8·5	?	12 38·5	12 55·8	14 1	1 52	0·7	
26th	A	17 4·0	17 9·0	17 17·3	17 19·2	18 3	0 59	0·2	
	B	17 4·5	?	17 11·6	17 12·5	17 35	0 30	?	Touched stops.
29th	A	20 6·0	20 7·5	20 8·4	20 8·8	20 33	0 27	0·3	
	B	20 6·2	20 7·4	20 8·2	20 8·8	20 12·7	0 6·5	0·2	
	V	20 6·0	20 7·5	?	20 7·7	20 11	0 5·0	?	Touching stop.

8th A Almost continuously disturbed from 4 hrs. 45 mins. to 15 hrs. 25 mins. Maximum amplitude as follows :—0·5 mm. at 7 hrs. 40·: mins. ; 5·5 mm. at 8 hrs. 21·3 mins ; 1·4 mm. at 9 hrs. 31·3 mins.

B Apparently several shocks superposed maximum amplitudes as follows :—0·6 mm. at 7 hrs. 41·1 mins. ; at 7 hrs. 38·4 mins. ; 0·7 mm. at 13 hrs. 30·7 mins. Most vigorous shock at 8 hrs. 30·4 mins. when mass touched one of stops.

10th B Touching stops.

12th A Disturbed practically throughout day. Maxima 0·9 mm. at 7 hrs. 49·7 mins. and 0·6 mm. at 13 hrs. 55·5 mins.

B Disturbed from about 7 hrs. 34·0 mins. to about 8 hrs. 22·0 mins. maximum 0·4 mm. at 7 hrs. 50·0 mins ; and again from about 13 hrs. 6·0 mins. to about 22 hrs. 38·0 mins. maximum 1·0 mm. at 13 hrs. 56·4 mins.

B No sign of disturbance in B trace.

All times are given in G. M. T.
A = E—W component.
B = N—S component.
V = Vertical component.
Magnification A = 15, B = 15, V = 60.

* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquake.		Duration.	Intensity Rossi-Forel scale.	No. of shocks.	REMARKS.
		h.	m.	Sec.			
Shillong . . .	1st	22	10	1	5	1	
Mandalay . .	5th	18	50	6	3	1	
Kurseong . .	12th	12	30	1	6	1	
Dam Dim . .	12th	12	40	2	6	1	
Shillong . . .	13th	3	52	5	7	1	
Darjiling . .	13th	11	45	7	...	1	
Mandalay . .	16th	6	18	3	4	1	
Ditto . .	17th	22	5	5	5	4	
Ditto . .	21st	15	0	3	5	1	
Chitral . . .	23rd	22	30	5	6	2	
Shillong . . .	25th	13	50	1	4	1	
Gauhati . . .	25th	13	55	2	6	1	
Landikotal . .	28th	21	40	30	...	1	Slight shock.
Drosh . . .	29th	20	0	1	7	2	
Tehran . . .	29th	5 5 15	24 29 14	...	...	3	Slight shock.
Srinagar . . .	30th	6	17	2	7	1	

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute. The small number of observations is due to the cloudiness of the sky during the month.

Maximum	1·24
Minimum	1·18
Mean	1·22
Number of days of observation . . .	4

W. A. HARWOOD,
Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. During June, as in May, the pressure conditions over the Indian Ocean as represented by Mauritius, Seychelles and Zanzibar were favourable to a good monsoon in the Indian land region. Winds were approximately normal in character except at Seychelles where the rate of movement was considerably lower than usual. Rainfall was in large defect at Mauritius and Zanzibar, but much above the normal at Seychelles.

TABLE 7.

—	Mauritius.*	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	—·041	—·006	—·014
Actual mean wind direction .	S 56° E	S 24° W	S 32° E
Normal mean wind direction .	S 60° E	S 13° W	S 27° E
Actual mean wind velocity (miles per diem).	226	161	161
Normal mean wind velocity (miles per diem).	239	154	258
Rainfall departure from normal .	—1·82	—1·32	+2·33

*Approximate data derived from weekly telegrams.

Depressions and cyclonic storms.

9. The Bay was entirely free from disturbance. In the Arabian Sea the advance of the monsoon was as usual associated with an area of deficient pressure ; this first showed itself off Goa on the 11th and during the next seven days travelled very slowly up the coast to the neighbourhood of Veraval. There is no evidence of its having developed into a regular cyclonic storm.

Pressure.

10. The high pressure conditions which had characterized April and May disappeared in June except in south Madras, Orissa and the hill districts of northwest India.

The table below shows the character and magnitude of the change :—

TABLE 8.

PROVINCE.	Departure from normal of pressure.		
	April.	May.	June.
	"	"	"
Burma	+·057	+·019	—·020
Assam	+·087	+·015	—·015
Bengal	+·073	+·034	—·005
Bihar and Orissa	+·068	+·032	—·004
United Provinces	+·062	+·034	—·020
Punjab	+·062	+·033	—·021
North-West Frontier Province	+·039	+·018	—·017
Sind	+·043	+·026	—·012
Rajputana	+·039	+·016	—·016
Bombay	+·039	+·015	—·012
Central India	+·046	+·026	—·003
Central Provinces	+·045	+·020	—·004
Hyderabad	+·051	+·017	—·007
Mysore	+·046	+·020	0
Madras	+·050	+·017	—·004

The vertical gradient was appreciably weaker than usual in northwest India and above normal in southern India and northeast India.

Over a large part of the country the excess of pressure accompanied higher temperatures than usual.

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B—A.
	"		"	"
Quetta	+·017	Jacobabad	—·024	—·041
Leh	+·020	Lahore	—·024	—·044
Murree	+·001	Peshawar	—·012	—·013
Simla	+·017	Ludhiana	—·012	—·029
Chakrata	+·017	Roorkee	—·005	—·022
Darjiling	—·036	Dhubri	—·013	+·023
Mount Abu	+·018	Deesa	—·011	—·029
Pachmarhi	—·007	Khandwa	—·008	—·001
Kodaikanal	—·010	Madura	+·016	+·026

Temperature.

11. Departures from normal of mean temperature for the month were very feebly marked in Burma, northeast India, the North-West Frontier Province, Kathiawar, the Konkan and southern India, in few places reaching 2°. Over the rest of the plains temperature ruled above the normal ; the excess was on the whole most marked in the Central Provinces, Central India and Hyderabad, and was shown much more largely in the day than in the night temperature.

In the hills temperature was rather low in Baluchistan and Kashmir in spite of the deficient precipitation but was markedly above the normal in the Satpuras.

Weather was much warmer than usual in the interior of the Peninsula during the first ten days of the month, and at several stations the maxima recorded during this period have surpassed the limit previously attained in June.

TABLE 10.

STATION.	Highest maximum temperature in June 1912.	Date on which recorded.	Highest temperature on record in June previous to 1912.	Year in which recorded.
Malegaon	111·9	7th	110·8	1900
Ahmednagar	107·1	4th	105·9	1900
Buldana	107·0	4th	102·7	1908
Akola	115·2	5th	114·5	1903
Amraoti	114·8	5th	113·5	1903
Nizamabad	113·9	9th	111·4	1900
Bidar	107·4	5th & 7th	105·4	1901
Gulbarga	110·0	4th & 5th	109·4	1900
Hanamkonda	112·0	3rd & 4th	111·7	1900
Mangalore	93·3	2nd	92·8	1895
Pudukkottai	106·8	4th	105·4	1908
Salem	107·0	4th & 5th	105·4	1895 & 1900
Ootacamund	73·5	1st & 4th	73·0	1908

TABLE 11.

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	85·5	77·6	81·5	7·9	17·6	−0·7	−0·2	−0·5
2. Lower Burma	86·4	76·2	81·3	10·1	19·9	+0·4	+0·6	−0·2
3. Upper Burma	91·9	76·9	84·4	15·1	25·9	−0·4	+0·1	−0·5
4. Assam	89·1	75·6	82·3	13·5	23·3	+1·0	−1·3	+2·3
5. Bengal	90·6	77·9	84·2	12·7	25·8	+0·9	−0·2	+1·1
6. Orissa	96·1	80·1	88·1	16·1	34·2	+2·9	+0·5	+2·4
7. Chota Nagpur	100·3	79·1	89·7	21·2	39·0	+4·7	+1·2	+3·5
8. Bihar	97·6	78·8	88·2	18·8	37·2	+2·1	−0·2	+2·3
9. United Provinces, East	103·8	80·9	92·4	22·9	41·6	+4·2	−0·1	+4·3
10. Do., West	106·8	83·2	95·0	23·6	43·1	+5·1	+1·5	+3·6
11. Punjab, East and North	108·0	82·0	95·0	26·0	43·4	+3·9	+1·6	+2·3
12. Do., Southwest	110·7	84·4	97·6	26·4	47·6	+2·4	+1·0	+1·4
13. Kashmir	78·9	52·5	65·7	26·4	43·1	−2·1	−2·6	+0·5
14. North-West Frontier Province	109·1	78·7	93·9	30·3	47·8	+2·1	−0·5	+2·6
15. Baluchistan	98·6	68·3	83·4	30·3	45·5	−0·7	−3·0	+2·3
16. Sind	105·9	83·6	94·7	22·3	36·4	+3·3	+0·7	+2·6
17. Rajputana, West	108·3	85·3	96·8	23·1	45·9	+4·7	+1·9	+2·8
18. Do., East	107·2	85·6	96·4	21·6	40·9	+4·9	+3·7	+1·2
19. Gujarat	98·6	81·3	90·0	17·3	30·8	+2·9	+1·2	+1·7
20. Central India, West	102·3	78·7	90·5	23·6	39·2	+5·9	+2·4	+3·5
21. Do., East	107·3	84·5	95·9	22·8	38·8	+7·1	+2·7	+4·4
22. Berar	103·7	79·6	91·7	24·2	41·6	+8·3	+3·9	+4·4
23. Central Provinces, West	105·4	81·3	93·3	24·1	39·7	+8·2	+3·8	+4·4
24. Do., East	102·6	81·1	91·9	21·5	38·7	+8·1	+5·1	+3·0
25. Konkan	87·1	78·2	82·6	9·0	21·2	+0·8	+0·5	+0·3
26. Bombay Deccan	95·7	73·6	84·6	22·1	37·3	+5·6	+1·4	+4·2
27. Hyderabad, North	101·0	77·1	89·0	23·9	39·0	+5·9	+2·5	+3·4
28. Do., South	101·4	79·2	90·3	22·2	35·7	+5·9	+3·5	+2·4
29. Mysore	84·5	68·1	76·3	16·5	27·9	+0·9	+0·4	+0·5
30. Malabar	84·2	75·0	79·6	9·1	20·5	−0·4	+0·9	−1·3
31. Madras, Southeast	97·2	78·9	88·1	18·3	31·8	+0·9	+1·2	−0·3
32. Do., Deccan	101·5	79·9	90·7	21·6	34·8	+4·3	+2·2	+2·1
33. Do. Coast, North	98·2	82·8	90·5	15·4	29·3	+3·7	+2·0	+1·7

TABLE 12.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·1	+0·4	+0·3
Assam	+1·0	−1·3	−0·1
Bengal	+0·9	−0·2	+0·4
Bihar and Orissa	+2·9	+0·3	+1·6
United Provinces	+4·6	+0·6	+2·6
Punjab	+3·4	+1·4	+2·4
North-West Frontier Province	+2·1	−0·5	+0·8
Sind	+3·3	+0·7	+2·0
Rajputana	+4·8	+3·1	+4·0
Bombay	+3·2	+1·1	+2·1
Central India	+6·5	+2·5	+4·5
Central Provinces	+8·2	+4·1	+6·2
Hyderabad	+5·9	+3·2	+4·5
Mysore	+0·9	+0·4	+0·7
Madras	+1·7	+1·5	+1·6

Winds.

12. (*a*) The air movement was high in Madras, about average in Mysore, Hyderabad, the Central Provinces, Central India, Rajputana, the Punjab and Bihar and Orissa, and lower than usual in Burma, Assam, Bengal, the United Provinces, the North-West Frontier Province, Sind and Bombay.

(*b*) The winds blew with more than their usual persistence in Hyderabad and Bihar and Orissa, but were very unsteady in Burma, Bengal and Sind.

(*c*) The direction of movement was very abnormal on the Malabar coast, in Sikkim and at Cherat.

TABLE 13.

Station.	Wind direction.	
	Actual.	Normal.
	°	°
Cochin	S 86 E	N 9 W
Calicut	S 70 E	N 22 E
Mangalore	S 73 E	S 83 W
Darjiling	N 72 W	S 76 E
Cherat	N 12 W	S 79 E

The absence of the usual easterly winds at Darjiling would suggest that the Bay current was very shallow; while the undue prevalence of northerly winds at Cherat was probably connected with abnormal snowfall accumulations in the region to the north.

TABLE 14.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	−0·9	−11
Assam	−0·5	+2
Bengal	−1·1	−16
Bihar and Orissa	−0·1	+7
United Provinces	−0·6	0
Punjab	0	+1
North-West Frontier Province	−0·7	−3
Sind	−1·8	−14
Rajputana	+0·6	+1
Bombay	−0·9	−6
Central India	0	−1
Central Provinces	+0·5	−5
Hyderabad	−0·2	+8
Mysore	−0·4	+2
Madras	+0·9	+5

Humidity and cloud.

13. The general deficiency of rainfall in the Indian region was accompanied with abnormal dryness of the atmosphere. Not only was the quantity of vapour present in the air more or less below the average in nearly all parts of the country, but the relative humidity was also generally in defect. The region of greatest dryness included the United Provin-

ces, the Punjab, Rajputana, Central India, the Central Provinces and Hyderabad and thus coincided roughly with the area of largest defect of rainfall.

Except in the North-West Frontier Province, the extreme south of India and a few places elsewhere there was a deficiency of cloud throughout the Indian area. In the United Provinces, Rajputana, the Central Provinces and Hyderabad the defect was equal to one-fifth of the whole sky expanse.

TABLE 15.

Division.	Hygrometry, 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	87	0	·889	—·001	7·4	—0·2
Assam	89	— 2	·909	—·006	7·0	—1·4
Bengal	85	— 2	·947	—·012	6·7	—0·9
Bihar and Orissa	73	— 6	·875	—·032	5·1	—1·0
United Provinces	55	—12	·741	—·079	2·3	—2·5
Punjab	40	—13	·575	—·130	2·0	—0·7
North-West Frontier Province.	49	— 1	·703	+·008	2·0	+0·3
Sind	66	+ 1	·927	+·077	2·3	—1·1
Rajputana	46	— 9	·642	—·099	1·7	—2·0
Bombay	74	— 3	·840	—·014	5·7	—1·0
Central India	52	—14	·661	—·091	4·7	—0·2
Central Provinces	51	—19	·644	—·114	3·4	—2·5
Hyderabad	59	—11	·670	—·036	4·9	—2·2
Mysore	80	— 1	·656	+·003	7·8	—0·3
Madras	71	— 2	·828	+·009	5·9	—0·5

Rainfall.

14. Over by far the greater part of the country the total precipitation of the month was in defect of the normal, the only divisions in which it was in excess being the Bay Islands, Upper Burma, and Malabar. The deficit was more than fifty per cent. in amount on the north Madras coast, in Hyderabad, the United Provinces and practically the whole of north-west and central India, and was on the whole greatest in the region including the Central Provinces proper and Central India East which obtained less than a quarter of their normal fall.

TABLE 16.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	22·0	19·7	22·06	17·63	+4·43	+ 25
2. Lower Burma	20·7	22·1	23·26	25·36	—2·10	— 8
3. Upper do.	10·3	9·8	7·51	6·74	+0·77	+ 11
4. Assam	16·8	17·7	16·85	17·96	—1·11	— 6
5. Bengal	12·7	14·1	13·84	14·68	—0·84	— 6
6. Orissa	7·9	10·2	4·80	9·45	—4·65	— 49
7. Chota Nagpur	7·7	10·5	4·66	9·22	—4·56	— 49
8. Bihar	6·5	9·0	5·59	8·29	—2·70	— 33
9. United Provinces, East	2·9	5·9	1·88	5·35	—3·47	— 65
10. Do., West	2·7	5·3	1·32	4·64	—3·32	— 72

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departre from normal.
			"	"	"	
11. Punjab, East and North	1·4	3·1	0·61	2·35	—1·74	— 74
12. Punjab, South-west	1·0	1·3	0·38	0·71	—0·33	— 46
13. Kashmir	1·3	3·0	0·47	1·71	—1·24	— 73
14. North-West Frontier Province	0·9	1·5	0·38	0·85	—0·47	— 55
15. Baluchistan	0·2	0·6	0·17	0·30	—0·13	— 43
16. Sind	0·4	0·6	0·27	0·41	—0·14	— 34
17. Rajputana, West	1·6	2·1	1·02	1·39	—0·37	— 27
18. Do., East	2·2	4·2	0·98	3·15	—2·17	— 69
19. Gujarat	4·0	5·9	4·06	5·65	—1·59	— 28
20. Central India, West	3·8	6·7	1·99	6·59	—4·60	— 70
21. Do., East	2·9	7·3	1·07	7·33	—6·26	— 85
22. Berar	4·4	8·1	3·09	5·57	—2·48	— 45
23. Central Provinces, West	3·2	8·6	1·65	7·17	—5·52	— 77
24. Do., East	3·7	9·6	2·01	8·46	—6·45	— 76
25. Konkan	15·6	18·6	23·21	26·62	—3·41	— 13
26. Bombay Deccan	5·5	8·4	3·26	5·57	—2·31	— 41
27. Hyderabad, North	4·3	8·1	2·01	5·61	—3·60	— 64
28. Do., South	2·4	6·8	1·21	4·05	—2·84	— 70
29. Mysore	8·2	7·2	4·76	5·27	—0·51	— 10
30. Malabar	26·0	22·9	41·41	33·03	+8·38	+ 25
31. Madras, South-east	2·6	2·8	1·39	1·53	—0·14	— 9
32. Do., Deccan	3·1	4·6	1·39	2·47	—1·08	— 44
33. Do. Coast, North	4·0	6·3	2·19	4·47	—2·28	— 51

TABLE 17.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	14·84	15·41	—0·57	— 4
Assam	16·85	17·96	—1·11	— 6
Bengal	13·84	14·68	—0·84	— 6
Bihar and Orissa	5·24	8·73	—3·49	— 40
United Provinces	1·62	5·01	—3·39	— 68
Punjab	0·56	2·01	—1·45	— 72
North-West Frontier Province	0·38	0·85	—0·47	— 55

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Sind	0·27	0·41	—0·14	— 34
Rajputana	0·99	2·68	—1·69	— 63
Bombay	7·15	9·42	—2·27	— 24
Central India	1·67	6·84	—5·17	— 76
Central Provinces	2·32	6·81	—4·49	— 66
Hyderabad	1·57	4·76	—3·19	— 67
Mysore	4·76	5·27	—0·51	— 10
Madras	5·23	5·35	—0·12	— 2
Mean of India	5·37	7·47	—2·10	— 28

Snowfall.

I.—AFGHANISTAN.

15. No information has yet been received.

II.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Kurram.*—No snow fell.

(*b*) *Drosh.*—There was no snow fall.

(*c*) *Malakand.*—No snow fell on the Lowarai range, but a slight fall occurred in Swat Kohistan.

(*d*) *Hazara.*—Light snow fell on the 26th in the Kagan Valley down to 10,000 feet.

III.—KASHMIR.

No snow fell and the weather was warmer than usual.

IV.—PUNJAB.

(*a*) *Chamba.*—No falls of any consequence occurred.

(*b*) *Kangra.*—Snow is reported to have fallen as low as 11,000 feet on the 12th.

(*c*) *Kilba* (Simla Hills).—Snow storms occurred on the surrounding hills on the 9th and 10th down to a level of about 11,000 feet.

All the passes were open.

V.—UNITED PROVINCES.

(*a*) *Garhwal.*—No snow fell and weather was hot and dry.

(*b*) *Almora.*—The aggregate fall of the month amounted to about 6½′ in Byans and Chandas, 5½′ in Malla Darma, 2′ in Malla Danpur and 1′ in Malla Johar. The snow line came down about half a mile below the region of perpetual snows.

SUMMARY.

16. There was no wide spread heavy snowfall during the month and the previous accumulations were melting fast.

HEM RAJ.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 17 stations in India, etc., in June, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs. at

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
5	Calcutta . .	21	29·595	29·504	·091	29·555	+·006	29·523	92·8	79·2	13·6	100·3	73·0	27·3	87·8	89·6	85·7	+1·2	76·7	81·2	81·1	79·7
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad . .	309	·244	·124	·120	·187	—·013	·436	107·1	82·9	24·2	115·5	71·5	44·0	97·0	106·2	93·7	+ 2·9	73·4	76·7	77·7	75·9
	VI.—Punjab.																					
11	Lahore . .	702	28·805	28·705	·100	28·747	—·026	·378	109·8	82·5	27·3	118·2	73·1	45·1	99·6	108·0	95·8	+ 2·8	70·1	75·9	76·5	74·2
	IX.—Rajputana.																					
1	Jaipur . .	1,431	·171	·062	·109	·116	—·017	·413	108·5	83·9	24·6	114·7	71·6	43·1	98·5	106·3	95·0	+ 1·1	69·8	75·5	74·7	73·3
	X.—Bombay.																					
25	Bombay . .	37	29·699	29·621	·078	29·661	—·012	·638	89·9	81·0	8·9	95·3	75·4	19·9	85·8	87·3	84·3	+ 1·9	77·2	79·9	80·4	79·2
	XIV.—Mysore.																					
29	Bangalore . .	3,021	26·857	26·771	·086	26·821	—·002	·639	85·1	67·0	18·1	92·5	62·8	29·7	77·5	81·6	74·3	+ 0·3	65·4	69·7	70·8	68·6
	XV.—Madras.																					
31	Pudukkottai .	318	29·493	29·370	·123	29·431		·674	98·6	77·9	20·7	106·8	69·3	37·5	86·7	94·8	88·2			77·3	79·1	
	Madras . .	22	·723	·613	·110	·677	—·022	·630	101·2	83·2	18·0	108·2	74·9	33·3	94·4	92·6	91·0	+ 2·6	76·6	80·7	82·1	79·8
	Hill Stations excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	23·029	22·982	·047	22·998	+·012	22·961	75·1	62·6	12·5	81·9	53·8	28·1	70·1	71·8	68·1	+ 1·2	52·0	57·4	58·2	55·9
	Sarain . .		·054	23·002	·052	23·023		·985	74·7	54·7	20·0	82·2	48·1	34·1	70·3	71·0	63·9			56·9	58·4	
	Kalabagh . .		20·093	20·069	·024	20·076		20·038	56·4	45·9	10·5	64·0	40·2	23·8	52·2	53·9	50·3			44·5	46·0	
	Mukteswar . .		22·749	22·692	·057	22·714		22·672	75·5	55·9	19·6	84·0	48·2	35·8	67·4	72·2	64·9		49·9	58·4	60·7	56·3
	Katmandu . .	4,388	25·504	25·422	·082	25·459	+·056†	25·413	85·2	65·8	19·4	89·0	57·6	31·4	77·8	82·3	74·7	+0·8†	63·5	69·5	70·5	67·8
	Ootacamund .	*7,327*	23·016	22·958	·058	22·984		22·920	64·9	53·2	11·7	75·7	51·2	22·5	60·9	59·4	58·2		51·9	56·9	56·4	55·1
	Kodaikanal . .	7,688	22·796	·739	·057	·768		·703	65·4	54·1	11·3	73·5	51·2	22·3	62·3	60·1	59·7		50·9	56·9	56·9	54·8
	Dodabetta . .	8,538?	·029	21·970	·059	21·996		·933	58·8	49·6	9·2	68·2	46·5	21·8	55·9	54·9	53·4		46·9	53·4	52·5	50·9
	Extra India.																					
	Minicoy . .	7																				
	Diego Garcia .																					
	Seychelles . .	15	29·974	29·889	·085	29·933	—·014†	29·871	83·4	78·0	5·4	86·1	74·0	12·1	81·1	82·5	79·6	+2·0†	71·8	76·1	76·4	74·8
	Mauritius . .	181																				

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 3,000 feet.

A.

17 stations in India, etc., in June, 1912.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind direction. Total number of 10 hrs. and 16 hrs. winds from											Wind steadiness.		Wind velocity.		Rainfall.			
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.	Number of subdivision.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·885	·877	·946	·917	—·024	89	75	69	80	− 3	6·3	6·6	6·5	−1·0	1		2	2	13	20	21	1		S 4° W	S 3° W	72	59	100*	142	9·53	3·72	Calcutta.	5
																															V.—United Provinces of Agra and Oudh.	
·701	·648	·575	·657	—·116	63	39	26	44	−12	2·7	1·7	2·2	−2·9	3	8	8	11	2	2	3	14	9	N 17° W	N 10° W	25	16	86	192	1·58	1·06	Allahabad.	9
																															VI.—Punjab.	
·575	·579	·491	·566	—·061	52	31	21	36	− 8	1·4	1·4	1·4	−1·5	16	1	4	7	11	5	6	3	7	S 33° E	N 18° E	17	7	46	86	0·64	0·50	Lahore.	11
																															IX.—Rajputana.	
·556	·597	·470	·548	—·108	48	33	21	36	−16	0·9	3·9	2·4	−2·0		5	1	3	2	2	8	21	18	N 75° W	N 70° W	60	43	137*	163	0·09	0·03	Jaipur.	18
																															X.—Bombay.	
·880	·934	·940	·934	—·004	84	77	73	80	− 3	5·9	6·1	6·0	−1·1				1	4	9	15	26	5	S 63° W	S 63° W	68	64	204*	365	10·79	3·37	Bombay.	25
																															XIV.—Mysore.	
·605	·635	·628	·630	+·007	92	67	59	75	+ 1	7·7	7·6	7·7					1			23	29	7	S 77° W	S 72° W	85	81	193	223	3·73	1·45	Bangalore.	29
																															XV.—Madras.	
	·779	·788				57	49			5·0	7·8	6·4		26					2	14	10	8	S 76° W		43		83		3·02	1·42	Pudukkottai.	31
·824	·860	·952	·896	+·063	73	54	63	65	− 1	5·1	4·9	4·0	−2·2		1		2	17	5	11	22	2	S 37° W	S 37° W	48	57	155*	211	1·78	1·41	Madras.	
																															Hill Stations excluding Kashmir and Baluchistan.	
·280	·339	·346	·321	—·076	51	47	46	48	−13	3·4	4·8	4·1	−1·6																2·31	0·58	Simla.	
	·327	·362				46	51			4·4	6·0	5·2																	3·01	1·39	Sarain.	
	·229	·244				59	59			4·5	6·8	5·7		6	27			3	2		2	20	N 21° W		65		223		3·11	1·32	Kalabag.	
·297	·399	·414	·369		67	61	53	60		5·2	5·7	5·5		11	1		2	1			44	1	N 89° W		70		161		4·62	2·44	Mukteswar.	
·565	·623	·612	·599	—·041	88	66	56	70	− 6	5·0	6·2	5·6	−0·6	56			1			1	2		S 68° W	N 87° W	3	20	22*	31	4·51	1·00	Katmandu.	
·373	·422	·426	·403		92	80	84	85		8·8	9·5	9·1		9			7	1		15	25	3	S 73° W		52		81		6·61	0·91	Ootacamund.	
·343	·413	·435	·397		82	74	83	80		7·6	8·8	8·2			6	1	2	3		6	29	13	N 76° W		65		285*		3·76	1·02	Kodaikanal.	
·286	·384	·381	·350		81	87	90	89		9·1	9·5	9·3		1	4	4		1	10	18	17	5	S 66° W		52		334		4·01	0·55	Dodabetta.	
																															Extra India.	
																															Minicoy.	
																															Diego Garcia.	
·698	·836	·830	·804	+·023	73	73	75	78	− 1	6·0	5·7	5·9	−1·2†	6		1	4	29	17	2		1	S 32° E	S 27° E	73	81	161*	258	7·13	4·50	Seychelles.	
																															Mauritius.	

* Uncorrected for scale error.

† Departure from old normal.

Table B.—Abstract of observations taken at 8 hrs. at 221 stations in India, etc., in June, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

	Pressure departure from normal.	Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
		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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	—·020	88·7	+0·1	76·5	+0·4	82·6	+0·3	12·2	22·4	—0·9	—11	87	0	·889	—·001	7·4	—0·2	14·84	15·41	—0·57
Assam	—·015	89·1	+1·0	75·6	—1·3	82·3	—0·1	13·5	23·3	—0·5	+ 2	89	— 2	·909	—·006	7·0	—1·4	16·85	17·96	—1·11
Bengal	—·005	90·6	+0·9	77·9	—0·2	84·2	+0·4	12·7	25·8	—1·1	—16	85	— 2	·947	—·012	6·7	—0·9	13·84	14·68	—0·84
Bihar and Orissa	—·004	97·7	+2·9	79·3	+0·3	88·5	+1·6	18·4	36·6	—0·1	+ 7	73	— 6	·875	—·032	5·1	—1·0	5·24	8·73	—3·49
United Provinces of Agra and Oudh.	—·020	105·2	+4·6	82·0	+0·6	93·6	+2·6	23·2	42·3	—0·6	0	55	—12	·741	—·079	2·3	—2·5	1·62	5·01	—3·39
Punjab	—·021	108·8	+3·4	82·7	+1·4	95·7	+2·4	26·1	44·5	0	+ 1	40	—13	·575	—·130	2·0	—0·7	0·56	2·01	—1·45
North-West Frontier Province	—·017	109·1	+2·1	78·7	—0·5	93·9	+0·8	30·3	47·8	—0·7	— 3	49	— 1	·703	+·008	2·0	+0·3	0·38	0·85	—0·47
Sind	—·012	105·9	+3·3	83·6	+0·7	94·7	+2·0	22·3	36·4	—1·8	—14	66	+ 1	·927	+·077	2·3	—1·1	0·27	0·41	—0·14
Rajputana	—·016	107·7	+4·8	85·5	+3·1	96·6	+4·0	22·2	42·9	+0·6	+ 1	46	— 9	·642	—·099	1·7	—2·0	0·99	2·68	—1·69
Bombay	—·012	94·9	+3·2	78·2	+1·1	86·5	+2·1	16·6	30·3	—0·9	— 6	74	— 3	·840	—·014	5·7	—1·0	7·15	9·42	—2·27
Central India	—·003	104·8	+6·5	81·6	+2·5	93·2	+4·5	23·2	39·0	0	— 1	52	—14	·661	—·091	4·7	—0·2	1·67	6·84	—5·17
Central Provinces	—·004	104·1	+8·2	80·8	+4·1	92·5	+6·2	23·3	39·8	+0·5	— 5	51	—19	·644	—·114	3·4	—2·5	2·32	6·81	—4·49
Hyderabad	—·007	101·2	+5·9	78·3	+3·2	89·8	+4·5	22·9	37·1	—0·2	+ 8	59	—11	·670	—·036	4·9	—2·2	1·57	4·76	—3·19
Mysore	0	84·5	+0·9	68·1	+0·4	76·3	+0·7	16·5	27·9	—0·4	+ 2	80	— 1	·656	+·003	7·8	—0·3	4·76	5·27	—0·51
Madras	—·004	95·7	+1·7	79·4	+1·5	87·6	+1·6	16·4	29·6	+0·9	+ 5	71	— 2	·828	+·009	5·9	—0·6	5·23	5·35	—0·12

Table

(2) *Abstract of observations taken at 8 hrs. at 221*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·735		29·812	29·803	5th	29·665	1st	·138	79·8	84·9		75·5		80·2		9·4	89·1	6th	72·2	14th	16·9
	Mergui	65	29·791	—·010	29·787	29·857	7th	29·721	13th	·136	77·3	84·0	—1·7	73·4	+0·3	78·8	—0·7	10·6	93·0	5th	71·8	6 days	21·2
	Tavoy	19	29·821	—·024	29·773	29·907	7th	29·719	13th	·188	78·8	84·0	—0·8	76·0	+1·3	80·0	+0·3	8·0	91·0	3rd, 4th & 5th.	71·8	11th	19·2
	Moulmein	94	29·711	—·011	29·743	29·827	4th	29·582	13th	·245	77·7	85·5	+0·9	75·9	+1·1	80·7	+1·0	9·6	92·0	3rd	73·8	17th & 18th.	18·2
	Rangoon	18	29·765	—·015	29·721	29·893	6th	29·637	17th	·256	80·2	87·5	+1·0	76·7	+0·2	82·1	+0·6	10·8	93·0	1st & 2nd.	74·5	16th & 24th.	18·5
	Bassein	27?	29·732	—·017	29·696	29·882	6th	29·614	15th	·268	80·9	87·5	+1·2	77·2	+0·9	82·4	+1·1	10·3	94·7	1st & 2nd.	74·4	16th	20·3
	Diamond Island	41	29·721	—·021	29·697	29·860	6th	29·609	13th	·251	82·5	86·6	+1·0	77·0†	+0·6†	82·0†	+0·8	9·6	89·9	24th	71·2	18th	18·7
	Toungoo	164	29·599	—·012	29·705	29·737	5th	29·476	17th	·261	81·0	89·9	+0·8	76·4	+0·9	83·1	+0·9	13·5	96·5	2nd & 3rd.	73·4	21st	23·1
	Kyaukpyu	18	29·694		29·652	29·843	6th	29·566	17th	·277	80·8	86·7		76·8		81·7		9·9	95·0	3rd	73·4	15th & 25th.	21·6
	Akyab	20	29·691	—·010	29·651	29·825	6th & 7th.	29·565	16th	·260	81·0	87·1	+1·1	77·4	—0·7	82·2	+0·2	9·7	93·9	3rd	73·0	8th	20·9
3	Thayetmyo	121	29·597	—·028	29·659	29·742	5th	29·474	17th	·268	81·7	91·4	0	77·8	+1·0	84·6	+0·5	13·6	96·9	1st	71·9	29th	25·0
	Minbu	*165*	29·541	—·025	29·618	29·685	4th	29·400	16th	·285	82·8	92·9	—0·1	78·2	+0·4	85·6	+0·1	14·7	99·3	8th	75·5	24th	23·8
	Yamethin	657	29·054	—·039	29·655	29·195	5th	28·914	16th	·281	79·5	90·7	—1·2	75·7	+0·4	83·2	—0·4	15·0	98·8	2nd	73·0	16th	25·8
	Mandalay	250	29·454	—·021	29·650	29·609	3rd	29·313	16th	·296	82·5	93·1	—1·9	77·3	—1·2	85·2	—1·5	15·8	101·7	2nd	73·1	3rd & 9th.	28·6
	Monywa	280	29·421		29·643	29·595	3rd	29·276	16th	·319	83·0	94·1		78·7		86·5		15·7	103·8	3rd	72·1	7th	31·7
	Lashio	*2,820*	26·961	—·031	29·641	27·096	3rd	26·831	16th	·265	75·1			70·9	+1·5						62·0	7th	
	Bhamo	*381*	29·316	—·011	29·649	29·488	3rd	29·160	16th	·328	79·9	91·9	+1·4	74·9	0	83·4	+0·7	17·0	95·4	2nd	71·6	7th & 8th.	23·8
	Myitkyina	458	29·209		29·625	29·373	3rd	29·074	16th	·299	77·8	89·1		75·5		82·3		13·6	95·7	13th	73·0	4th	22·7
	II.—Assam.																						
4	Dibrugarh	353	29·278		29·611	29·486	3rd	29·145	29th	·341	78·6	87·4		74·6		81·0		12·8	95·4	15th	70·6	11th	24·8
	Sibsagar	333	29·327	—·021	29·618	29·518	3rd	29·175	29th	·343	80·7	91·4	+2·1	73·6	—2·8	82·5	—0·3	17·8	94·6	14 days	71·5	7 days	23·1
	Tezpur‡	252	29·386		29·595	29·595	3rd	29·256	24th	·339	80·6	90·3		77·7		84·0		12·6	95·1	14th & 18th.	72·8	2nd	22·3
	Gauhati	195	29·462		29·611	29·678	3rd	29·252	23rd	·426	80·9	89·6		76·1		82·8		13·5	94·8	4 days	72·1	2nd & 9th	22·7
	Dhubri	115	29·523	—·013	29·593	29·723	3rd	29·342	24th	·381	80·2	86·7	+1·0	76·2	—0·2	81·4	+0·4	10·5	92·5	16th	69·1	3rd	23·4
	Silchar	104	29·580	—·007	29·637	29·777	3rd	29·393	24th	·379	79·1	89·2	—0·2	75·4	—0·8	82·3	—0·5	13·8	93·8	13th & 14th.	70·3	8th & 9th	23·5
	III.—Bengal.																						
5	Cox's Bazar	36	29·618		29·623	29·791	4th	29·505	24th	·286	81·1	87·3		76·0		81·7		11·3	91·7	14th	72·7	16th	19·0
	Chittagong	87	29·584	—·013	29·617	29·749	6th	29·430	24th	·319	81·1	87·3	+0·7	76·6	0	82·0	+0·3	10·7	92·0	4th, 13th & 14th.	70·0	10th	22·0
	Noakhali	43	29·614		29·604	29·790	3rd	29·440	24th	·350	82·1	87·3		76·5		82·9		8·8	91·8	14th	73·9	25th	17·9
	Barisal	12	29·631	—·003	29·590	29·805	3rd	29·479	16th	·326	83·4	90·4	+1·7	78·1	—0·1	84·3	+0·8	12·3	94·8	14th	72·6	25th	22·2
	Narayanganj	26	29·601	—·013	29·576	29·803	3rd	29·428	24th	·375	83·2	90·7	+1·7	78·3	0	84·5	+0·9	12·4	95·5	14th & 15th.	70·3	1st	25·2
	Mymensingh	63	29·537	—·011	29·601	29·776	4th	29·415	24th	·361	81·0	88·1	+0·8	77·2	+0·3	82·7	+0·5	10·9	94·1	15th & 16th.	71·1	3rd	23·0
	Bogra	75	29·559	—·002	29·585	29·741	3rd	29·386	24th	·355	80·7	89·5	—0·3	76·2	—1·0	82·9	—0·7	13·3	96·7	14th	67·7	6th	29·0
	Dinajpur	123	29·491	—·007	29·568	29·683	3rd	29·325	24th	·358	80·8	89·7	+0·2	76·6	—0·9	83·1	—0·3	13·1	97·3	15th	70·0	3rd & 10th.	27·3
	Jalpaiguri	283	29·351	—·018	29·595	29·540	4th	29·163	24th	·377	80·3	90·5	+2·6	75·9	+0·7	83·2	+1·7	14·6	95·9	4 days	68·4	7th	27·5
	Saugor Island	25	29·589	+·006	29·560	29·772	5th	29·423	24th	·349	85·9	89·7	—0·7	81·2	—0·5	85·4	—0·6	8·5	92·7	13th	72·7	10th	20·0
	Midnapore	149	29·447		29·542	29·607	3rd	29·281	24th	·326	84·7	95·7		79·2		87·4		16·5	106·3	1st	70·7	10th	35·6

† Mean of 26 days. ‡ Mean of 24 days.

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

B.

stations in India, etc., in June, 1912.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May, to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period 1st May, to 30th June, 1912.	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	56	57
																																I.—Burma.
2		2	2	6	3	12	2	1	S 14° W		5·7*			43		87		·879		6·0		20			35·85			49·82			3·20	Victoria Point.
23				2	2	3			S 7° W	S 79° W	2·2	1·3	+0·9	18	−39	93	+ 2	·881	−·013	7·2	−0·1	29	24·20	+4·80	37·95	29·29	+ 8·66	49·83	47·49	+ 2·34	3·63	Mergui.
26					2	2			S 22° W	S 55° W	1·2*	1·5	−0·3	10	− 5	91	− 1	·896	+·008	8·0	+0·4	27	25·80	+1·20	51·99	42·67	+ 9·32	64·52	68·16	− 3·64	4·45	Tavoy.
5		3	4	6	10	2			S 35° E	S 14° E	4·1	2·7	+1·4	53	+ 1	94	+ 2	·892	+·002	8·5	+0·6	29	26·10	+2·90	40·57	35·52	+ 5·04	62·77	56·41	+ 6·36	5·10	Moulmein.
6	2	3	2	2	10	4	1		S 11° E	S 37° W	2·6	3·7	−1·1	33	−34	89	− 4	·921	−·007	9·4	+0·6	22	24·80	−2·80	18·21	17·57	+ 0·64	28·11	29·80	−1·69	3·44	Rangoon.
15				1	10	4			S 9° W	S 13° W	3·9	3·4	+0·5	43	−16	90	− 2	·955	+·016	8·0	0	20	24·50	−4·50	18·05	22·99	− 4·94	22·84	33·26	−10·42	4·13	Bassein.
3			1	1	4	11	8	2	S 55° W	S 39° W	8·3	7·0	+1·3	59	−11	92	− 1	·934	+·031	8·1	−0·3	21	21·73	−0·73	28·03	23·77	+ 4·26	38·23	34·93	+ 3·30	6·35	Diamond Island.
10				7	10	3			S 10° E	S 32° E	1·9	3·7	−1·8	56	−29	88	− 2	·915	−·011	8·6	−0·3	19	20·80	−1·80	13·91	14·35	− 0·44	22·93	21·33	+ 1·60	2·77	Toungoo.
1		3		22	1	1		2	S 48° E		3·8*			62		88		·931		7·0		22			35·14			59·02			7·52	Kyaukpyu.
6	1	2	8	6	3	3	1		S 59° E	S 48° E	2·7	2·8	−0·1	43	− 9	91	− 2	·949	−·023	7·1	−1·9	23	21·40	−1·40	50·75	45·06	+ 5·69	76·93	56·68	+20·25	8·19	Akyab.
2				4	14	8	2		S 13° W	S 6° E	3·4*	5·6	−2·2	76	−17	83	0	·904	+·030	8·9	+0·6	13	13·90	−0·90	6·58	6·55	+ 0·03	12·48	11·08	+ 1·40	1·71	Thayetmyo.
				22	8				S 33° E	S 48° E	2·9	8·5	−5·6	89	+18	81	− 1	·893	+·003	4·6	−1·1	7	9·10	−2·10	5·53	5·55	− 0·02	11·95	10·55	+ 1·40	2·45	Minbu.
4				14	12				S 24° E	S 29° E	4·2	7·2	−3·0	79	− 7	84	+ 3	·821	−·029	5·4	+0·2	14	7·40	+6·60	8·36	5·09	+ 3·77	12·57	11·24	+ 1·33	1·15	Yamethin.
				19	10	1			S 28° E	S 1° W	5·5	6·4	−0·9	89	+17	78	+ 3	·833	−·033	4·2	−2·4	9	6·50	+2·50	11·52	5·38	+ 6·14	17·08	11·03	+ 6·05	2·92	Mandalay.
2		1	1	19	5	2			S 34° E		3·3			74		81		·910		8·2		9	6·80	+2·20	7·95	4·63	+ 3·32	10·58	10·57	+ 0·01	2·40	Monywa.
11		2	1	1	4	9	1	1	S 29° W		2·7*			33		85	− 2	·729	−·001	8·4	+0·2	13			5·85	10·87	− 5·02	12·94	16·92	− 3·98	1·09	Lashio.
29		1							N 45° E	N 81° W	0·9	1·8	−0·9	3	− 7	88	− 1	·899	+·013	7·8	+0·2	11	19·10	−8·10	5·79	14·41	− 8·62	11·10	20·21	− 9·11	1·72	Bhamo.
26		1			2	1			S		0·9			7		91		·865		7·3		18			8·72	13·91	− 5·19	15·96	19·33	− 3·37	1·37	Myitkyina.
																																II.—Assam.
30									(a)		0·9					92		·885		6·8		15	18·10	−3·10	15·51	18·97	− 3·46	23·08	28·19	− 5·11	3·62	Dibrugarh.
10	5	8	1	1	4	1			N 51° E	N 70° E	2·0	2·0	0	27	+ 2	88	− 4	·922	−·016	7·9	−0·9	17	16·70	+0·30	12·88	14·20	− 1·32	24·23	25·97	− 1·74	3·14	Sibsagar.
2	1	3	8		2	2	6		S 83° E		1·6			9		88		·923		6·3		14	16·00	−2·00	6·41	11·35	− 4·94	14·37	19·60	− 5·23	1·25	Tezpur.
28		1					1		N 23° W		1·1			2		85		·898		7·2		20	14·50	+5·50	17·65	14·73	+ 2·92	25·91	24·18	+ 1·73	2·68	Gauhati.
4	3	8	7	3	3	2			N 81° E	N 77° E	3·5	4·2	−0·7	43	− 1	88	− 3	·911	+·009	7·7	−0·4	15	18·10	−3·10	25·91	24·20	+ 1·71	42·96	39·14	+ 3·82	7·50	Dhubri.
24		2	2	1		1			E	N 85° E	1·1	2·0	−0·9	11	+ 6	91	+ 2	·913	−·010	6·0	−3·0	21	21·10	+2·90	22·95	22·27	+ 0·68	36·88	37·49	− 0·61	3·13	Silchar.
																																III.—Bengal.
	1		5	15	4	4	1		S 36° E		5·4*			66		87		·916		6·6		18			37·72			53·60			7·32	Cox's Bazar.
8			1	21					S 47° E	S 44° E	2·4	5·1	−2·7	72	− 2	85	− 1	·905	−·017	7·0	−0·8	14	16·74	−2·74	22·41	20·39	+ 2·02	33·57	29·70	+ 3·87	4·07	Chittagong.
5		1	2	8	8	5	1		S 13° E		4·2			60		88		·962		6·7		13	18·39	− 5·39	11·27	20·98	− 9·71	18·87	32·64	−13·77	2·54	Noakhali.
20		1		1	5	3			S 6° W	S 17° E	0·7	3·2	−2·5	23	−18	85	− 2	·965	−·019	8·0	−0·1	14	16·52	−2·52	18·49	15·38	+ 3·11	27·21	24·27	+ 2·94	5·53	Barisal.
7		1	3	6	7	3	2	1	S 15° E	S 32° E	2·7	5·5	−2·8	40	−30	85	− 4	·965	−·017	7·4	−1·1	11	15·39	−4·39	12·40	12·62	− 0·22	20·60	21·56	− 0·96	5·72	Narayanganj.
16		1	7	2	2	1		1	S 71° E	S 61° E	1·7	2·9	−1·2	27	−40	88	− 2	·945	+·008	6·8	−0·8	19	18·19	+0·81	26·38	18·74	+ 7·64	33·42	31·77	+ 1·65	2·81	Mymensingh.
19	1	2	5		1	2			E	S 66° E	0·6	2·9	−2·3	17	−50	88	0	·939	−·013	6·9	+0·2	15	14·35	+0·65	21·43	13·23	+ 8·20	27·99	21·57	+ 6·42	5·62	Bogra.
3	1	3	14	5	1	2	1		S 81° E	S 78° E	2·0	3·2	−1·2	56	−18	89	0	·940	+·012	6·2	−1·8	17	13·45	+3·55	18·77	13·69	+ 5·08	32·17	21·18	+10·99	3·90	Dinajpur.
28		1		1					E	S 86° E	1·2			5	−58	86	− 3	·898	−·009	4·3	−0·9	17	13·66	−1·66	19·61	23·68	− 4·07	31·29	35·07	− 3·78	3·63	Jalpaiguri.
		1		1	13	14	1		S 22° W	S 11° W	13·7	11·6	+2·1	82	+23	84	− 1	1·030	+·016	6·8	−1·7	8	12·10	− 4·10	8·48	10·53	− 2·05	10·45	15·01	− 4·56	2·51	Saugor Island.
2			1	12	11	2	1	1	S 17° E		3·5			70		81		·955		5·5		11	12·00	− 1·00	8·65	9·74	− 1·09	12·54	14·79	− 2·25	1·48	Midnapore.

Stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

(a) Indeterminate.

Table

(2) *Abstract of observations taken at 8 hrs. at 221*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal—*concld.*																						
5	Calcutta	21	29·587	+·001	29·556	29·746	5th	29·422	17th	·324	83·8	93·0	+1·9	79·4	+0·9	86·2	+1·4	13·6	100·1	18th	73·0	10th	27·1
	Jessore	33	29·594	+·005	29·574	29·795	3rd	29·420	17th	·375	82·7	91·3	−0·2	77·9	−0·9	84·6	−0·5	13·4	97·5	16th	72·7	25th	24·8
	Burdwan	99	29·502	−·004	29·549	29·691	4th	29·322	24th	·369	83·2	95·2	+1·4	78·9	−0·4	87·1	+0·5	16·3	104·9	16th	70·8	10th	34·1
	Berhampore	67	29·542	−·003	29·558	29·734	4th	29·367	24th	·367	81·9	93·3	+0·9	78·1	−0·4	85·7	+0·3	15·2	103·1	16th	70·2	5th	32·9
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·554	+·001	29·548	29·721	3rd	29·386	24th	·335	85·5	95·8	+3·9	79·6	+1·0	87·7	+2·5	16·2	107·4	17th	71·6	8th	35·8
	False Point	21	29·603	+·002	29·567	29·765	3rd	29·476	16th	·289	86·2	91·8	+1·5	80·1	0	86·0	+0·7	11·7	105·7	17th	71·6	8th	34·1
	Cuttack	80	29·545	+·013	29·566	29·722	3rd	29·420	16th	·302	84·7	97·2	+1·7	79·3	−0·8	88·3	+0·5	17·9	109·9	2nd	71·2	10th	38·7
	Puri	21	29·611		29·574	29·762	6th	29·489	24th	·273	84·8	90·2		79·9		85·0		10·3	94·1	3rd	73·6	8th	20·5
	Angul	455	29·167		29·576	29·326	3rd	29·055	24th & 29th.	·271	85·0	99·8		78·9		89·4		20·9	110·1	1st & 2nd.	70·0	16th	40·1
	Sambalpur	486	29·124	−·005	29·550	29·257	3rd	29·010	29th	·247	86·8	101·8	+4·5	82·5	+1·8	92·1	+3·1	19·3	111·6	3rd	75·6	20th	36·0
7	Chaibasa	*733*	28·851	−·007	29·523	29·010	3rd	28·709	17th	·301	84·6	100·3	+3·8	78·8	+0·1	89·6	+1·9	21·5	111·1	1st & 2nd.	72·8	8th	38·3
	Ranchi	2,128	27·505	+·007	29·537	27·650	3rd	27·372	25th	·278	82·4	96·6	+5·5	76·9	+2·3	86·7	+3·9	19·7	106·2	1st	70·4	8th	35·8
	Purulia	*816*	28·775		29·530	28·938	2nd	28·614	24th	·324	83·6	98·6		78·2		88·4		20·4	111·0	1st	69·1	10th	41·9
	Daltonganj	*730*	28·817†		29·521†	28·987	2nd	28·701	29th	·286	87·8	105·7		82·5		94·1		23·2	113·6	5th & 6th	73·5	13th	40·1
8	Purnea	134	29·467	−·013	29·555	29·663	3rd	29·290	24th	·373	81·4	91·3	−0·8	76·9	−0·4	84·1	−0·6	14·4	98·6	15th	67·8	9th & 10th.	30·8
	Monghyr	155	29·422†		29·527†	29·591	3rd	29·247	29th	·344	84·5	96·4		77·9		87·1		18·5	103·7	15th	66·9	9th	36·8
	Darbhanga	165	29·421	−·014	29·539	29·586	2nd	29·247	24th	·339	83·1	94·3	+1·9	76·5	−2·7	85·4	−0·4	17·8	101·6	15th	68·7	9th & 10th.	32·9
	Pusa	188	29·389		29·530	29·545	11th	29·213	24th	·332	84·2	97·1		76·8		86·9		20·3	105·0	15th	66·7	9th	38·3
	Patna	183	29·379	−·024	29·515	29·531	11th	29·214	24th	·317	86·0	98·5	+2·1	80·1	+0·1	89·3	+1·1	18·4	107·0	17th	68·2	9th	38·8
	Buxar	239	29·309		29·501	29·451	11th	29·137	24th	·314	87·1	102·5		81·3		91·9		21·2	110·5	17th	67·1	9th	43·4
	Gaya	372	29·185	−·020	29·500	29·330	11th	29·032	17th	·298	90·2	104·8	+5·2	82·8	+2·6	93·8	+3·9	22·0	112·4	18th	72·2	9th	40·2
	Naya Dumka	489	29·103	+·012	29·540	29·270	3rd	28·931	24th	·339	83·1	96·2	+2·2	78·3	−0·4	87·3	+0·9	17·9	106·4	16th	70·0	10th	36·4
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·307	−·008	29·518	29·464	2nd	29·112	24th	·352	85·1	98·8	+1·9	76·2	−3·5	87·5	−0·8	22·6	106·6	17th	69·3	7th	37·3
	Benares	267	29·286	−·011	29·500	29·423	2nd & 11th.	29·126	17th	·297	90·9	106·4	+6·3	82·3	+0·4	94·3	+3·3	24·1	113·1	17th	70·6	9th	42·5
	Allahabad	309	29·239	−·013	29·495	29·385	2nd	29·071	17th	·314	91·0	107·4	+5·7	83·1	+0·6	95·2	+3·1	24·3	115·6	17th	71·5	27th	44·1
	Cawnpore	416	29·110	−·030	29·472	29·274	11th	28·934	17th & 29th.	·340	89·8	106·1	+5·0	83·3	+1·3	94·7	+3·1	22·8	113·2	4th	70·4	12th	42·8
	Lucknow	368	29·179	−·014?	29·498	29·347	11th	28·994	29th	·353	88·4	104·3	+3·8	81·2	−0·1	92·8	+1·9	23·1	112·0	1st	70·1	9th	41·9
	Bahraich	401	29·146	−·032	29·499	29·317	12th	28·939	24th	·378	86·7	100·0	+2·6	79·6	+0·4	89·8	+1·5	20·4	108·6	17th	67·5	9th	41·1
10	Jhansi	824	28·741	−·025	29·491	28·835	2nd	28·585	29th	·310	93·7	109·3	+6·5	85·3	+1·3	97·3	+3·9	24·0	116·5	5th	73·5	10th	43·0
	Agra	556	28·977	−·031	29·474	29·157	12th	28·816	29th	·341	93·5	109·9	+5·6	86·3	+1·8	98·1	+3·7	23·6	117·5	5th	75·0	10th	42·5
	Mainpuri	516	29·015	−·025	29·477	29·195	12th	28·842	29th	·353	89·8	107·7	+6·5	82·6	+1·1	95·1	+3·8	25·1	117·3	4th	72·6	12th	44·7
	Bareilly	568	28·974	−·016	29·490	29·169	11th	28·736	24th	·373	88·3	103·7	+4·0	81·0	+1·2	92·4	+2·6	22·7	111·3	1st, 17th & 18th.	66·5	9th	44·8
	Roorkee	899	28·658	−·005	29·498	28·821	12th	28·496	17th	·325	88·9	103·4	+3·0	80·8	+2·2	92·1	+2·6	22·6	111·5	17th	70·9	11th	40·6

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

† Mean of 29 days.

B—*continued.*

stations in India, etc., in June, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June, 1912.	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	56	57
																																III.—Bengal. —*concld.*
2	1	1		9	8	9			S 2° E	S 4° E	4·2*	4·3	−0·1	62	+14	85	0	·977	+·005	7·0	−0·3	11	12·88	− 1·88	9·53	11·43	− 1·90	14·37	17·17	− 2·80	3·72	Calcutta.
11			3	9	5		2		S 33° E	S 27° E	3·2	3·3	−0·1	43	− 6	84	−4	·948	−·061	5·8	−2·1	10	14·55	− 4·55	12·88	12·33	+ 0·55	22·35	20·38	+ 1·97	3·12	Jessore.
7	1	3	1	4	8	5		1	S 9° E	S 4° E	2·3	3·6	−1·3	37	− 7	84	+2	·959	+·027	7·4	−0·1	11	12·71	− 1·71	6·25	9·59	− 3·34	10·73	15·95	− 5·22	1·96	Burdwan.
	2	2	9	4	8	5			S 41° E	S 36° E	3·0	3·4	−0·4	49	− 3	82	−7	·894	−·078	7·4	−0·7	10	12·00	− 2·00	8·71	9·33	− 0·62	13·85	14·57	− 0·72	3·27	Berhampore.
																																IV.—Bihar and Orissa.
1	1			1	9	16	2		S 32° W	S 32° W	4·5	5·3	−0·8	79	+20	72	−13	·867	−·115	6·2	−1·8	7	11·00	− 4·00	3·15	9·66	− 6·51	5·59	14·41	− 8·82	0·85	Balasore.
1				2	5	16	5	1	S 42° W	S 43° W	9·5	9·1	+0·4	72	+ 5	76	−8	·950	−·046	6.9	−1·1	3	9·27	− 6·27	2·53	8·42	− 5·89	2·71	12·77	−10·06	1·49	False Point.
3		1	1		3	13	9		S 55° W	S 47° W	2·8*	2·9	−0·1	62	+ 3	77	−1	·918	+·005	6·3	−0·7	8	11·26	− 3·26	7·78	9·84	− 2·06	8·96	13·83	− 4·87	2·25	Cuttack.
1	1				3	19	4	2	S 54° W		11·1			77		82		·983		6·0		8	8·11	− 0·11	4·33	7·03	− 2·70	4·59	9·76	− 5·17	1·23	Puri.
2	2	7	2	3	6	1	2	5	N 15° E		6·4			15		72		·864		6·4		7			2·74	8·09	− 5·35	3·18	9·63	− 6·45	0·60	Angul.
	1	1	2	3	5	13	5		S 33° W	S 23° W	3·8	3·8	0	59	+ 1	65	−9	·816	−·043	7·3	+0·7	7	10·40	− 3·40	3·13	10·36	− 7·23	3·44	11·67	− 8·23	1·61	Sambalpur.
6						17	7		S 57° W	S 52° W	3·2	2·1	+1·1	72	+31	69	−6	·810	−·060	6·5	+0·7	11	11·29	− 0·29	5·38	8·46	− 3·08	7·59	11·80	− 4·21	1·06	Chaibassa.
	1			1	6	9	11	2	S 60° W	S 42° W	8·0†	6·4	+1·6	66	+22	65	−11	·705	−·057	5·2	−0·7	6	12·47	−6·47	5·01	9·13	− 4·12	5·56	11·42	− 5·86	1·73	Ranchi.
9				4	7	2	7	1	S 29° W		2·7			43		74†		·853†		2·6		9	12·39	− 3·39	6·81	7·42	− 0·81	8·39	10·16	− 1·77	1·89	Purulia.
4	2	3	4	1	2	11	1	2	S 31° W		4·2			20		56		·719		3·9		7	8·48	− 1·48	1·86	5·67	− 3·81	2·59	6·18	− 3·59	0·56	Daltonganj.
10		6	9	3		1		1	N 81° E	N 84° E	2·5	2·9	−0·4	46	−20	88	+2	·935	+·003	4·8	−2·0	11	11·50	− 0·50	10·00	11·07	− 1·07	14·67	15·52	− 0·85	2·50	Purnea.
1		2	20	5		1	1		S 83° E		6·9			77		78		·923		4·3		7			4·95			6·92			1·56	Monghyr.
5			24				1		E	S 75° E	2·4	4·4	−2·0	77	0	85	+3	·959		4·9	−0·5	7	8·43	− 1·43	5·56	8·29	− 2·73	7·73	11·15	− 3·42	1·13	Darbhanga.
1		6	12	8		1		1	S 87° E‡		4·0			70		79		·929	+·005	4·2		9			4·93			8·07			0·99	Pusa.
5		1	21	1	1		1		S 87° E	S 87° E	5·5	4·1	+1·4	69	+ 6	75	−2	·928	+·017	3·6	−2·2	5	7·81	− 2·81	3·22	7·87	− 4·65	3·78	9·53	− 5·75	1·07	Patna.
1		2	19	1		2	4	1	E		4·3			50		67		·851		3·4		3	8·06	− 5·06	0·70	5·32	− 4·62	1·08	5·99	− 4·91	0·26	Buxar.
6		5	2	1	5	7	4		S 21° W	S 66° E	1·8	3·6	−1·8	27	+ 4	63	−12	·887	−·029	3·3	−2·0	2	8·32	− 6·32	2·16	7·26	− 5·10	2·46	8·29	− 5·83	1·36	Gaya.
15	1		3	4	5	1	1		S 29° E		2·0			30		76	− 8	·858		5·2		7	12·03	− 5·03	8·05	9·91	− 1·86	12·42	13·37	− 0·95	2·36	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
6	1	9	11	1			2		N 67° E	N 81° E	2·4	2·3	+0·1	56	+ 6	69	−10	·827	−·079	1·6	−3·3	6	7·70	−1·70	3·23	7·96	− 4·73	4·70	9·38	− 4·68	1·28	Gorakhpur.
6	1	3	3	8		1	6	2	S 54° E	S 89° E	3·3	3·8	−0·5	10	−10	55	−17	·776	−·071	2·3	−3·3	2	6·80	−4·80	1·42	5·19	− 3·77	2·05	5·70	− 3·65	1·12	Benares.
5	1	4	9	2		1	7	1	N 63° E	N 46° E	4·1	5·8	−1·7	17	+ 4	51	−15	·713	−1·12	3·3	−2·5	3	6·20	−3·20	1·58	4·92	− 3·34	1·69	5·18	− 3·49	1·06	Allahabad.
7	1	1	6	5		4	6		S 17° E	S 59° E	2·4	4·0	−1·6	17	− 5	55	−10	·750	−·086	1·2	−4·2	3	5·00	−2·00	2·09	3·21	−1·12	2·32	3·49	− 1·17	1·21	Cawnpore.
11		3	6	1	3	2	3	1	S 58° E	S 89° E	2·1	3·1	−1·0	13	−23	59	−10	·797	−·040	2·0	−3·8	4	6·10	−2·10	2·58	4·65	−2·07	2·94	5·53	− 2·59	1·05	Lucknow.
1	1		10	12	1	2	2	1	S 57° E	S 69° E	3·0	3·6	−0·6	53	− 7	65	−10	·811	−·084	2·4	−2·4	5	7·30	−2·30	1·89	6·27	−4·38	3·00	7·80	− 4·80	0·98	Bahraich.
2		1	2	2	2	11	8	2	S 55° W	N 89° W	4·8	4·0	+0·8	53	+22	38	−18	·571	−·160	5·1	+1·6	5	5·80	−0·80	1·52	4·87	−3·35	1·53	5·22	− 3·69	0·65	Jhansi.
6	1	1	3	1	5	7	5	1	S 37° W	S 16° W	5·0	4·7	+0·3	33	+ 7	42	−15	·644	*−·120	1·8	−2·0	1	3·90	−2·90	0·48	2·51	−2·03	0·51	2·99	− 2·48	0·30	Agra.
1	1		4	6	4	3	5	6	S 31° W	N 80° E	2·1	2·1	0	20	+ 4	53	−13	·724	−·097	0·9	−4·0	3	4·60	−1·60	2·12	2·94	−0·82	2·18	3·27	− 1·11	1·10	Mainpuri.
23			7						E	S 56° E	0·6	3·1	−2·5	23	−18	67	− 3	·892	+·068	2·8	−1·6	2	4·91	−2·91	1·87	5·42	−3·55	3·47	6·12	− 2·65	1·66	Bareilly.
9			1	18	1			1	S 45° E	S 41° E	2·4	2·6	−0·2	59	+18	48	−15	·641	−·087	2·3	−1·6	1	6·00	−5·00	0·45	5·10	−4·65	0·59	5·93	− 5·34	0·36	Roorkee.

stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

‡ One variable wind.

Table

(2) Abstract of observations taken at 8 hrs. at 221

Number of sub-division.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Punjab.																						
11	Delhi	718	28·822	−·013	29·482	28·998	11th	28·667	17th	·331	91·3	106·4	+3·2	85·0	+1·7	95·7	+2·5	21·4	113·0	5th & 19th	74·3	11th & 14th.	38·7
	Sirsa	662	28·845†	−·027†	29·449†	29·087	11th	28·688	29th	·379	94·0	110·6	+3·9	84·9	+1·8	97·7	+2·9	25·7	117·8	19th	73·0	11th	44·8
	Patiala	*818*	28·722		29·485	28·891	13th	28·530	17th	·355	89·6	105·3		82·7		94·0		22·6	113·4	18th	74·0	13th	39·4
	Ambala	892	28·641	−·026	29·472	28·826	11th	28·464	17th	·362	90·6	107·6	+6·2	81·9	+1·7	94·8	+3·9	25·7	116·5	18th	71·9	11th	44·6
	Ludhiana	812	28·714	−·012	29·470	28·920	11th	28·544	24th	·376	89·6	109·4	+4·6	82·9	+2·2	96·1	+3·4	26·5	117·5	18th	74·0	10th, 11th & 12th.	43·5
	Lahore	702	28·796	−·024	29·446	29·015	11th	28·612	24th	·403	91·5	109·7	+2·3	82·6	+3·3	96·1	+2·8	27·1	118·4	19th	73·2	10th & 11th.	45·2
	Sialkot	830	28·675	−·024	29·450	28·878	11th	28·479	24th	·399	91·3	107·9	+2·4	80·4	−0·1	94·2	+1·1	27·5	115·5	19th	72·5	2nd & 12th	43·0
	Rawalpindi	1,674	27·874	−·018	29·445	28·084	11th	27·674	24th	·410	90·4	107·3	+4·5	75·7	+0·4	91·5	+2·5	31·6	115·4	30th	67·4	1st & 12th	48·0
12	Khushab	612	28·882	−·018	29·444	29·131	11th	28·681	24th	·450	94·2	109·7	+2·6	83·0	+0·6	96·4	+1·6	26·7	116·4	18th	70·4	12th	46·0
	Montgomery	558	28·923	−·022	29·429	29·154	11th	28·746	24th	·408	94·9	110·9	+0·9	84·3	+0·2	97·6	+0·5	26·6	117·4	4 days	67·5	10th	49·9
	Multan	420	29·054	−·025	29·426	29·285	11th	28·858	24th	·427	92·5	111·6	+3·8	85·8	+2·1	98·7	+2·9	25·8	119·3	8th	72·5	10th	46·8
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·426	−·012	29·478	28·634	12th	28·197	24th	·437	89·4	108·9	+3·0	76·5	−0·8	92·7	+1·1	32·4	118·2	30th	68·4	12th	49·8
	D. I. Khan	590	28·906	−·023	29·450	29·155	12th	28·655	24th	·500	91·1	109·2	+1·2	81·0	−0·2	95·1	+0·5	28·2	116·9	30th	71·1	12th	45·8
	VIII.—Sind.																						
16	Jacobabad	186	29·289	−·024	29·428	29·489	12th	29·098	24th	·391	95·6	117·4	+4·7	84·5	+0·1	100·9	+2·4	32·9	124·1	7th & 8th	75·3	2nd	48·8
	Hyderabad	96	29·439	−·009	29·485	29·631	3rd	29·300	20th	·331	88·5	108·4	+4·2	82·6	+0·9	95·5	+2·5	25·8	119·5	10th	79·0	1st	40·5
	Karachi	13	29·576	−·004	29·540	29·773	3rd	29·436	20th	·337	86·5	91·8	+0·9	83·6	+1·1	87·7	+1·0	8·2	102·0	12th	82·0	1st, 2nd & 10th.	20·0
	IX.—Rajputana.																						
17	Bikaner	*771*	28·758	−·018	29·467	28·932	11th	28·623	18th	·309	93·3	111·2	+4·7	87·1	+1·9	99·1	+3·3	24·1	119·5	21st	69·0	9th	50·5
	Jodhpur	780	28·797	−·023	29·516	28·967	3rd	28·673	20th	·294	88·6	105·5	+0·4?	83·5	+0·8	94·5	+0·6?	22·0	112·5	6th	71·3	11th	41·2
18	Jaipur	1,431	28·16	−·007	29·499	28·318	3rd	28·051	20th	·267	92·0	108·5	+6·0	84·0	+2·9	96·2	+4·5	24·5	114·7	7th & 19th.	71·6	12th	43·1
	Ajmer	1,611	28·002	−·012	29·510	28·176	3rd	27·869	20th	·307	88·0	104·3‡	+3·8‡	85·3	+4·5	94·8‡	+4·1	19·0	111·9	5th	73·7	12th	38·2
	Kotah	819?	28·749	−·019	29·496?	28·894	11th	28·596	29th	·298	93·8	108·9	+2·1?	87·5	+0·5?	98·2	+1·3?	21·4	116·1	7th	74·6	11th	41·5
	X.—Bombay.																						
19	Deesa	466	29·169	−·011	29·580	29·350	3rd	29·029	20th	·321	87·9	106·0	+4·1	81·8	+1·2	93·9	+2·7	24·2	116·8	15th	73·9	22nd	42·9
	Bhuj	395	29·227	−·006	29·567	29·408	3rd	29·079	20th	·329	86·2	100·4	+2·8	80·6	+0·8	90·5	+1·8	19·8	110·0	15th	68·5	13th	41·5
	Jamnagar	61	29·580		29·586	29·761	3rd	29·442	20th	·319	88·5	98·3		81·2		89·7		17·1	104·8	7th	77·2	22nd	27·6
	Dwarka	37?	29·616	−·022?	29·599	29·802	3rd	29·472	18th & 20th.	·330	85·2	90·3	+1·3	83·1	+1·2	86·7	+1·3	7·2	92·3	17th & 18th.	79·2	19th	13·1
	Rajkot	429	29·229	+·001	29·601	29·415	3rd	29·079	19th	·336	85·2	102·1	+2·3	78·2†	+0·6†	90·1†	+1·5	23·9	110·1	4th, 5th & 7th.	72·0	4th & 21st	38·1
	Veraval	*18*	29·651	−·009	29·612	29·835	3rd	29·459	20th	·376	84·0	86·8	+0·4	82·2	+1·2	84·5	+0·8	4·6	88·1	7 days	76·3	20th	11·8
	Bhavnagar Para	55	29·613	−·040	29·612	29·787	3rd	29·419	20th	·368	87·5	103·4	+5·1	81·8	+1·4	92·6	+3·3	21·6	112·5	6th	75·0	28th	37·5
	Surat	39	29·650	−·010	29·632	29·816	3rd	29·474	20th	·342	86·2	95·1	+1·4	80·8	+1·5	88·0	+1·5	14·3	102·4	14th	75·1	30th	27·3
	Ahmadabad	163	29·481	−·014	29·591	29·655	2nd	29·335	20th	·320	86·9	105·1	+5·4	82·4	+1·7	93·8	+3·5	22·7	114·6	5th	77·2	19th & 21st.	37·4
85	Bombay	37	29·692	−·017	29·669	29·830	2nd.	29·536	18th	·294	83·9	90·1	+2·5	81·0	+1·5	85·5	+2·0	9·1	95·5	12th	75·5	30th	20·0
	Ratnagiri	110	29·639	−·021	29·687	29·773	3rd	29·488	13th	·285	82·5	87·8	+1·2	78·2	+1·0	83·0	+1·1	9·6	93·3	11th	69·9	29th	23·4
	Goa	199	?	?	?	?	?	?	?	?	79·9	85·0	−0·2	77·5	−0·3	81·2	−0·3	7·5	90·1	7th, 8th & 3th.	71·1	12th	19·0
	Marmagao	*60*	29·717	−·018	29·711	29·832	3rd	29·625	14th	·207	81·8	87·1	+0·1	77·3	−0·6	82·2	−0·3	9·8	93·0	5th	72·2	27th	20·8

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

† Mean of 29 days.
‡ „ „ 28 „
§ „ „ 13 „

NOTE.—The barometric readings are not reduced to sea-level in the case of

B—*continued.*

stations in India, etc., in June, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June, 1912.	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	56	57
																																VI.—Punjab.
2		2	5	6	2	2	7	4	S 10° W	S 44° E	3·8	3·6	+0·2	10	− 3	54	− 2	·778	+·056	4·5	−0·5	2	4·10	−2·10	1·45	3·10	−1·65	2·03	3·73	− 1·70	1·27	Delhi.
6	2	1	2	4	8	6	1		S 1° E	S 27° W	5·7	5·2	+0·5	41	+15	36	−15	·554	−·156	1·5	−3·0	1	3·20	−2·20	0·26	1·65	−1·39	0·39	2·26	− 1·87	0·16	Sirsa.
3		1	6	14	1	1	1	3	S 55° E		4·7			53		51		·692		1·4		4			1·07	2·20	−1·13	1·65	2·83	− 1·18	0·48	Patiala.
2	1		12	12	2			1	S 66° E	S 61° E	4·5	1·8	+2·7	72	+20	42	−25	·597	−·202	1·5	−1·5	1	4·30	−3·30	0·93	3·68	−2·70	1·13	4·28	− 3·15	0·90	Ambala.
13	1	2		12	1		1		S 51° E	S 37° E	1·0	2·0	−1·0	57	0	30	−16	·542	−·184	1·7	−1·6	1	3·50	−2·50	0·15	2·58	−2·43	0·74	3·18	− 2·44	0·15	Ludhiana.
14		1	2	7	2	2		2	S 38° E	S 60° E	1·8	2·6	−0·8	27	− 3	21	−11	·603	−·090	2·2	−0·6	2	2·30	−0·30	0·64	1·84	−1·20	0·74	2·51	− 1·77	0·50	Lahore.
8	4	4	3	7	2			2	N 82° E	N 81° E	1·9	2·3	−0·4	30	−14	30	−13	·519	−·150	0·7	−1·3	2	3·60	−1·60	0·41	2·56	−2·15	0·80	3·65	− 2·85	0·19	Sialkot.
16	7	1	1		1		2	2	N 12° W	N 89° E	2·6	2·0	+0·6	27	+ 7	35	−15	·483	−·132	3·2	+0·4	2	3·30	−1·30	0·64	2·10	−1·46	1·82	3·52	− 1·70	0·36	Rawalpindi.
3	1	6	11	3	4	1	1		S 84° E	N 69° E	5·1	5·2	−0·1	53	+ 1	30	−13	·441	−·153	2·6	+0·8	5	1·50	+3·50	1·46	1·41	+0·05	1·71	2·18	− 0·47	0·43	Khushab.
	2	3	3	4	9	8	1		S 5° E	S 3° W	6·3	6·9	−0·6	43	+ 6	31	−12	·469	−·207	1·9	+0·4	1	2·00	−1·00	0·35	1·08	−0·73	0·53	1·44	− 0·91	0·35	Montgomery.
18	5		1	2	4				S 80° E	S 3° W	1·1	2·4	−1·3	8	−22	42	− 6	·618	−·084	1·1	+0·4	1	1·10	−0·10	0·53	0·59	−0·06	1·08	0·88	+ 0·20	0·50	Multan.
																																VII.—North-West Frontier Province.
19	3		3		1	3	1		S 45° W	N 6° W	2·1	3·2	−1·1	(a)		37	− 7	·501	−·092	2·3	+0·4	1	0·90	+0·10	0·79	0·32	+0·47	1·40	1·25	+0·15	0·67	Peshawar.
14	2	8		1	2	1		2	N 37° E	N 51° E	1·6	1·8	−0·2	23	− 3	62	+ 6	·905	+·108	1·7	+0·3	1	1·30	−0·30	0·15	0·67	−0·52	0·29	1·09	−0·80	0·10	D. I. Khan.
																																VIII.—Sind.
18		3		5	2	1		1	S 51° E	S 51° E	2·7	3·9	−1·2	17	−38	59	+ 8	·982	+·196	0·2	−0·9	0	0·30	−0·30	0	0·16	−0·16	0·07	0·30	−0·23	0	Jacobabad.
1		1		1	14	13			S 18° W	S 39° W	8·2	12·8	−4·6	82	+ 1	61	0	·819	+·027	2·2	−1·6	0	0·70	−0·70	0	0·53	−0·53	0	0·70	−0·70	0	Hyderabad.
			1			13	15	1	S 71° W	S 75° W	13·2	12·8	+0·4	82	− 4	77	− 5	·980	+·009	4·5	−0·7	0	0·50	−0·50	0	0·98	−0·98	0	1·04	−1·04	0	Karachi.
																																IX.—Rajputana.
2		1		1	4	10	10	2	S 61° W	S 38° W	6·9	6·9	0	66	− 1	43	−11	·654	−·120	1·2	−1·1	1	2·10	−1·10	0·96	1·43	−0·47	1·13	2·07	− 0·94	0·90	Bikaner.
2				1	2	19	6		S 49° W		4·8			79		49	− 8	·649		2·0		2	2·60	−0·60	2·08	1·23	+0·85	2·15	1·48	+ 0·67	1·19	Jodhpur.
3	1	2	2	1	1	3	8	9	N 68° W	S 88° W	5·9*	5·0	+0·9	43	+ 6	42	−15	·616	−·102	1·1	−3·1	0	4·40	−4·40	0·09	2·05	−1·96	1·03	2·58	− 1·55	0·03	Jaipur.
3	1				1	12	9	4	S 74° W	S 84° W	7·9	6·9	+1·0	69	− 1	52	− 9	·675	−·075	1·8	−1·8	2	3·90	−1·90	1·32	2·23	−0·91	1·38	2·78	− 1·40	0·65	Ajmer.
3	1				1	11	9	5	S 78° W		3·0			66		42	− 4	·617		2·3		1	6·20	−5·20	1·13	2·70	−1·57	1·17	3·13	− 1·96	0·96	Kotah.
																																X.—Bombay.
	1			2	5	15	4	3	S 46° W	S 69° W	11·1	12·2	−1·1	66	+ 3	62	− 6	·799	−·021	3·4	−2·5	3	2·18	+0·82	1·85	1·92	−0·07	1·85	2·11	− 0·26	1·27	Deesa.
				2	2	10	12	4	S 70° W	S 72° W	12·9	12·9	0	69	− 9	67	− 4	·836	−·037	5·5	+0·5	2	2·40	−0·40	0·98	1·87	−0·89	0·98	1·94	− 0·96	0·80	Bhuj.
1			1		1	16	7	4	S 65° W		16·3§			74		68		·961		4·1		3			1·20	1·90	−0·70	1·20	1·92	− 0·72	0·84	Jamnagar.
					2	16	10	2	S 62° W		11·2			82		85	+ 5	1·038		5·4		1			0·76	2·39	−1·63	0·76	2·40	− 1·64	0·60	Dwarka.
1			1		2	13	11	2	S 64° W	S 81° W	12·5	10·3	+2·2	76	+ 2	73	− 1	·868	−·007	5·3	−0·3	8	5·30	+2·70	8·40	4·16	+4·24	8·40	4·33	+ 4·07	4·11	Rajkot.
6				2		5	17		S 75° W	S 69° W	7·2	8·3	−1·1	62	− 7	86	+ 2	1·004	+·040	5·8	−1·1	3	4·60	−1·60	11·54	3·48	+8·06	11·54	3·53	+ 8·01	7·80	Veraval.
2					6	11	9	2	S 56° W	S 48° W	5·0	11·5	−6·5	73	− 7	67	− 9	·873	−·080P	5·6	−0·5	2	5·70	−3·70	2·10	3·48	−1·38	2·21	3·63	− 1·42	1·20	Bhavnagar Para.
				2		9	15	3	1	S 33° W	S 49° W	6·8	9·6	−2·8	76	+ 6	77	− 2	·961	+·043	5·5	−1·4	5	8·70	−3·70	7·04	7·94	−0·90	7·04	8·04	− 1·00	3·90	Surat.
4				4	4	17	1		S 28° W	S 61° W	5·2	5·6	−0·4	72	+13	71	− 1	·900	+·024	4·1	−2·1	4	4·80	−0·80	2·46	4·40	−1·94	2·46	4·48	− 2·02	1·53	Ahmadabad.
	1	1	1	5	4	6	10	2	S 67° W	S 58° W	8·2*	11·1	−2·9	46	− 2	80	− 3	·935	+·006	6·4	−1·5	12	14·70	−2·70	10·79	18·48	−7·69	11·22	19·19	− 7·97	3·37	Bombay.
4	2	1	1	4	1	8	3	6	S 73° W	S 60° W	7·7	7·4	+0·3	27	− 4	81	− 2	·888	−·013	6·8	−0·8	19	20·50	−1·50	32·04	29·10	+2·94	34·19	30·27	+ 3·92	5·33	Ratnagiri.
1	5	2	2	3	5	5	5	2	S 57° W	S 66° W	7·6	6·7	+0·9	17	−31	87	+ 2	·875	−·035	9·5	+1·4	22			45·25	30·78	+14·47	47·26	32·87	+14·39	4·36	Goa.
1	3		3	2	4	3	6	8	N 84° W	N 76° W	7·9*†	8·0	−0·1	30	−19	87	+ 2	·935	0	8·5	+1·7	21			35·94	29·77	+6·17	37·32	31·55	+ 6·27	4·24	Marmagao.

hill or plateau stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

(a) Indeterminate.

Table

(2) Abstract of observations taken at 8 hrs. at 221

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between 2nd maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay—*concld.*																						
25	Karwar	44	29·747	—·019	29·725	29·846	3rd	29·660	13th	·186	81·3	85·7	+0·4	76·9	+0·8	81·3	+0·6	8·8	93·2	1st & 4th	70·5	27th	22·7
26	Malegaon	1,430	28·266	—·009	29·609	28·387	2nd	28·133	18th	·254	85·6	102·8	+7·9	76·9	+1·9	89·8	+4·9	25·9	111·9	7th	71·1	28th	40·8
	Ahmadnagar	2,154	27·600	+·007	29·629	27·712	1st	27·481	18th	·231	81·3	97·9	+7·5	72·9	+0·6	85·4	+4·1	25·0	107·1	4th	67·5	26th	39·6
	Poona	1,846	28·895	—·010	29·653	28·013	3rd	27·767	18th	·246	78·6	95·3	+6·1	73·9	+1·3	84·6	+3·7	21·4	104·0	4th	69·8	17th	34·2
	Sholapur	1,590	28·149	—·016	29·651	28·272	1st	28·047	18th	·225	81·3	99·0	+4·2	75·8	+2·6	87·4	+3·4	23·2	108·3	7th	71·6	25th	36·7
	Bijapur	*1,948*	27·809	—·003	29·656	27·919	1st	27·708	18th	·211	79·4	95·4	+4·9	73·6	+1·4	84·5	+3·1	21·8	105·2	4th	69·8	29th	35·4
	Belgaum	2,535	27·248	—·006	29·672	27·370	3rd	27·167	17th	·203	74·2	83·7	+2·9	68·5	+0·4	76·1	+1·7	15·2	97·3	6th	60·5	29th	36·8
	XI.—Central India.																						
20	Neemuch	1,624	28·016	—·009	29·540	28·159	3rd	27·892	20th	·267	85·9	103·5	+5·2	79·5	+2·2	91·5	+3·7	24·0	111·4	4th	71·0	11th	40·4
	Indore	1,823	27·848	+·002	29·565	27·983	3rd	27·727	17th	·256	84·7	101·1	+6·7	77·9	+2·6	89·5	+4·7	23·2	110·1	4th & 15th	72·1	23rd	38·0
21	Nowgong	754	28·825	—·004	29·510	28·973	2nd	28·671	29th	·299	91·9	108·0	+6·4	84·5	+2·1	96·3	+4·3	23·5	115·0	6th	74·0	10th	41·0
	Sutna	1,041	28·532	—·003	29·497	28·664	2nd	28·390	29th	·274	90·1	106·5	+7·8	84·4	+3·3	95·5	+5·5	22·1	113·3	5th	76·7	10th	36·6
	XII.—Central Provinces.																						
22	Buldana	2,132	27·579		29·590	27·695	2nd	27·452	18th	·243	81·8	99·2		76·3		87·8		22·9	107·0	4th	69·4	16th	37·6
	Akola	925	28·749	—·001	29·602	28·860	1st	28·645	18th	·215	87·1	106·3	+8·1	81·5	+3·8	93·9	+5·9	24·8	115·2	5th	72·0	30th	43·2
	Amraoti	1,215	28·446	—·007	29·547	28·548	1st	28·363	18th	·185	87·9	105·7	+8·5	81·3	+4·5	93·5	+6·5	24·4	114·8	5th	71·3	30th	43·5
23	Khandwa	1,044	28·613	—·008	29·584	28·735	2nd	28·483	18th	·252	87·3	106·1	+8·5	82·7	+4·0	94·5	+6·3	23·4	114·2	4th	75·6	23rd & 28th.	38·6
	Hoshangabad	1,006	28·631	—·010	29·557	28·763	3rd	28·507	17th	·256	89·9	106·7	+8·6	82·4	+3·4	94·5	+6·0	24·3	114·6	4th	76·4	21st & 30th.	38·2
	Saugor	1,807	27·812	—·012	29·499	27·944	2nd	27·690	29th	·254	88·1	104·4	+6·6	80·7	+3·1	92·5	+4·9	23·7	112·3	5th	67·1	24th	45·2
	Jubbulpore	1,327	28·275	—·012	29·508	28·401	3rd	28·162	29th	·239	88·8	105·0	+8·1	81·7	+3·3	93·4	+5·7	23·3	112·3	6th	74·3	24th	38·0
	Seoni	2,033	27·636	+·012	29·529	27·759	1st	27·539	29th	·220	88·4	102·9	+8·7	76·4	+0·9?	89·7	+4·8?	26·5	110·6	5th	72·0	18th & 30th.	38·6
	Nagpur	1,017	28·625	0	29·559	28·729	1st	28·530	17th	·199	90·7	107·3	+9·0	83·7	+5·2	95·5	+7·1	23·6	114·6	5th	75·3	30th	39·3
24	Pendra	2,123?	27·604		29·491	27·764	3rd	27·491	17th & 29th.	·273	86·4	100·6		78·7		89·7		21·9	109·3	6th	66·7	11th	42·6
	Raipur	970	28·666	+·015	29·555	28·769	3rd	28·567	17th	·202	89·8	105·2	+8·0	84·5	+6·1	94·8	+7·1	20·7	112·2	9th	75·6	30th	36·6
	Chanda	*634*	29·004	—·019	29·568?	29·111	1st	28·908	17th	·203	89·9	106·7	+8·2	83·7	+4·1	95·2	+6·1	23·0	113.5	3rd, 4th & 6th.	72·0	13th	41·5
	Jagdalpur	1,813	27·837		29·585	28·007	2nd	27·790	17th	·217	84·7	97·8		77·6		87·7		20·2	106·2	3rd	72·1	4th & 28th	34·1
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	27·835	—·024	29·637	27·943	1st	27·720	18th	·223	81·2	99·1	+4·3	74·3	+1·3	86·7	+2·8	24·8	108·4	4th	69·7	29th	38·7
	Nizamabad	1,248	28·445		29·606	28·517	1st	28·350	29th	·197	85·0	101·6	+7·6	80·2	+3·7	92·7	+5·7	23·8	113.9	9th	71·7	29th	42·2
	Bidar	*2,165*									82·6	99·2		76·2		87·7		23·0	107·4	5th & 7th	71·4	4 days	36·0
28	Gulbarga	1,503	28·242	—·007	29·660	28·378	1st	28·158	17th	·220	81·4	100·7	+6·0	76·3	+3·1	88·8	+4·5	23·9	110·0	4th & 5th	71·3	25th	38·7
	Raichur	*1,311*	28·447	+·008	29·676	28·536	1st	28·375	17th	·161	83·2	99·4	+4·7	77·5	+2·7	88·5	+3·7	21·9	107·5	5th	72·1	27th	34·4
	Hyderabad (Deccan)	1,690	28·035	0	29·624	28·153	1st	27·953	29th	·190	83·5	100·8	+6·5	79·4	+5·0	90·1	+5·7	21·4	108·8	5th	73·7	30th	35·1
	Hanamkonda	877	28·815	—·011	29·614	28·919	7th	28·726	29th	·193	88·3	104·6	+6·5	83·1	+3·3	93·8	+4·9	21·5	112·0	3rd & 4th.	77·2	19th	34·8
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·405	—·001	29·693	27·494	4th	27·334	14th	·160	75·9	88·1	+2·3	70·5	+0·9	79·3	+1·6	17·6	95·1	1st	64·8	1st	30·3
	Hassan	3,149	26·733	+·010	29·730	26·816	4th	26·662	17th	·154	71·2	80·6	+1·1	66·4	+0·3	73·5	+0·7	14·2	89·4	1st	63·6	21st	25·8
	Bangalore	3,021	26·850	0	29·720	26·913	4th	26·780	17th	·133	72·4	85·3	+0·6	67·0	+0·2	76·1	+0·4	18·3	92·8	1st	62·8	6th	30·0
	Mysore	2,518	27·339	—·008	29·745	27·414	4th	27·252	17th	·162	73·4	84·2	—0·4	68·3	+0·1	76·3	—0·1	15·9	92·0	2nd	66·5	28th & 30th	25·5

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 of

3—*continued.*

tations in India, etc., in June, 1912—continued.

Wind direction. Number of winds from Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June 1912.	Heaviest rainfall during month.	Stations.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																																X.—Bombay—*concld.*
17		1			1	11			S 41° W	S 82° W	4·5	4·4	+0·1	33	−19	85	+ 2	·890	+·032	8·0	0	21	23·30	−2·30	31·66	38·65	−6·99	32·59	41·33	− 8·74	4·12	Karwar.
		1	1		4	11	12	1	S 61° W	S 81° W	10·6	10·2	+0·4	69	− 4	56	−15	·674	−·083	2·0	−4·2	3	7·70	−4·70	3·18	4·45	−1·27	3·25	5·31	− 2·06	2·85	Malegaon.
				2	6	7	7	8	S 67° W	N 88° W	5·5	11·8	−6·3	56	+ 1	59	−19	·616	−·119	3·8	−2·7	6	7·40	−1·40	2·03	5·03	−3·00	2·38	5·72	− 3·34	0·80	Ahmadnagar.
8			2			7	11	2	S 77° W	S 82° W	8·8	11·9	−3·1	49	−32	71	− 2	·678	−·028	3·3	−4·0	6	8·50	−2·50	1·74	4·51	−2·77	2·06	5·69	− 3·63	0·74	Poona.
					4	10	4	12	S 82° W	S 81° W	12·0	10·0	+2·0	62	−15	65	− 1	·678	+·008	6·6	−0·1	5	6·20	−1·20	1·95	4·79	−2·84	2·85	5·73	− 2·88	0·61	Sholapur.
					5	17	7	1	S 50° W	S 78° W	10·0	7·1	+2·9	82	+ 3	70	− 7	·700	−·021	6·1	−0·9	4	6·20	−2·20	2·27	3·44	−1·17	2·66	4·53	−1·87	0·90	Bijapur.
1				1	2	10	14	2	S 69° W	S 75° W	15·3	16·7	−1·4	76	+ 6	81	− 6	·674	−·021	8·4	+0·2	10	14·00	−4·00	3·63	8·38	−4·75	6·04	10·83	− 4·79	0·97	Belgaum.
																																XI.—Central India.
		1	3			12	13	1	S 69° W	S 81° W	11·8	9·9	+1·9	62	−12	55	−15	·644	−·139	4·6	+0·2	3	6·20	−3·20	1·69	3·99	−2·30	1·96	4·37	− 2·41	1·16	Neemuch.
6		1		1		2	14	6	N 82° W	S 87° W	5·8	5·1	+0·7	59	−15	61	−11	·703	−·055	3·7	−2·3	5	7·60	−2·60	2·67	5·64	−2·97	2·78	6·11	− 3·33	1·12	Indore.
5	1	1	1	1	1	2	17	1	S 88° W	S 86° W	3·5	3·4	+0·1	56	+ 8	43	−18	·627	−·129	4·5	−0·2	3	7·30	−4·30	0·87	6·47	−5·60	1·04	6·76	− 5·72	0·50	Nowgong.
5	1		2	2	3	7	9	1	S 56° W	S 84° W	4·3	7·1	−2·8	46	+17	49	−11	·672	−·042	6·1	+1·5	4	7·20	−3·20	0·74	5·83	−5·09	1·55	6·20	−4·65	0·22	Satna.
																																XII.—Central Provinces.
					3	5	14	8	S 86° W		7·2	8·0	−0·8	43		57		·605		3·0		5			2·35	6·43	−4·08	2·35	6·95	−4·60	0·79	Buldana.
					1	7	12	10	N 88° W	N 81° W	7·5	7·2	+0·3	79	+ 6	52	−16	·634	−·124	4·1	−2·1	7	8·10	−1·10	6·15	5·12	+1·03	6·18	5·49	+ 0·69	2·40	Akola.
1	2					4	15	8	N 79° W	S 87° W	9·0	6·5	+2·5	76	− 2	56	−15	·896	−·058	3·3	−2·7	4	9·00	−5·00	3·35	6·57	−3·22	3·35	7·11	− 3·76	1·60	Amraoti.
	1					5	15	9	N 81° W	N 87° W	7·3	7·5	−0·2	82	0	54	−14	·681	−·068	3·1	−2·4	2	7·50	−5·50	0·90	5·18	−4·28	0·90	5·51	− 4·61	0·47	Khandwa.
1		2		1		10	11	5	S 82° W	S 62° W	5·1	3·7	+1·4	62	− 9	46	−25	·619	−·189	2·9	−3·1	2	8·20	−6·20	0·98	5·89	−4·91	1·03	6·43	− 5·39	0·39	Hoshangabad.
1	1	1	3		1	4	15	4	N 88° W	S 80° W	7·9	4·7	+3·2	56	−11	48	−17	·605	−·102	3·5	−1·5	2	8·90	−6·90	0·88	6·93	−6·05	0·88	7·39	−6·51	0·14	Saugor.
1	2	2		2	6	6	7	4	S 64° W	S 70° W	2·6	3·7	−1·1	40	−19	43	−22	·569	−·153	2·7	−2·5	3	10·40	−7·40	1·54	7·69	−6·15	1·56	8·18	− 6·62	1·08	Jubbulpore.
	6	2			3	6	10	3	N 82° W	S 86° W	4·9	4·2	+0·7	49	− 7	42	−25	·533	−·173	2·9	−2·2	4	12·30	−8·30	0·69	8·87	−8·18	0·99	9·56	− 8·66	0·18	Seoni.
	1			1	1	8	5	10	N 88° W	S 87° W	5·5	6·6	−1·1	69	+10	45	−19	·633	−·119	5·1	−1·5	2	9·70	−7·70	0·81	8·71	−7·90	1·07	9·46	− 8·39	0·39	Nagpur.
3	3			4	8	7	2	3	S 31° W		5·1			43		54		·654		3·9		7			2·13	8·19	−6·06	2·21	9·10	− 6·89	0·54	Pendra.
1			1	1	5	14	8		S 46° W	S 56° W	6·3	7·1	−0·8	72	− 4	51	−17	·701	−·061	2·3	−4·1	2	10·40	−8·40	0·96	8·39	−7·43	1·25	9·31	− 8·06	0·53	Raipur.
2			1	4	2	4	14	3	S 70° W	S 61° W	6·1	4·5	+1·6	53	−12	48	−16	·652	−·089	3·7	−2·9	3	9·40	−6·40	2·68	7·22	−4·54	2·77	7·87	− 5·10	1·90	Chanda.
2			1	1	7	13	5	1	S 39° W					66		61		·784		4·1		6			1·44			3·97			0·49	Jagdalpur.
																																XIII.—Hyderabad.
	1				1	8	14	6	S 87° W		12·8			79		64	− 5?	·655		6·1		8	8·10	−0·10	4·74	5·21	−0·47	4·93	5·86	−0·93	1·18	Aurangabad.
3					1	19	7		S 55° W		7·0			79		56	−13	·636		4·3		7	8·90	−1·90	2·80	4·87	−2·07	3·45	5·18	−1·73	1·03	Nizamabad.
1					2	13	7	7	S 71° W		7·2			73		58		·638		6·7		2	7·80	−5·80	1·24	4·98	−3·72	1·91	5·76	−3·85	1·00	Bidar.
						10	12	8	S 87° W	S 86° W	10·3	10·3	0	82	+15	58	−18	·614	−·127	2·8	−3·5	4	7·40	−3·40	0·83	5·31	−4·48	1·75	6·32	−4·56	0·29	Gulbarga.
						10	15	5	S 82° W	S 74° W	11·2	10·2	+1·0	82	+ 7	62	− 8	·711	−·007	4·7	−1·7	1	6·20	−5·20	0·51	3·81	−3·30	1·46	4·45	−2·99	0·13	Raichur.
4							26		W	N 87° W	4·9	6·6	−1·7	87	+ 3	65	− 6	·740	+·027	4·7	−1·5	2			2·06	4·17	−2·11	2·12	5·26	−3·14	1·86	Hyderabad (Deccan).
	1			4	3	5	17		S 65° W		8·2			66		51	− 9	·665		5·1		3	6·70	−3·70	0·80	5·87	−5·07	1·15	6·39	−5·24	0·43	Hanamkonda.
																																XIV.—Mysore.
2						13	14	1	S 71° W	S 68° W	3·6	8·1	−4·5	82	− 4	74	− 8	·662	−·012	6·5	−2·1	5	6·00	−1·00	2·54	3·33	−0·79	6·61	6·38	+0·23	1·00	Chitaldrug.
					1	12	14	3	S 74° W	S 83° W	7·2	3·7	+3·5	87	+ 6	86	+ 3	·657	+·017	8·4	−0·3	6	10·4	−4·40	2·66	4·01	−1·35	3·79	9·25	−5·46	0·72	Hassan.
						13	16	1	S 72° W	S 70° W	7·8	6·8	+1·0	89	0	80	− 1	·639	−·001	7·6	+0·7	7	5·70	+1·30	3·78	2·87	+0·91	5·22	7·21	−1·99	1·45	Bangalore.
					1	16	11	2	S 65° W	S 62° W	9·0	10·7	−1·7	86	+ 5	81	+ 1	·665	+·008	8·7	0·6	7	6·00	+1·00	3·18	2·90	+0·28	8·08	7·96	+0·	1·47	Mysore

stations, the elevations of which exceed 3,200 feet.

Table

(2) *Abstract of observations taken at 8 hrs. at 221*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras.																						
30	Mangalore	65	29·765	—·018	29·763	29·844	7th	29·689	17th	·155	78·6	85·0	—0·7	75·2	+1·7	80·1	+0·5	9·8	93·3	2nd	68·9	21st	24·4
	Calicut	27	29·823	—·015	29·779	29·884	23rd	29·750	17th	·134	77·5	83·8	—0·8	75·1	+0·4	79·4	—0·2	8·7	91·8	3rd	71·6	20th	20·2
	Cochin	9	29·870	—·002	29·806	29·909	22nd	29·825	17th	·084	78·2	85·0	0	74·4	—0·3	79·7	—0·1	10·6	90·7	2nd	71·2	20th	19·5
	Trivandrum	198	29·683	+·009	29·812	29·732	9th	29·638	17th	·094	77·8	82·9	—0·1	75·4	+1·8	79·1	+0·9	7·5	90·0	1st	72·0	26th, 27th & 28th.	18·0
31	Pamban	37	29·779	+·001	29·743	29·853	22nd	29·724	29th	·129	84·1	90·5	+0·8	79·3	—1·0	84·9	—0·1	11·2	92·2	1st	76·0	5th & 6th	16·2
	Madura	447	29·372	+·016	29·746	29·428	7th	29·313	17th	·115	85·2	96·5	—1·7	78·3	+1·2	87·4	—0·3	18·2	104·0	4th	72·1	5th	31·9
	Pudukkottai	318	29·490		29·736	29·549	12th	29·433	17th	·116	84·4	98·7		78·2		88·5		20·5	106·8	4th	69·3	5th	37·5
	Negapatam	31	29·758	—·009	29·718	29·815	7th	29·703	17th	·112	86·7	98·5	+1·4	81·5	+2·3	90·0	+1·9	17·0	103·0	3rd	72·0	20th	31·0
	Trichinopoly	255	29·554	+·003	29·739	29·605	7th	29·491	17th	·114	85·0	98·4	—0·6	73·7	+0·3	88·5	—0·1	19·7	106·1	3rd	67·8	5th	38·3
	Coimbatore	1,341	28·465	—·017	29·732	28·524	7th	28·397	29th	·127	77·5	89·1	—0·8	72·4	+0·8	80·8	0	16·7	98·0	3rd	66·3	5th	31·7
	Salem	940	28·903	+·003	29·770	28·960	23rd	28·838	17th	·122	81·3	97·6	+2·4	75·7	+1·5	86·7	+1·9	21·9	107·0	4th & 5th	72·3	5th	34·7
	Cuddalore	37	29·740	0	29·707	29·799	7th	29·674	17th	·125	87·2	100·5	+2·3	81·6	+2·2	91·1	+2·3	18·9	105·8	3rd	75·7	20th	30·1
	Vellore	707	29·057		29·690	29·106	7th	28·995	17th	·111	85·7	100·7		80·3		90·5		20·4	107·7	3rd	74·5	29th	33·2
	Madras	22	29·728	—·018	29·681	29·803	7th	29·663	29th	·140	88·5	101·5	+3·0	83·3	+2·6	92·4	+2·8	18·2	108·5	3rd	75·0	20th	33·5
32	Cuddapah	433	29·323	—·009	29·684	29·399	3rd	29·250	17th	·149	88·5	104·3	+4·0	83·1	+2·5	93·7	+3·3	21·2	110·7	3rd	75·1	26th	35·6
	Bellary	1,475	28·261	—·018	29·666	28·317	7th	28·211	14th	·136	82·3	98·9	+4·4	77·6	+1·9	88·2	+3·1	21·3	106·0	1st & 4th	73·8	1st	32·2
	Kurnool	923	28·819	—·013	29·669	28·914	1st	28·749	17th	·165	83·6	101·3	+4·6	79·1	+2·2	90·2	+3·4	22·2	108·7	3rd	72·1	4th	36·6
33	Nellore	66	29·649	—·014	29·649	29·729	7th	29·568	29th	·161	90·0	104·3	+2·5	82·9	+0·7	93·6	+1·6	21·4	112·1	3rd	70·1	4th	42·0
	Masulipatam	15	29·685	—·006	29·635	29·793	6th	29·584	29th	·209	90·0	102·4	+4·7	81·0	+3·8	93·2	+4·3	18·4	108·8	2nd	80·2	12th&28th	28·6
	Cocanada	26	29·662	—·004	29·625	29·790	6th	29·562	29th	·228	88·6	100·7	+5·5	83·7†	+2·7†	92·1†	+4·1	17·0	107·2	2nd	75·1	12th	32·1
	Waltair (Vizagapatam).	*296*	29·446	+·017	29·610	29·591	6th	29·324	17th	·267	87·0	93·2		82·4		87·8		10·8	102·1	17th	77·9	26th & 27th	24·2
	Calingapatam	19	29·641		29·598	29·785	6th	29·505	17th	·280	87·0	97·1		82·3		89·7		14·8	105·8	17th	76·8	27th	29·0
	Gopalpur	72	29·605	+·013	29·578	29·770	6th	29·494	17th & 29th.	·276	85·3	91·3	+2·1	81·5	+0·9	86·4	+1·5	9·8	95·2	18th	75·5	10th&22nd	19·7
	Bay Islands.																						
1	P. V. Fraser	8	29·661		29·586	29·800	3rd&4th	29·525	24th	·275	85·7												
	Port Blair	58	29·751	—·010	29·739	29·849	7th	29·673	17th	·176	81·5	85·3	—0·7	77·6	—0·2	81·4	—0·5	7·7	90·7	1st	73·0	25th	17·7
	Slipper Island	90	29·682		29·706	29·798	7th	29·602	13th	·196	81·8	85·8		77·6		81·7		8·2	90·6	1st & 2nd	73·1	16th	17·5
	Kashmir.																						
13	Muzaffarabad	2,475	27·262		29·623	27·405	11th	27·050	30th	·355	81·0	99·3		71·0		85·2		28·3	110·1	30th	60·1	1st	50·0
	Srinagar	5,204	24·755	+·024	24·726	24·909	1st	24·583	24th	·326	65·4	81·9	—1·2	55·3	—3·5	68·6	—2·3	26·6	92·6	30th	48·1	1st	44·5
	Gulmarg	*8,569*	21·812	+·006	21·780	21·917	3rd	21·676	24th	·271	59·1	66·3	+0·2	43·8	+0·7	55·1	+0·5	22·5	74·2	30th	35·3	1st	38·9
	Dras	*10,059*	20·776	+·016	20·744	20·924	3rd	20·670	24th	·254	52·5	67·5		37·9		52·7		29·6	74·5	30th	33·5	2nd & 6th.	41·0
	Leh	*11,503*	19·700	+·020	19·668	19·832	3rd	19·569	24th	·263	52·9	69·5	—3·6	42·6	—2·0	56·0	—2·8	26·9	75·9	28th	37·0	5th & 6th	38·9
	Skardu	*7,505*	22·801	+·023	22·771	22·952	3rd	22·605	24th	·347	63·9	78·3	—0·3	53·9	—1·0	66·1	—0·7	24·4	88·5	8th	45·1	1st	43·4
	Gilgit	4,890	25·005		24·978	25·130	4th	24·791	24th	·336	69·6	89·2	—5·4	62·8	—7·2	76·0	—6·3	26·4	100·2	30th	55·2	1st	45·0
	Baluchistan.																						
15	Fort Sandeman		25·230		25·199	25·378	3rd	25·054	24th	·324	83·6	100·2		69·3		84·8		30·9	106·9	30th	61·1	11th	45·8
	Quetta	5,502	24·497	+·017	24·457	24·639	3rd	24·331	24th	·308	77·0	91·3	+0·7	55·7	—3·4	73·5	—1·3	35·6	98·1	30th	49·7	1st & 2nd	48·4
	Chaman	4,311	25·508	+·020	25·470	25·636	3rd	25·359	24th	·277	85·1	97·6	—2·1	70·3	—2·6	83·9	—2·3	27·3	103·8	30th	64·8	1st	39·0

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 29 days.
‖ " " 28 "

B—*continued.*

stations in India, etc., in June, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June, 1912.	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	56	57
																																XV.—Madras.
1	1	1	12	7	1	1	9	2	S 73° E	S 83° W	5·2	2·4	+2·8	37	+26	87	− 2	·856	−·017	8·2	−0·6	27	21·60	+2·40	37·53	36·76	+0·77	40·17	43·02	−2·85	3·63	Mangalore.
11		2	5	7	1	1		3	S 70° E	N 22° E	3·8	7·1	−3·3	30	+19	92	+ 4	·866	+·008	9·6	+1·5	26	24·30	+1·70	44·43	34·19	+10·24	52·53	41·98	+10·55	8·20	Calicut.
4	3	3	7	8	1	1	1	2	S 86° E	N 9° W	4·6	4·5	+0·1	40	+18	83	+ 1	·847	−·015	9·1	+1·5	26	24·20	+1·80	47·89	28·13	+19·76	58·67	39·52	+19·15	5·58	Cochin.
7	10	1				4	1	7	N 32° W	N 16° W	2·9*	5·1	−2·2	49	−18	86	− 1	·820	−·020	9·0	+0·9	23	16·50	+6·50	24·58	12·97	+11·61	30·32	21·64	+8·68	3·99	Trivandrum.
2					9	17	2		S 34° W	S 39° W	12·6	9·8	+2·8	82	+ 4	77	− 2	·898		3·3		3	2·50	+2·50	0·37	0·12	+0·25	0·89	0·92	−0·03	0·14	Pamban.
3			1			4	13	9	N 80° W	N 79° W	6·8	3·0	+3·8	69	+ 9	63	− 1	·755	−·008	7·7	+2·3	1	2·50	−1·50	2·01	1·38	+0·63	5·13	4·25	+0·88	1·82	Madura.
22						3	3	2	S 82° W		3·4			23		67		·794		5·8		5			3·02	1·16	+1·86	4·55	3·42	+1·13	1·42	Pudukkottai.
						14	16		S 69° W	S 61° W	5·5	6·1	−0·6	92	+11	68	+ 4	·863	+·073	4·5	−0·3	1	3·20	−2·20	0·52	1·33	−0·81	0·91	3·14	−2·23	0·47	Negapatam.
					2	9	19		S 72° W	S 80° W	5·5*	6·7	−1·2	86	+ 1	61	− 2	·734	+·002	4·7	−1·3	2	1·90	+0·10	4·10	1·44	+2·66	6·32	4·68	+1·64	2·70	Trichinopoly.
1		1			6	22			S 36° W	S 45° W	8·8	5·1	+3·7	82	+ 4	90	+ 9	·849	+·085	5·1	−0·8	5	4·90	+0·10	2·02	1·56	+0·46	2·69	4·03	−1·34	1·08	Coimbatore.
3					8	11	7	1	S 46° W	S 32° W	5·5	3·7	+1·8	69	0	70	− 4	·753	−·028	6·9	+0·9	3	4·80	−1·80	1·40	3·16	−1·76	5·28	8·06	−2·78	0·72	Salem.
3					3	24			S 41° W	S 62° W	7·2	2·1	+5·1	86	+16	64	− 8	·822	−·060	4·7	−0·7	3	3·10	−0·10	1·97	1·55	+0·42	2·24	2·29	−0·05	1·55	Cuddalore.
1		1	22	4	2				S 81° E		6·0			83		61		·735		3·9		3	4·60	−1·60	1·12	2·90	−1·78	1·56	5·66	−4·10	0·56	Vellore.
					5	8	16	1	S 66° W	S 66° W	6·6*	6·4	+0·2	79	+ 5	62	+ 1	·835	+·034	3·6	−2·6	2	8·10	−6·10	1·78	1·90	−0·12	1·78	2·98	−1·20	1·41	Madras.
	1	6	11	8	3			1	S 82° E	N 87° W				66	−12	56	+ 5	·754	−·004	3·4	−3·0	1	4·60	−3·60	0·97	3·12	−2·15	1·32	4·70	−3·38	0·88	Cuddapah.
3						6	16	5	S 88° W	S 84° W	7·0	7·7	−0·7	79	+ 5	62	+ 1	·679	+·039	6·1	−1·5	2	4·20	−2·20	0·98	2·04	−1·06	1·18	4·08	−2·90	0·68	Bellary.
					3	13	9	5	S 68° W	S 89° W	8·9*			79	+16	63	+ 3	·716	−·010	4·7	−1·7	3	5·90	−2·90	0·98	3·17	−2·19	1·46	4·12	−2·66	0·51	Kurnool.
2				1	2	1	18	6	N 88° W	N 73° W	6·3*	7·0	−0·7	72	+ 2	55	− 7	·776	−·046	4·9	−1·7	3	3·00	0	1·37	1·27	+0·10	1·37	1·96	−0·59	0·91	Nellore.
1		1	1	3	4		10	10	N 83° W	N 80° W	8·5	6·9	+1·6	43	−20	69	− 8	·969	+·019	4·7	−1·9	2	6·00	−4·00	0·58	4·69	−4·11	0·77	5·83	−5·06	0·42	Masulipatam.
2	1	1		2		8	15	1	S 76° W	S 69° W	6·2	6·4	−0·1	62	−13	66	− 6	·901	+·035	6·3	−0·7	1	6·20	−5·20	0·80	4·74	−3·94	0·88	5·90	−5·02	0·69	Cocanada.
		1				29			S 45° W	S 73° W	9·2			92	+18	69	− 5	·867	−·022	7·6	+0·2	2	5·70	−3·70	1·02	4·58	−3·56	1·63	6·89	−5·26	0·73	Waltair (Vizagapatam).
1				1	4	12	9	3	S 60° W		10·7			69		75		·953		5·9		2			1·74	3·99	−2·25	2·53	6·02	−3·49	1·53	Calingapatam.
2			1		14	13			S 19° W	S 39° W	13·3	11·0	+2·3	82	+ 8	83	− 1	·997	+·034	5·0	−2·2	6	7·10	−1·10	2·36	5·83	−3·47	2·94	7·77	−4·83	0·98	Gopalpur.
																																Bay Islands.
1		1			8	19	1		S 34° W					83		83		1·029		7·1		7			4·73			7·24			1·87	P. V. Fraser.
5					4	7	13	1	S 67° W	S 57° W	7·7	7·6	+0·1	63	− 5	84	− 4	·907	−·047	8·5	+0·1	25			21·64	19·24	+2·40	27·17	36·14	−8·97	4·44	Port Blair.
	1		1	1	6	13	6	2	S 47° W		13·5			62		94		1·016		7·0		19			22·48	16·01	+6·47	29·54	25·26	+4·23	4·80	Slipper Island.
																																Kashmir.
	1	4		2	10	12	1		S 17° W		1·3			57		37		·380		1·3		2			0·44			0·441			0·19	Muzaffarabad.
12	1	2		8	3	2		2	S 34° E	S 45° E	1·7	2·8	−1·1	23	+15	80	− 1	·500	−·074	1·7	−1·5	1	3·80	−2·80	0·27	1·73	−1·46	3·08**	4·36	− 1·28	0·10	Srinagar.
5	2	13	9					1	N 56° E		3·9			66		63	−18	·312		2·6		5			1·45	3·77	−2·32	8·79	3·77§	+5·02	0·21	Gulmarg.
22			1			1	4	2	N 82° W		4·4			17		54	− 7	·212		2·1		1	1·70	−0·70	0·16	0·71	−0·55	4·72	3·80	+ 0·92	0·12	Dras.
24					5	1			S 7° W	S 72° W	3·0	1·9	+1·1	20	−27	45	+ 3	·179	−·005	3·5	−0·1	1	0·60	+0·40	0·22	0·17	+0·05	0·42	0·38	+ 0·04	0·21	Leh.
19			4	2	2	3			S 31° E		3·9			20		46	− 6	·267		3·8		0	1·10	−1·10	0·10	0·34	−0·24	3·76	1·61	+ 2·15	0·04	Skardu.
25				1		1	3		S 66° W		1·0			10		58‖	+20	·414‖	+·059	2·8	0	2	0·80	+1·20	0·41	0·40	+0·01	1·18	1·34	−0·16	0·15	Gilgit.
																																Baluchistan.
2	5	4	1	1	2	8	6	1	N 89° W		4·1			26		33		·362		0·3		0			0·11			0·32			0·05	Fort Sandeman.
25	1	3		1					N 49° E	S 8° W	1·4	2·2	−0·8	10	+4	34	−15	·315	−·140	0·3	−0·3	0	0·80	−0·80	0	0·17	−0·17	0·18	0·55	− 0·37	0	Quetta.
2			1		9	14	3	1	S 35° W	S 53° W	5·2	6·6	−1·4	72	+24	29	+ 1	·360	−·002	0	−0·5	0	0·10	−0·10	0	0·03	−0·03	0·07	0·14	− 0·07	0	Chaman.

§ Normal rainfall since 1st June.

* Uncorrected for scale error.

‡ Rainfall for the month of May wanting.

** Rainfall since 3rd May 1912.

Table

(2) Abstract of observations taken at 8 hrs. at 221

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Baluchistan—*concld.*																						
15	Kalat	6,630	23·742		23·704	23·859	2nd	23·613	29th	·246	64·3	87·9		44·1		66·0		43·8	95·5	30th	35·7	1st	59·8
	Dalbandin	2,779	26·690		29·450	27·026	3rd	26·726	30th	·300	91·8	107·5		73·2		90·3		34·3	110·8	5th & 24th.	65·8	1st	45·0
	Pasni		29·567		29·527	29·751	4th	29·440	20th	·311	83·6	95·3		80·9		88·0		14·4	106·0	19th	75·0	3rd	31·0
	Panjgur		26·543		26·501	26·672	3rd	26·408	30th	·264	82·3	103·3		74·9		89·1		28·4	108·8	30th	67·5	1st	41·3
	Robat		26·627		26·585	26·784	5th	26·384	30th	·400	87·7	105·6		78·0		91·8		27·6	116·5	30th	62·8	8th	53·7
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*									74·0	89·7		59·9		74·8		29·8	99·6	30th	53·2	14th	46·4
	Para Chinar	6,000	24·300		24·277	24·452	3rd	24·129	21th	·323	76·9	88·0		61·9		75·0		26·1	99·2	30th	53·1	12th	46·1
	Cherat	*4,256*	25·517	+·019	25·485	25·659	3rd	25·324	24th	·335	81·1	94·4	+0·1	73·7	+0·6	84·1	+0·3	20·7	103·2	30th	58·4	14th	44·8
	Murree	6,333	23·733	+·001	23·701	23·869	3rd	23·578	24th	·291	73·3	83·7	+2·0	70·3	+5·8	77·0	+3·9	13·4	91·6	30th	59·7	12th	31·9
	Simla	7,232	23·015	+·017	22·977	23·133	3rd	22·889	24th	·244	67·4	74·8	+0·4	62·7	+1·7	68·7	+1·1	12·1	81·9	19th	53·8	11th	28·1
	Sarain		23·015		23·007	23·178	3rd	22·915	24th	·263	66·2	74·3		54·7		64·5		19·6	82·2	18th	48·1	1st & 2nd	34·1
	Kalabagh		20·074		20·036	20·186	4th	19·862	24th	·324	50·4	56·1		45·7		50·9		10·4	64·0	19th	40·2	2nd	23·8
	Chakrata	7,022	23·189	+·017	23·149	23·297	4th	23·062	24th	·235	67·2	77·3	+3·0	57·9	−2·1	67·7	+0·5	19·4	85·7	19th	50·2	11th	35·5
	Mukteswar	7,592	22·739	−·014	22·698	22·857	3rd	22·600	24th	·257	63·5	75·5	−0·5	56·0	−2·2	65·7	−1·3	19·5	84·0	19th	48·0	1st	36·0
	Darjiling	7,376	22·889	−·036	22·844	23·017	3rd	22·744	24th	·272	60·5	67·1	+1·9	56·6	+0·4	61·8	+1·1	10·5	71·3	14th & 16th.	51·7	5th, 6th & 8th.	19·6
	Shillong	4,920	24·976		24·928	25·150	3rd	24·776	2.rd	·374	68·2	75·3		62·2		68·8		13·1	78·4	13th & 16th.	56·7	11th	21·7
	Cherrapunji	4,309	25·536		25·487	25·696	3rd	25·342	23rd	·354	67·5	72·9		63·8		68·4		9·1	78·2	3rd & 15th.	59·1	9th	19·1
	Maymyo	3,545	26·294	−·016	26·239	26·433	3rd	26·136	16th	·297	70·2	77·1	−1·5	66·1	+0·5	71·6	−0·5	11·0	83·0	2nd	59·6	2nd	23·4
	Pachmarhi	3,528	26·247	−·007	26·194	26·402	2nd	26·174	29th	·228	81·8	95·5	+9·6	75·5	+3·5	85·5	+6·5	20·0	104·0	4th & 5th	69·1	30th	34·9
	Mount Abu	3,945	25·878	+·018	25·828	26·052	3rd	25·753	20th	·299	76·7	87·3	+4·0	70·8	+2·7	79·0	+3·3	16·5	94·2	8th & 15th.	60·9	11th	33·3
	Mercara	3,781	26·146	−·012	26·079	26·217	7th	26·076	17th	·141	66·4	72·8	−0·1	63·4	+0·1	68·1	0	9·4	83·0	2nd	60·0	28th & 29th.	23·0
	Ootacamund	*7,327*	23·009		22·945	23·086	3rd	22·946	14th	·140	58·5	64·9†		53·2		59·1†		11·7	73·5	1st & 4th	51·2	2nd, 8th & 30th.	22·3
	Kodaikanal	7,688	22·781	−·010	22·716	22·858	3rd	22·711	29th	·147	59·0	65·6	+0·3	53·8	0	59·7	+0·1	11·8	73·5	3rd	41·5	5th	32·0
	Extra India.																						
	Singapore (*a*)	10	29·916		29·847	29·975	1st	29·875	15th, 17th & 29th.	·100	83·3	87·3		76·1		81·7		11·2	90·4	14th & 25th.	74·0	25th	16·4
	Penang (*a*)	20	29·838		29·783	29·902	22nd	29·774	1st	·128	83·4	90·4		75·7		83·1		14·7	92·0	6 days	72·0	16th	20·8
	Trincomalee	99	29·719		29·747	29·783	7th	29·663	26th	·120	78·4	92·1	+0·5	76·2	−2.2	84·2	−0·9	15·9	96·0	1st & 2nd	71·0	5th	25·0
	Colombo	24	29·862	−·014	29·812	29·939	12th	29·823	17th	·116	78·3	86·4†	+1·4†	75·6	−1·9	81·2†	−0·5	11·1	90·0	4th	70·5	5th	19·5
	Minicoy	7	29·885			29·945	23rd	29·843	17th	·102													
	Amini Divi	*13*	29·813		29·754	29·879	23rd	29·743	14th	·136	83·3	88·3	+2·2	79·0	+0·9	83·6	+1·5	9·3	95·8	1st	74·1	6th	21·7
	Gyantse	13,120	17·055		17·016	17·176	7th	16·957	24th	·219	53·1	72·8		37·9		55·4		34·9	83·7	29th	27·8	8th	55·9
	Pharijong	14,400									48·7	56·3		31·0		43·7		25·3	59·4	21th & 28th.	22·3	11th	37·1
	Gangtok	5,660?									65·8	74·1		61·5		67·8		12·6	79·9	15th	55·5	6th	24·4
	Gartok (*b*)	15,100?	17·468			17·550	1st	17·450	10 days	·100	39·6	57·7		27·0		42·4		30·7	68·6	30th	19·5	5th	49·1
	Kashgar (*b*)	4,255	25·370			25·620	4th	25·210	24th & 25th.	·410	77·5	91·6	+1·8	65·4	−0·2	78·5	+0·8	26·2	98·9	24th	57·9	1st	41·0
	Kabul		24·215		24·184	24·330	3rd	24·099	25th	·231	74·8†	89·0†	−0·2	72·5†	+13·9	80·8†	+6·9	16·5	97·2	29th	65·8	1st	31·4
	Meshed	3,104	26·634		29·596	26·764	14th	26·488	29th	·276	77·6	90·9		58·7	−4·7	74·8		32·2	98·9	30th	51·6	1st	47·3
	Jask	13	29·552	−·015	29·518	29·725	4th	29·432	25th	·293	85·7	97·8	+2·0	82·8	−0·3	90·3	+0·9	15·0	107·8	17th	77·8	4th	30·1
	Muscat	20	29·561	+·008	29·529	29·718	4th	29·425	30th	·293	95·4	103·9	+10·1	90·7	+2·6	97·3	+6·3	13·2	111·3	10th	87·6	28th	23·7

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

(*a*) 9 hrs. observations.
(*b*) Aneroid corrected.

† Mean of 19 days.

NOTE.—The barometric readings are not reduced to sea-level in the case

B—*continued.*

stations in India, etc., in June, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June, 1912.	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	56	57
																																Baluchistan—*concld.*
25				2		3			S 12° W	S 32° W	4·7			10	−32	54		·324		0		0	0·50	−0·50	0	0·31	−0·31	0·37	0·56	− 0·19	0	Kalat.
4		2	7	2	3	9	2	1	S 5° E		5·3			30		32		·467		0·6		0			0			0·02			0	Dalbandin.
16			1			1	10	2	N 86° W		5·1			37		92		1·067		0		0			0			0			0	Pasni.
8	3	5	5	1	1	2	2	3	N 35° E		5·4			23		45		·501		0·7		0			0			0·13			0	Panjgur.
5	3	4	4	8	4	1	1		S 67° E		2·3			40		37		·491		1·1		0			0			0			0	Robat.
																																Hill Stations excluding Kashmir and Baluchistan.
17	11		2						N 10° E		3·4			37		41		·329		3·2		1			0·18	0·58	−0·40	1·38	2·55	− 1·17	0·15	Chitral.
13		2	1	2	1	3	5	3	S 80° W		2·6			17		37		·329		0·6		4	3·40	+ 0·60	0·73	2·21	−1·48	2·19	4·97	− 2·78	0·17	Para Chinar.
6	10	3		1	2	1		7	N 12° W	S 79° E	7·5	7·2	+0·3	46	+41	42	− 9	·433	−·070	3·5	+0·8	1			0·42	1·04	− 0·62	1·51	2·78	− 1·27	0·35	Cherat.
21		1	2	5	1				S 58° E	S 63° E	2·9	5·3	−2·4	27	+16	53	+ 1	·419	+·036	1·7	−1·8	3	8·00	−5·00	0·86	3·50	−2·64	5·02	6·45	−1·43	0·28	Murree.
																51	−15	·336	−·066	2·7	−2·3	7	9·80	−2·80	2·31	6·91	− 4·60	4·93	9·59	−4·66	0·58	Simla.
																56		·355		3·6		5			3·01	5·79	−2·78	5·37	7·83	−2·46	1·39	Sarain.
1	16			1	2		1	9	N 19° W		9·2			70		61		·220		4·3		7			3·11	8·01	−4·90	4·33	8·01‡	− 3·68	1·32	Kalabagh.
12	4	1		4	8			1	S 28° E	S 8° W	3·2	5·4	−2·2	20	+11	58	−13	·380	−·057	5·2	+1·2	8	10·60	−2·60	2·63	7·79	−5·16	4·84	10·25	− 5·41	0·56	Chakrata.
7	1	2	3				16	1	N 76° W		6·9			40		67	0	·388		4·4		7			4·62	5·88	−1·26	7·52	7·97	− 0·45	2·44	Mukteswar.
24	1	1				1	3		N 72° W	S 76° E	1·0	3·7	−2·7	10	− 5	93	− 2	·492	−·006	8·6	0	18	20·81	−2·81	19·82	22·77	−2·95	23·61	31·51	−7·90	3·55	Darjiling.
26		1			1	1	1		S 45° W		1·7			3		80		·552		6·6		19	20·40	−1·40	11·02	17·18	−6·16	19·97	26·35	−6·38	2·75	Shillong.
19				2		7	1	1	S 43° W		3·5			27		92		·615		8·5		23	24·70	−1·70	90·20	90·95	−0·75	100·98	123·11	−22·13	15·10	Cherrapunji.
10						20			S 45° W		2·4			66		91	+ 6	·672		8·1		12	11·80	+0·20	6·86	9·02	−2·16	15·29	18·33	−3·04	1·28	Maymyo.
1	1	1				17	2	8	S 76° W	S 81° W	6·8	6·7	+0·1	62	− 5	49	−23	·506	−·115	3·4	−3·1	3	11·00	−8·00	2·93	9·38	−6·45	2·05	9·93	−6·88	1·62	Pachmarhi.
1	1	1		2	6	10	7	2	S 52° W	S 59° W	7·2	8·3	−1·1	56	−11	64	− 9	·553	−·018	3·8	−1·5	4	6·70	−2·70	4·11	5·25	−1·14	4·11	5·97	−1·86	2·11	Mount Abu.
7					2	7	11	3	S 75° W	N 88° W	4·3	5·7	−1·4	59	−15	96	+ 3	·613	+·007	9·1	+0·1	24	24·80	−0·80	22·24	25·74	−3·50	26·47	31·53	−5·06	1·87	Mercara.
3		3	2	1	6	12	3		S 72° W		3·3			49		85		·414		8·6		18	13·30	+4·70	6·61	6·10	+0·51	11·24	13·94	−2·70	0·91	Cotacamund.
	3	1	1		1	20	4		N 79° W		11·6*			72		79	+ 4	·395		7·4		7	8·50	−1·50	3·76	3·86	−0·10	9·70	9·72	−0·02	1·02	Kodaikanal.
																																Extra India.
13		2	4	6	5				S 5° E		5·0*			40						6·0		11			8·51	6·92	+1·59	16·79	12·88	+3·91	2·29	Singapore (*a*).
	8		12	3	3		4		S 61° E		11·6*			33								7			8·54	7·61	+0·93	23·33	16·09	+7·24	2·50	Penang (*a*).
					30				S 45° W	S 47° W	8·0*	12·2	−4·2	96	+ 2	85	+ 9	·826	−·050	8·0	+4·5	1			1·06	1·31	− 0·25	4·96	3·67	+ 1·29	0·95	Trincomalee.
5		2	1			14	4	4	S 69° W	S 62° W	3·8*	7·7	−3·9	49	−37	90	+ 9	·864	−·022	9·1†	+1·9	23			20·11	7·62	+12·49	39·08	18·32	+20·76	2·86	Colombo.
						11	16	3	S 77° W	S 81° W	10·5	11·8	−1·3	90						7·8		20			16·44	10·52	+5·92	22·94	16·20	+6·74	3·54	Minicoy.
3				4	22	1			S 40° W		11·7			87		81	− 4	·918	−·026	8·0	+0·2	20			14·52	13·67	+0·85	17·44	16·81	+0·63	2·82	Amini Divi.
24		2	3		1				S 45° E		0·8			13		74		·315		1·4		6			1·62			1·98			0·50	Gyantse.
18	1	1		6	2	1	1		S 31° E		8·3			20		64		·221		4·6		9			3·16			6·94			1·00	Phariong.
25		1			2			2	N 85° W		1·0			4		91		·576		5·6		25			21·34	20·62	+ 0·72	42·49	40·07	+ 2·42	2·18	Gangtok.
22				6		2			S 27° E		6·5			23						2·7		0			0			0			0	Gartok
23								7	N 45° W	N 28° W	1·3	3·5	−2·2	27	+10	58	+19	·545	+·169	0·9	−1·6	0			0	0·24	− 0·24	0·58	1·04	− 0·46	0	Kashgar.
	1	1	5	3	11	4	5		S	N 23° E				47		65†		·555		?		0			0	0·24	− 0·24	0	1·19	− 1·19	0	Kabul.
18	3	2	1	1	2		2	1	N 11° E		1·5			6		46		·426		1·3		1			0·69	0·33	+ 0·36	1·60	1·72	− 0·12	0·64	Meshed.
6	2	1	9	2			4	6	N 29° E	S 48° E	5·9	9·6	−3·7	20	0	71	+ 4	·859	−·078	0·6	−0·5	0			0	0·05	− 0·05	0	0·05	− 0·05	0	Jask.
6	5	2	3	1		1	2	10	N 21° W	N 27° E	4·1	3·4	+0·7	43	+24	54	−13	·877	−·071	2·0	+0·5	0			0	0·15	− 0·15	0	0·15	− 0·15	0	Muscat.

hill or plateau stations, the elevations of which exceed 3,100 feet. * Uncorrected for scale error. ‡ Since 1st June.

Table

(2) Abstract of observations taken at 8 hrs. at 221

Number of sub-division.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India—*concld.*																						
	Bahrein . .	18	29·608		29·579	29·792	3rd	29·496	25th	·296	91·2	96·9		84·1		90·5		12·8	102·3	10th	79·1	1st	23·2
	Bushire. . .	14	29·580	+·006	29·556	29·743	3rd	29·433	25th	·310	87·9	93·5	+1·6	82·7	+2·2	88·1	+1·9	10·8	97·8	15th	77·0	8th	20·8
	Busrah . . .	25	29·590		29·534	29·750	1st	29·357	25th	·393	88·1	104·3		83·7		94·0		20·6	112·3	23rd	78·3	1st	34·0
	Kerman . .		24·688			24·820	7th & 8th.	24·590	24th & 26th.	·230	80·3	99·3		60·5		79·9		38·8	106·4	30th	53·8	1st	52·6
	Ispahan (*a*) .	*5,817*	24·229			24·390	7th	24·050	25th	·340	77·4	92·3	−2·1	63·1	+1·2	77·7	−0·5	29·2	99·9	30th	57·2	14th & 16th.	42·7
	Tehran (*a*)* .	*4,002*	25·646			25·790	5th	25·500	30th	·290	78·1	95·0	+0·7	70·3	+3·3	82·7	+2·0	24·7	101·4	28th	63·8	15th	37·6
	Baghdad . .	127	29·518	−·061	29·616	29·672	1st	29·400	21st	·272	87·1	109·5	+7·7	76·7	+1·2	93·1	+4·5	32·8	115·4	14th	68·6	2nd	46·8
	Beirut¶. . .				29·798						76·9	81·5		68·8		75·2		12·7	86·4	15th	63·9	1st	22·5
	Aden . . .	94	29·669	+·022	29·693	29·777	4th	29·560	30th	·217	88·5	95·2	+0·5	84·8	+1·1	90·0	+0·8	10·4	98·1	14th & 16th,	79·9	5th	18·2
	Zanzibar . .	72	30·071	−·006	30·070	30·144	23rd	29·994	30th	·150	76·2	83·0	+1·5	74·8	+0·7	78·9	+1·1	8·2	85·4	5th	71·1	26th	14·3

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*) Aneroid uncorrected.

* Observations of 28 days.

¶ 8½ hours observations.

B—*concluded.*

stations in India, etc., in June, 1912—concluded.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period 1st May, to 30th June 1912.	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	56	57
																																Extra India —concld.
	5				1	3	7	14	N 58° W		5·3			73		59		·863		0·3		0			0	0	0	0	0·10	− 0·10	0	Bahrein.
6	4			1		1	7	11	N 55° W	N 37° W	7·4	7·8	−0·4	59	+ 3	74	+12	·977	+·192	0·2	0	0			0	0	0	0	0·02	− 0·02	0	Bushire.
3	1	1	1	2	1	5	11	5	S 86° W		3·1			50		51		·676		0·1		0			0	0	0	0	0·46	− 0·46	0	Busrah.
19	5	2	1	1			1	1	N 9° E		2·1			20		34		·353		P		0			0			0			0	Kerman.
21			1			1	4	3	N 81° W	N 50° W	2·1	2·8	−0·7	20		41		·387		0·6		1			0·22	0·01	+ 0·21	0·22	0·26	− 0·04	0·22	Ispahan.
15		3	4	1	2	3			S 59° E	S 7° W	3·1†	2·2	+0·9	21		40		·383		1·3		2			0·51	0·08	+ 0·43	0·85	0·53	+ 0·32	0·27	Tehran.
10	7		2		1			10	N 21° W	N 9° W	2·8‡	3·6	−0·8	47	−21	42	+ 2	·541	+·052	0·6	+0·5	0			0	0	0	0	0·23	− 0·2	0	Baghdad.
3		2		1	7	7	9	1	S 50° W					57		69		·640		3·8												Beirut. §
7		10	2	3		6		2	N 69° E	S 34° E	5·9	6·8	−0·9	17	− 9	71	− 1	·954	+·016	2·8	−0·2	0			0	0·07	− 0·07	0	0·20	− 0·20		Aden.
					15	14	1		S 24° W	S 13° W	6·7	6·4	+0·3	93	+ 6	82	− 1	·742	+·014	0·5	−4·6	2			0·47	1·79	− 1·32	3·92	13·21	− 9·29	0·21	Zanzibar.

† Mean of 27 days.
‡ Mean of 28 days.

§ Rainfall not recorded.

Table C.—Abstract of observations taken at 8 hrs. at 63 fourth and fifth class stations in India, etc., in June, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs. at 63 fourth

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Bishnath	79·6	90·1	...	75·2	..	82·7	...	14·9	95·5	18th	70·9	9th	24·6	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	81·0	90·3	...	74·9	...	82·6	...	15·4	95·6	18th	69·7	2nd	25·9	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	78·6	93·0	...	72·8	...	82·9	...	20·2	104·0	14th	68·8	10th	35·2	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	78·0	90·5	...	74·8	...	82·7	...	15·7	97·3	18th	71·2	8th & 9th.	26·1	...	...	...	...	...	...	...	...	...	...	...
	Dikom	79·2	90·7	...	75·0	...	82·9	...	15·7	98·6	15th	70·0	3rd	28·6	...	...	...	...	...	...	..	...	...	...	...
	Golaghat	81·6	?	...	75·8	..	?	...	?	?	?	71·6	7th	?	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	Observations not received.																							
	Jorehat	82·4	90·1	...	75·9	...	83·0	..	14·2	95·4	14th	70·6	8th	24·8	...	...	...	...	...	...	...	...	...	...	...
	Lumding	80·3	91·2	...	75·2	...	83·2	...	16·0	96·7	22nd	70·0	8th	26·7	...	...	...	...	...	...	...	...	...	...	...
	Messa	86·0	93·5	...	74·4	...	83·9	...	19·1	99·3	14th	69·8	10th	29·5	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	75·6	89·7	...	72·1	...	80·9	...	17·6	96·0	28th	63·0	4th	33·0	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	81·3	91·4	...	75·6	...	83·5	...	15·8	97·4	14th	69·4	10th	28·0	...	...	...	...	...	...	...	...	..	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	83·3	89·7	...	76·4	...	83·1	...	13·3	96·2	14th	69·3	6th	26·9	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo †	84·8	91·6	...	74·9	...	83·3	...	16·7	97·2	14th	69·3	6th	27·9	...	...	...	...	...	...	...	...	...	...	...
	Pabna	82·8	91·0	...	76·7	...	83·9	...	14·3	97·5	15th	71·9	25th	25·6	...	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	81·0	92·3	...	73·7	...	83·0	...	18·6	98·7	14th	68·8	7th & 8th.	29·9	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	82·7	89·6	...	72·1	...	80·8	...	17·5	96·1	15th	64·4	2nd & 7th.	31·7	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	80·1	88·5	...	73·5	...	81·0	...	15·0	94·1	15th & 16th.	67·0	2nd	27·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

† Observations of 25 days.

C.

and fifth class stations in India, etc., in June, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May, to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June	Departure from normal of period, 1st May, 1912 to 30th June		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam
...	...	...	...	...	98	...	·998	...	...	...	14	...	...	12·90	14·36	−1·46	17·66*	22·51	−4·85	2·55	Bishnath.
...	...	...	...	...	85	...	·896	...	...	...	14	...	...	11·26	14·98	−3·72	18·50	23·37	−4·87	2·00	Borjuli.
...	...	...	...	...	94	...	·917	...	...	...	21	...	...	21·13	23·50	−2·37	29·39	36·32	−6·93	4·25	Chandkhira.
...	...	...	...	...	96	...	·915	...	...	...	17	...	...	17·27	18·29	−1·02	26·10	26·23	−0·13	5·25	Doom Dooma.
...	...	...	...	...	89	...	·886	...	...	...	16	...	...	13·42	18·11	−4·69	22·43	26·92	−4·49	2·20	Dikom.
...	...	...	...	...	86	...	·925	...	...	...	12	...	...	8·32	9·88	−1·56	18·99	18·13	+0·86	1·95	Golaghat.
											Observations not received.										Hailakandi.
...	...	...	...	...	83	...	·915	...	...	...	14	...	...	9·50	10·63	−1·13	21·76	19·57	+2·19	1·33	Jorehat.
...	...	...	...	...	85	...	·866	...	...	...	11	...	...	5·21	...	...	7·41	...	...	0·78	Lumding.
...	...	...	...	...	86	...	1·079	...	...	...	16	...	...	7·54	13·51	−5·97	15·86	21·27	−5·41	1·53	Messa.
...	...	...	...	...	93	...	·826	...	...	...	15	...	...	15·68	13·75	+1·93	21·79	24·53	−2·74	4·10	Panerihat.
...	...	...	...	...	85	...	·916	...	...	...	21	...	...	16·21	17·30	−1·09	25·75	30·09	−4·34	3·17	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	13	17·39	−4·39	17·10	17·60	−0·50	30·25	28·80	+1·45	3·87	Comilla.
...	...	...	...	...	81	...	·925	...	...	...	14	...	...	21·54	14·35	+7·19	29·51	24·98	+4·53	9·32	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	12	14·28	−2·28	13·62	13·16	+0·46	20·97	21·70	−0·73	5·93	Faridpur.
...	...	...	...	...	79	...	·943	...	...	...	12	...	...	16·66	12·03	+4·63	25·43	19·55	+5·88	5·22	Goalundo.
...	...	...	...	...	86	...	·967	...	...	...	15	...	...	12·75	11·04	+1·71	18·76	17·53	+1·23	2·75	Pabna.
...	...	...	...	...	...	...	...	...	...	...	14	13·32	+0·68	11·01	12·24	−1·23	14·56	20·19	−5·63	2·33	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	12	12·58	−0·58	10·15	10·16	−0·01	13·67	15·77	−2·10	3·47	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	10	12·16	−2·16	8·02	9·32	−1·30	10·57	13·29	−2·72	1·55	Malda.
...	...	...	...	...	...	...	...	...	...	...	12	15·61	−3·61	11·90	17·27	−5·37	20·51	27·38	−6·87	3·07	Rangpur.
...	...	...	...	...	90	...	·944	...	...	...	20	...	...	28·15	29·23	−1·08	44·57	41·49	+3·08	6·38	Dam Dim.
...	...	...	...	...	77	...	·864	...	...	...	17	...	...	16·21	29·27	−13·06	28·26	40·44	−12·18	1·62	Kalchini.
...	...	...	...	...	83	...	·854	...	...	...	22	...	...	23·49	30·59	−7·10	39·75	43·24	−3·49	3·76	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	13	19·24	−6·24	19·27	33·45	−14·18	29·78	48·71	−18·93	3·50	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	13	12·19	+0·81	14·23	9·87	+4·36	24·04	15·95	+8·09	4·46	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	8	11·89	−3·89	7·04	10·74	−3·70	9·37	14·78	−5·41	1·92	Bankura.
...	...	...	...	...	...	...	...	...	...	...	10	12·21	−2·21	4·05	9·23	−5·18	5·31	13·00	−7·69	1·04	Raniganj.

* Rainfall 8th to 14th, May not included.

Table

Abstract of observations taken at 8 hrs. at 63 fourth and

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	87·0	101·0	...	80·6	...	*90·8	...	20·4	108·2	17th	67·2	9th	41·0	...	...	...	...	...	...	...	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...
	XII.—Central Provinces																								
23	Chhindwara	86·1	102·2	...	78·8	...	90·5	...	23·4	109·7	5th	73·8	30th	35·9	...	1	1	...	...	2	6	12	8	N 87° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	83·1	99·0	...	77·5	...	88·2	...	21·5	104·6	3rd	71·1	3rd	33·5	...	...	...	...	...	...	...	...	...	...	...
33	Guntur	89·8	105·3*	...	82·4	...	93·8*	...	22·9	111·2	3rd	71·5	9th & 10th.	39·7		...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...			...	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	96·2	105·2	...	82·0	...	93·6	...	23·2	113·1	19th	72·0	12th	41·1	...	10	14	...	...	5	...	1	...	N 31° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	61·7	78·7	...	51·4	...	65·0	...	27·3	90·5	30th	42·4	2nd	48·1	...	18	7	1	1	...	...	...	3	N 12° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Mean of 29 days.

C—*contd.*

fifth class stations in India, etc., in June, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	6	11·19	−5·19	5·71	8·29	−2·58	8·41	10·48	−2·07	2·11	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	9	9·90	−0·90	7·77	8·08	−0·31	10·12	10·95	−0·83	2·35	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	6	8·06	−2·06	5·05	7·97	−2·92	7·06	10·50	−3·44	1·56	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	7	9·39	−2·39	4·23	9·47	−5·24	8·16	12·29	−4·13	1·16	Motihari.
...	...	...	...	...	...	...	...	...	...	...	4	7·61	−3·61	4·52	6·25	−1·73	5·44	7·60	−2·16	1·60	Chapra.
...	...	...	...	...	...	...	...	...	...	...	5	7·90	−2·90	3·54	6·50	−2·96	4·87	8·07	−3·20	1·42	Arrah.
...	...	...	...	...	...	...	...	...	...	...	5	8·06	−3·06	1·40	6·21	−4·81	1·55	7·03	−5·48	0·60	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	70	...	·891	...	...	...	...	No	rain	gauge	...	...	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	3	4·00	−1·00	0·97	3·24	−2·27	1·25	3·82	−2·57	0·44	Meerut.
...	...	...	...	...	...	...	...	...	...	...	6	10·00	−4·00	5·13	8·42	−3·29	5·70	9·90	−4·20	1·57	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	5	5·10	−0·10	1·42	2·74	−1·32	1·67	3·53	−1·86	0·49	Udaipur.
																					XII.—Central Provinces.
2·8	...	...	70	...	49	...	·586	...	1·4	...	6	...	...	2·42	...	...	2·46	...	...	0·83	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	2	1·20	+0·80	1·29	0·51	+0·78	3·12	2·02	+1·10	0·75	Tinnevelly.
...	...	...	...	...	68	...	·765	...	6·7	...	2	...	...	1·76	...	...	2·47	...	...	1·05	Anantapur.
...	...	...	...	...	72	...	·999	...	5·7	...	2	...	...	1·23	...	...	3·30	...	...	0·77	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	18	...	...	26·61	12·71	+13·90	43·74	24·62	+19·12	5·90	Car Nicobar.
																					Kashmir.
...	...	...	60	...	36	...	·595	...	1·6	...	1	...	...	0·18	...	...	0·62	...	...	0·16	Jammu.
...	...	...	...	...	...	...	...	...	...	...	6	...	...	1·29	3·11	−1·82	7·67	8·93	−1·26	0·31	Sonamarg.
...	...	...	83	...	37	...	·205	...	3·0	...	0	...	...	0	...	...	3·97	...	...	0	Kargil.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor.

Table

Abstract of observations taken at 8 hrs. at 63 fourth and

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	80·7	87·7	...	72·8	...	80·3	...	14·9	93·5	18th	68·0	8th	25·5	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	69·5	73·7	...	63·9	...	68·8	...	9·8	77·5	15th	59·8	5th	17·7	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo*	...	...	...	54·0	...	...	...	...	...	...	44·7	1st	...	22	1	...	...	1	...	1	2	1	N 84° W	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drosh	74·3	92·2	...	66·8	...	79·5	...	25·4	100·4	30th	59·1	27th	41·3	1	9	...	9	...	5	...	6	...	N 37° E	...
	Pishin	...	93·5	...	59·8	...	76·6	...	33·7	99·4	30th	53·1	1st	46·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	109·0	...	94·8	...	101·9	...	14·2	114·2	11th	89·0	28th	25·2	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	54·5	65·8	...	48·5	...	57·2	...	17·3	71·5	18th	40·8	3rd	30·7	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	74·6	90·4	...	54·1	...	72·2	...	36·3	96·2	22nd	47·6	2nd	48·6	...	...	...	...	...	...	...	...		...	...
	Koweit	...	105·1	...	83·9	...	94·5	...	21·2	115·4	10th	78·2	2nd	37·2	4	...	...	1	...	...	5	12	8	N 84° W	...
	Maidan	...	111·3	...	81·4	...	96·4	...	29·9	116·2	10th	76·2	2nd	40·0	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	102·0	...	82·6	...	92·3	...	19·4	108·4	9th	77·6	2nd	30·8	...	...	...	...	...	...	1	...	19	N 47° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	100·9	...	76·2	...	88·6	...	24·7	114·8	30th	68·4	2nd	46·4	...	6	...	...	...	...	...	5	19	N 43° W	...

* Observations of 28 days.

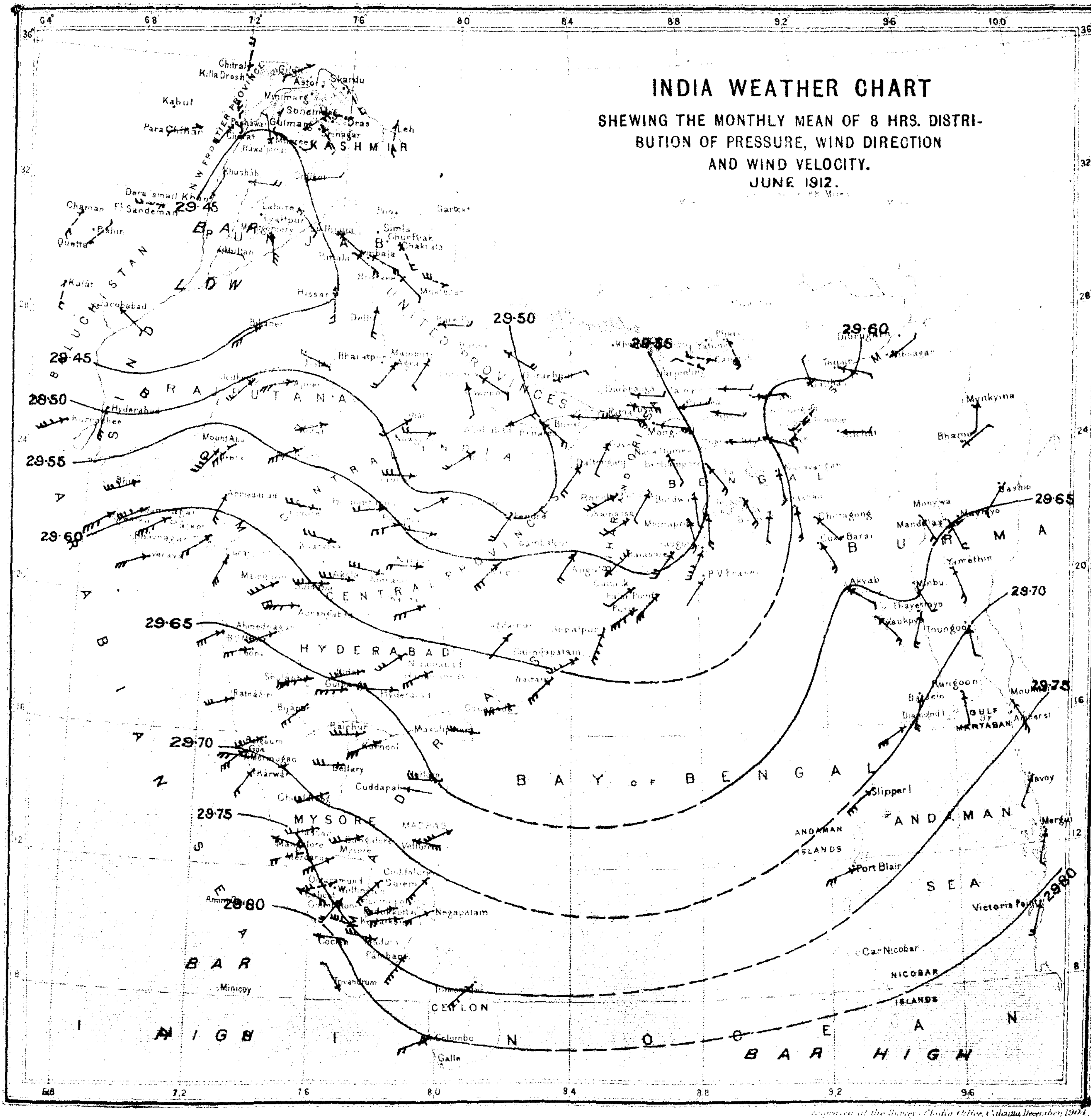
C—*concluded.*

fifth class stations in India, etc., in June, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th June, 1912.	Normal rainfall for period, 1st May to 30th June.	Departure from normal of period, 1st May to 30th June, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	78	...	·813	...	...	...	19	...	...	22·88	26·90	—4·02	40·42	35·48	+4·94	2·95	Panighatta.
...	...	...	...	...	85	...	·611	...	...	...	18	...	...	23·98	28·98	—5·00	35·39	38·11	—2·72	3·31	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	25	...	...	27·19	...	...	47·11	...	...	3·38	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	23	...	...	7·53	...	...	11·12	...	...	0·62	Lachung.
...	...	...	...	...	...	...	...	...	...	...	21	...	...	49·67	...	...	49·67†	...	...	8·49	Ringim.
...	...	...	10	...	...	...	...	...	4·5	...	1	...	...	0·21	0·25	—0·04	1·14	1·30	—0·16	0·10	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	0·69	...	...	2·76	...	...	0·27	Bakloh.
...	...	...	17	...	37	...	·296	...	0·9	...	3	...	...	0·76	0·63	+0·13	2·65	3·01	—0·36	0·32	Drosh.
...	...	...	...	...	...	...	...	...	0	...	0	...	...	0	0·05	—0·05	0·45	0·23	+0·22	0	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Ahwaz.
...	...	...	...	...	82	...	·351	...	6·4	...	14	...	...	3·65	...	...	6·98	...	...	0·50	Chumbi.
...	...	...	...	...	33	...	·287	...	0	...	0	...	...	0	...	...	0·20	...	...	0	Kirmanshah.
...	...	...	67	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Koweit.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Maidan.
...	...	...	63	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Muhammerah.‡
...	...	...	...	...	...	...	...	...	...	...	4	...	...	1·93	5·24	—3·31	4·16	23·53	—19·37	0·61	Pemba.
...	...	...	...	...	...	...	...	...	...	...	Rainfall data not received.						...	...	...	...	Prison Island.
14·9	...	...	87	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Seistan.

† Total rainfall from 1st June.

‡ Wind variable=10.



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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.

Engraved at the Survey of India Office, Calcutta, January 1914.

LITHO. BY S.S.M.

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

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

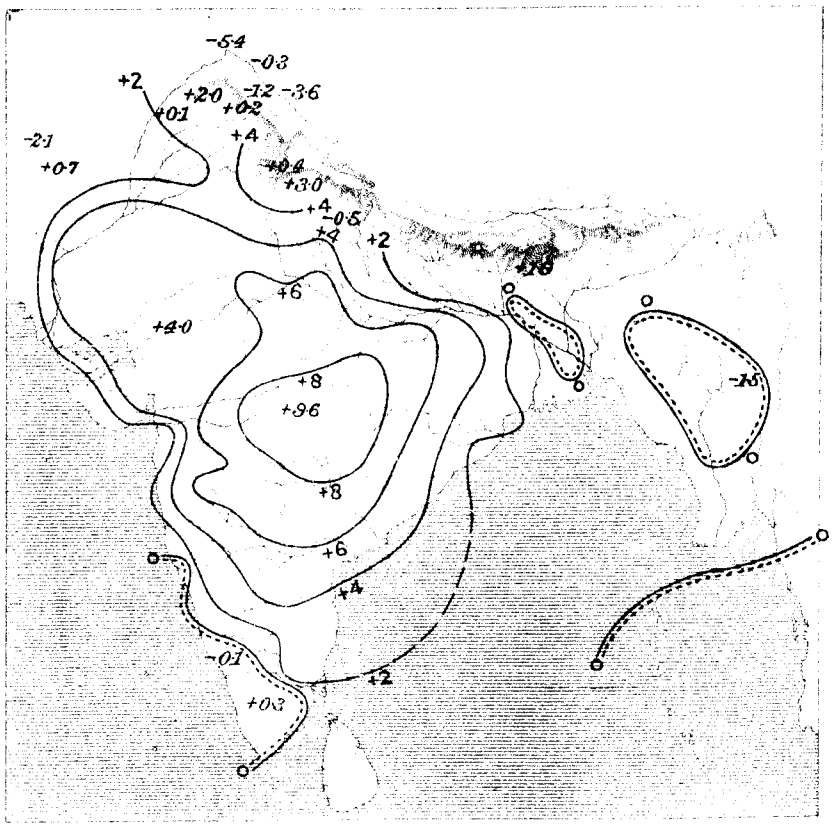
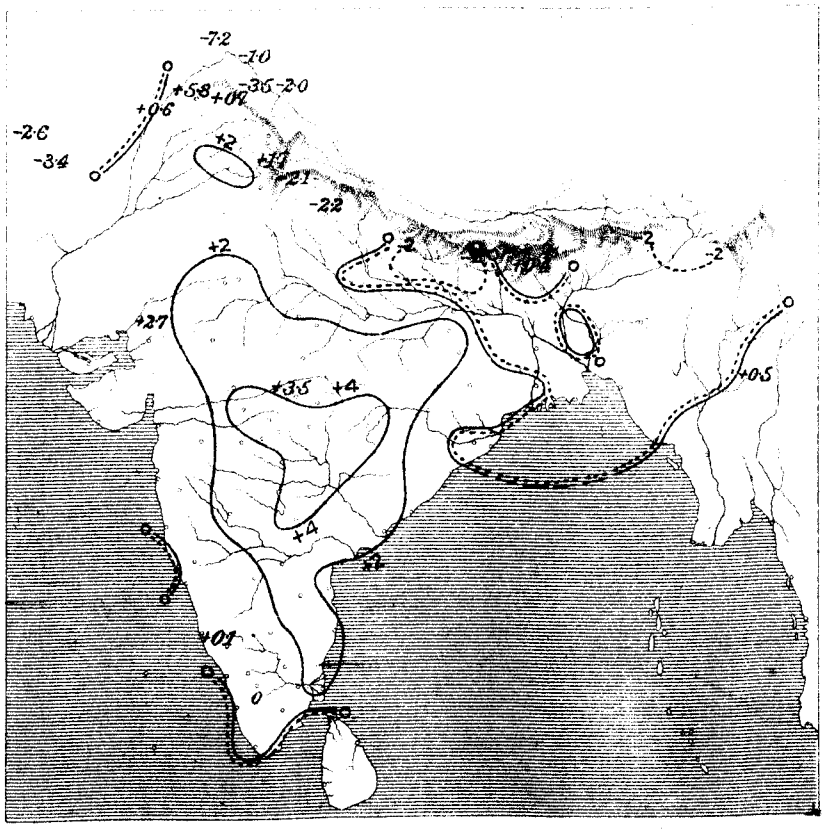


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S.S. MUNDLE.

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

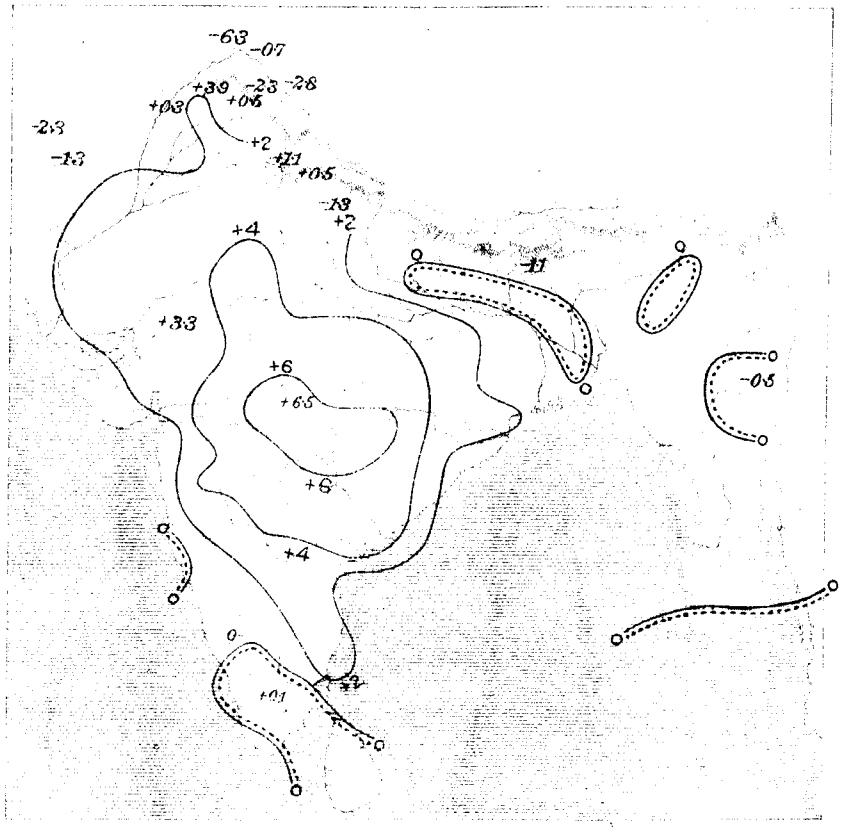
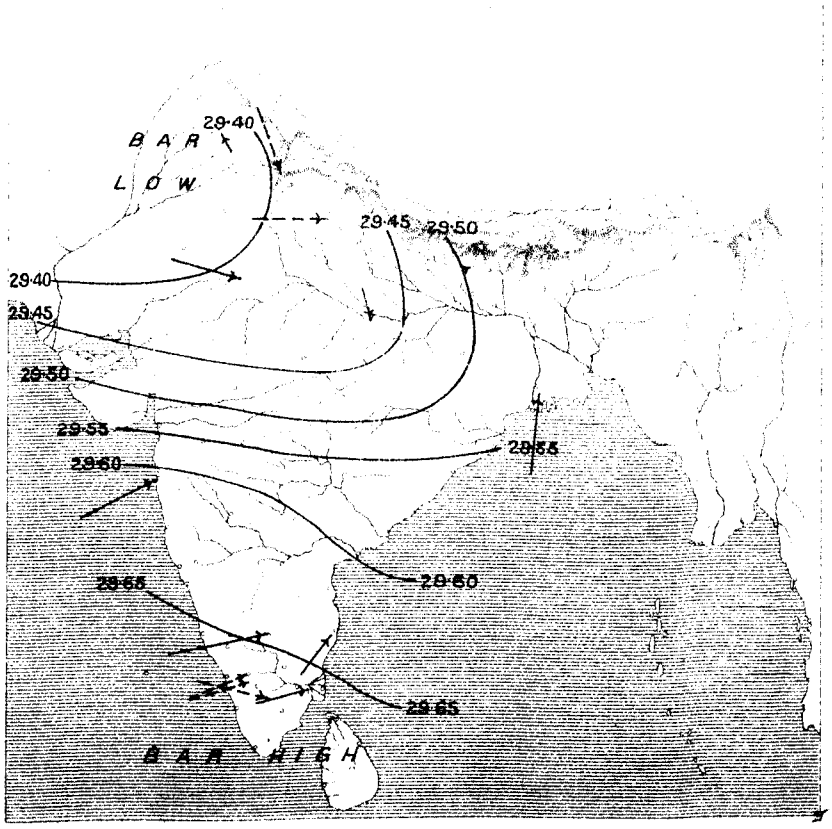


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.



LITHO. BY S.S.M.

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

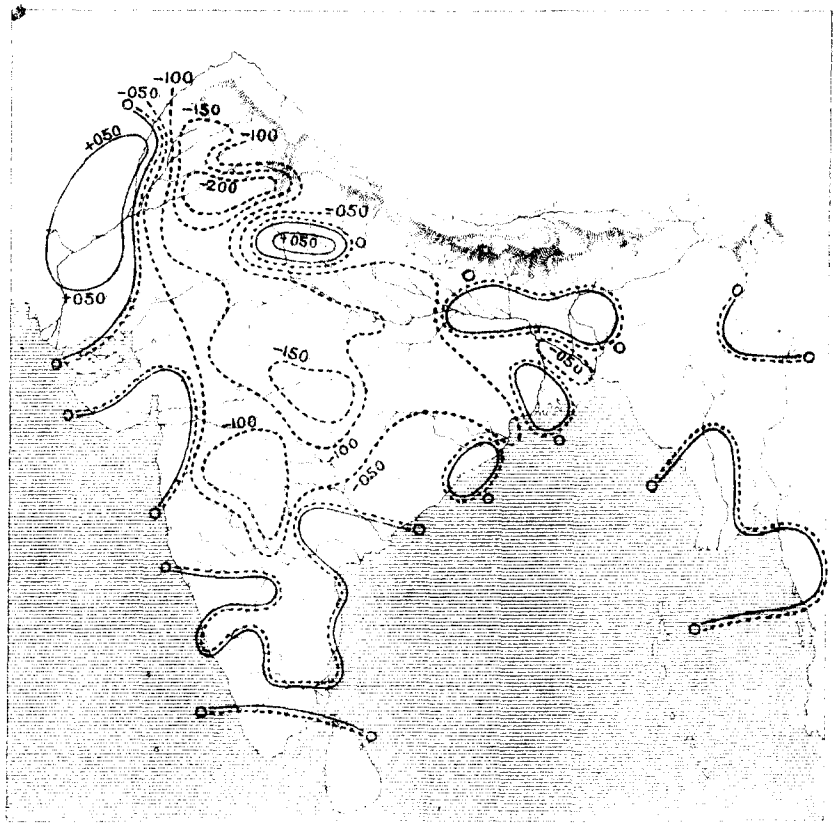
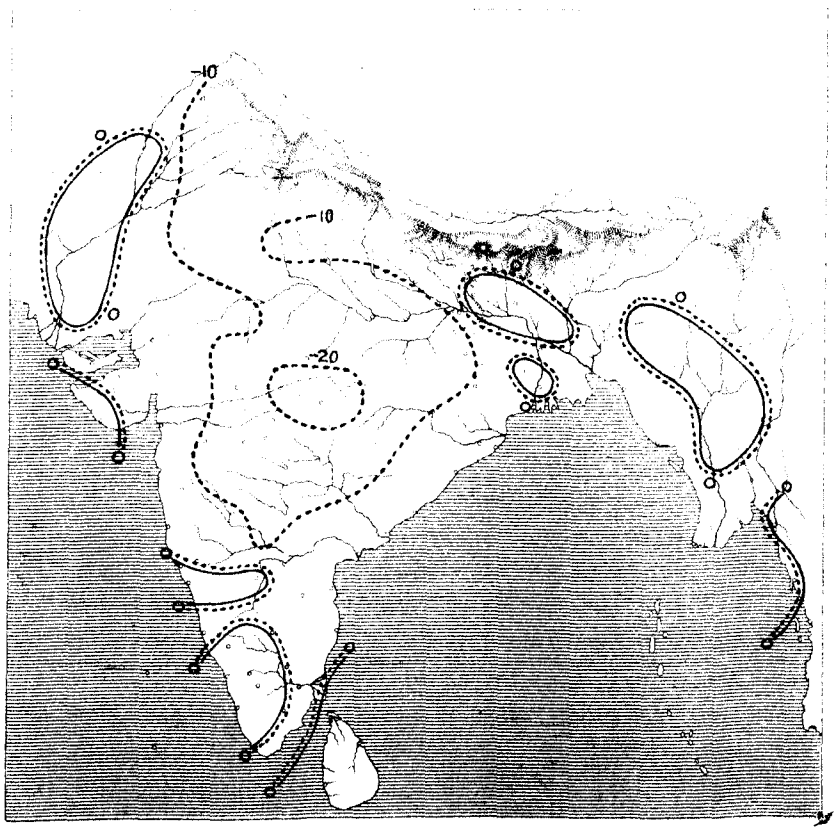


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.



LITHO. BY S. & M.

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

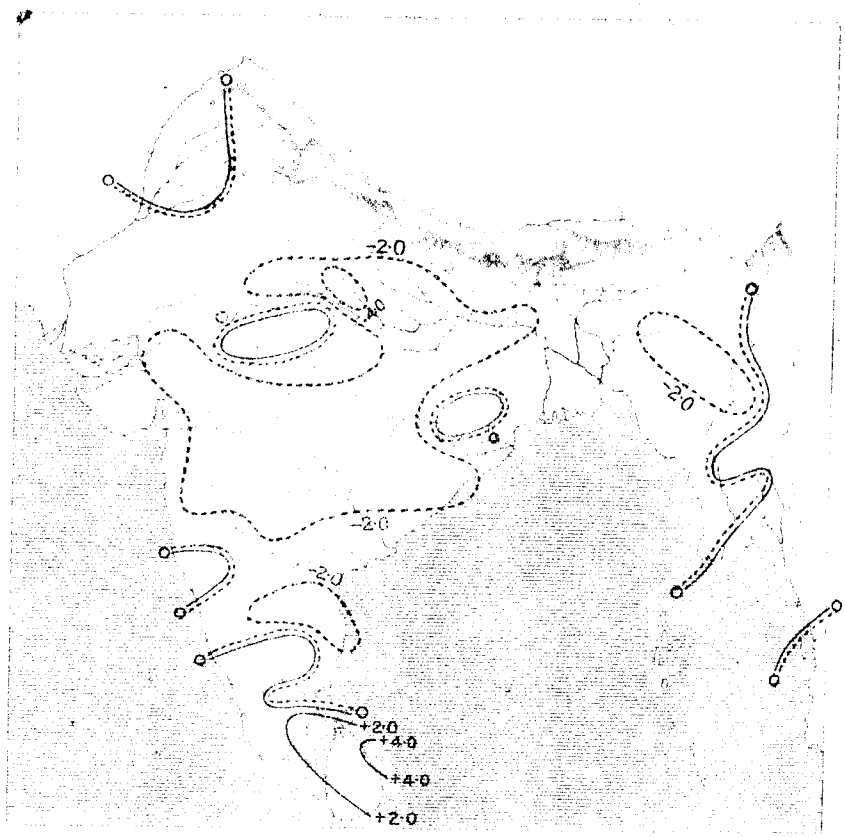
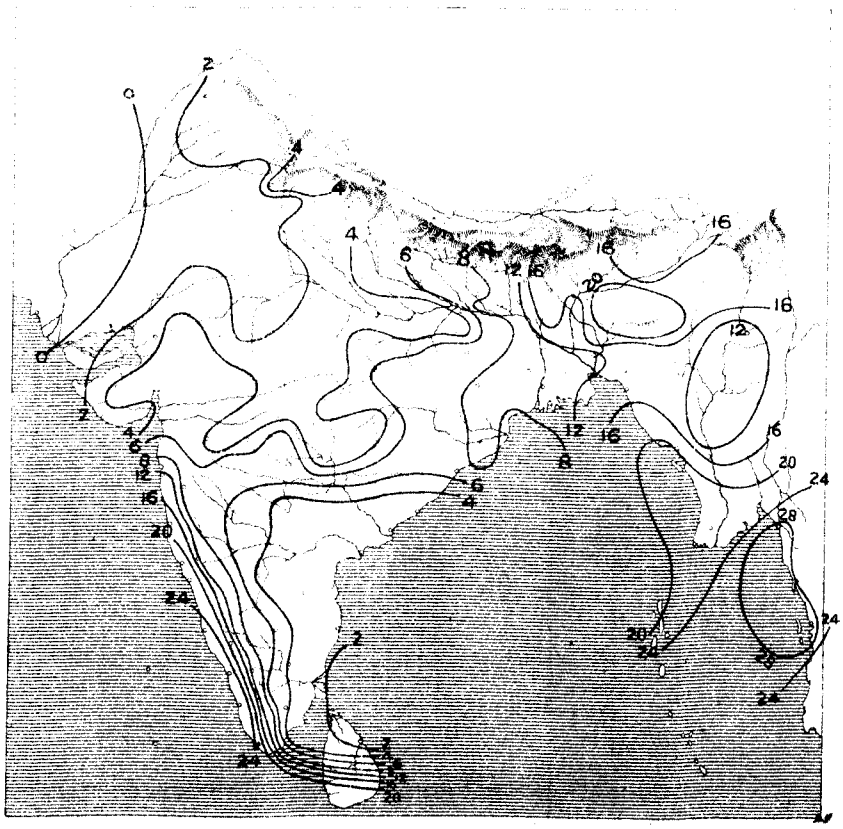
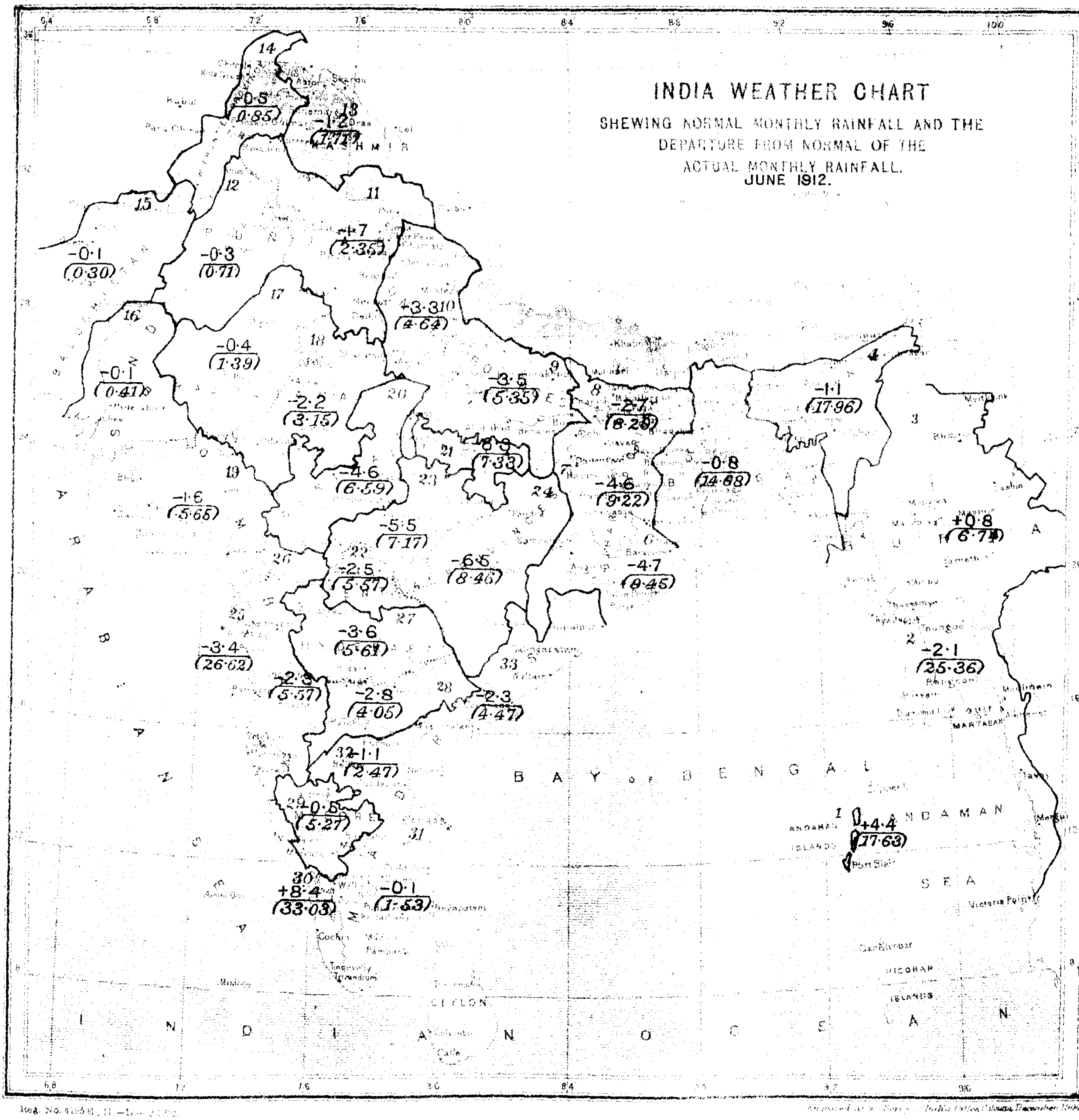


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.
(BASED ON THE RETURNS OF TABLE B.)



LITHO. BY S.E.M.



LITHO. BY S.S.M.

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 monthly 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
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

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GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW.

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JULY, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of July, 1912, is based on observations taken daily at 8 hrs. at 241 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 34 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. The unfavourable conditions which during June had prevented the monsoon from extending in the normal manner into the interior held through the first five days of July. On the 6th the monsoon began however to spread inland and by the 11th had covered most parts of the country with the exception of the Indus valley and Baluchistan. During the rest of the month with the exception of a few days the currents were unusually vigorous and attained their fullest extension, but their activity was shown chiefly in the tract of country stretching from Ganjam to Gujarat. This was the case more especially during the fourth week when the first cyclonic storm of the season from the Bay passed across the country.

The total precipitation of the month was above the normal throughout the country with the exception of Burma, the United Provinces West, the Punjab South-west, Kashmir, Sind, Madras South-east and Madras Deccan.

The excess was most marked in Gujarat (10·19" or 74 per cent). While the greatest defect occurred in the United Provinces West (2·37" or 19 per cent), Madras South-east (0·9" or 45 per cent.)

Humidity, temperature and cloud were all approximately normal.

Atmospheric pressure was more or less below normal over the whole of the plains of India.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—The weather was unfavourable for solar observations during the month. The sun could not be observed on 8 days and on 7 other days prominences could not be recorded.

Sunspots.—Three spots were observed during the month but all of them were small. Two of these did

not last more than a day. The daily average number was 0.3. All the spots were in the southern hemisphere and their distribution in latitude was as follows :—

TABLE 1.

	0°—10°.	10°—20°.	Mean latitude.	Extreme latitudes.
North . .	—	—	—	—
South . .	2	1	8°·0	3° and 12°

Prominences.—Sixteen large and 5 eruptive prominences were recorded, also one high latitude metallic prominence. The greatest height attained was 180″ and was observed on the 14th at latitude + 38° east.

Magnetic disturbances.—There was a moderate disturbance on the 4th.

Seismological records.

TABLE 2.

No.	Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum amplitude.	Duration.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	mm. ″	h. m.	
48	July 7	8 21·4	8 46·8	8 58·5	11 08·0	5·5=2·6	2 46·6	
49	" 8	22 32·0	22 47·6	22 49·2	23 28·0	0·8=0·4	0 56·0	
50	" 24	12 12·3	12 15·6	12 17·4	?	1·9=0·9	1 52·3	Beginning lost in end of No. 50.
51	" 24	?	13 32·1	13 37·3	14 04·6	0·6=0·2		

J. EVERSHED,

Director,

Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of July, 1912, the traces showed 14 calm days and 17 days of small disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 2nd, 12th, 13th, 24th and 28th.

The following table represents the magnetic character of each day during the month :—

TABLE 3.

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

C = calm ; S = small ; M = moderate ; G = great ; V. G. = very great.

The mean observed absolute values of the several magnetical elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and the declination for the month are as follows :—

Easterly declination . . .	0° 51′ 1″
Horizontal force	0·36879 C.G.S. unit.
Vertical force	0·16371 " "
Inclination	23° 56′·2
Inclination (observed) . . .	23° 54′·1
Horizontal force range . .	0·00039 " "
Horizontal force summed range .	0·00277 " "
Declination range . . .	4′·1
Declination summed range .	19′·3

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

Seismic disturbances.

TABLE 4.

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	h. m.	h. m.	h. m.	mm.	h. m.
July 7	8 21·3	8 56·2	11 11·0	5·8	2 49·7
" 24	12 9·0	12 18·7	Mixed with the beginning of the following disturbance.	0·7	.....
" 24	Mixed with the end of preceding disturbance.	13 27·0	13 49·9	0·5	.....
" 25	23 19·5	23 59·2	d. h. m. 26 0 40·9	0·5	1 21·4

All times given above denote G. M. T.

Sensibility to tilt 1 mm. = { 0″·40 from 1st to 23rd. 0.37 from 24th to 31st.

N. A. F. MOOS,

Director.

Bombay and Alibag Observatories.

CALCUTTA OBSERVATORY.

5. *List of displacements recorded by the Milne seismograph.*

TABLE 5.

Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maximum. G. M. T.	End. G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
July 7	...	8 20·2	8 49·2	12 1·9	3 41·7	14·00†	† Measured from base line.
„ 8	16 50·3	16 58·5	17 2·0	17 24·4	0 34·1	1·00	
„ 8	22 16·2	22 38·5	22 40·0	23 36·5	1 20·3	2·00	
„ 24	12 10·5	12 13·6	12 18·7	14 10·5	2 0·0	8·00*	* Measured from base line.
				26-7-12			
„ 25	23 16·7	23 38·0	23 42·1	5 21·7	6 5·0	1·75	

Sensibility 1 mm.=0·38″ tilt.

C. W. PEAKE,

Meteorologist, Calcutta

SIMLA OBSERVATORY.

6. *List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 6.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Max. amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
July 7th	A	8 9·6	8 19·4	838·0	8 39·6	10 31·0	2 20	22·5	
	B	8 9·4	8 19·4	8 38·2	9 26·7	11 15	3 6	16·8	
	V	8 9·5	?	8 41·8	8 48·9	9 5	0 55	0·5	
„ 8th	A	22 16·4			22 38·4	23 22	1 6	0·5	Tremors
	B	22 16·5			22 42·9	23 29	1 12	0·4	Do.
„ 18th	B	22 40·0			22 55·1	23 26·5	0 46	0·3	Do.
„ 24th	A	12 10·1	12 15·5	12 21·3	12 22·1	13 50·8	1 41	1·0	
	B	?	12 15·5	12 20·9	12 21·9	14 4	?	1·6	
	V	?	?	12 21·6	12 22·3	12 25	?	1·9	Apparent beginning 12h 7m, 18·8 mins.
„ 26th	A	23 19·4	23 29·8	23 47·9?	23 48·9	0 28	1 9	Small	
	B	23 19·6	23 29·3	23 41·0?	23 42·2	?	?	3·8	
	V	23 19·3	?	?	23 20·2	23 21·4	0 8·1	0·4	
	A	7 50·7			8 5·0	8 49	0 58	Small	Tremors.
	„	8 9·7			8 26·5	8 48	0 48	0·4	Do.

All times are given in G. M. T.
A=E—W component.
B=N—S component.
V=Vertical, component.
Magnification of A=15, B=15 and V=60.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 7.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity. Rossi-Forel scale.	No. of shocks.	REMARKS.
	July.	h. m.	sec.			
Srinagar . .	2nd	4 6	8	6	2	
Landikotal . .	2nd	4 9	60	...	1	"A big" shock.
Gulmarg . .	2nd	4 10	25	6	1	
Drosh . .	2nd	4 17	90	6	4	
Chitral . .	2nd	4 20	30	6	2	
Drosh . .	8th	20 0	2	5	1	
Drosh . .	8th	21 50	3	6	3	
Mandalay . .	13th	19 55	3	5	1	
Mandalay . .	15th	18 35	6	7	3	
	15th	18 40	3	5	2	
	15th	18 45	3	5	1	
Drosh . . .	16th	5 22	3	6	2	
Chitral . .	16th	5 27	15	6	3	
„ . .	25th	8 22	30	6	2	
Drosh . . .	25th	8 45	3	6	1	
Bassein . . .	25th	20 30	1	4	1	

Solar radiation.—No observations with the Angstrom's pyrheliometer were possible during the month owing to overcast skies.

W. A. HARWOOD,

Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. The following information has been received for the period January to June, 1912.

TABLE 8.

——	January, 1912.	Feb., 1912.	March, 1912.	April, 1912.	May, 1912.	June, 1912.
Departure from normal of mean pressure.	+·054	—·077	—·031	+·029	—·039	—·023
Actual mean wind direction.	N 84° E	N 54° E	S 67° E	S 70° E	S 62° E	S 58° E
Normal mean wind direction.	S 86° E	S 83° E	S 82° E	S 72° E	S 64° E	S 63° E
Actual mean wind velocity (miles per diem).	228	317	249	225	285	249
Normal mean wind velocity (miles per diem).	232	223	226	218	217	239
Rainfall departure from normal.	—0·18	+24·40	—6·29	+0·86	+2·86	—1·39

Weather in the Indian monsoon region.

8. The pressure in the Indian Ocean as represented by Mauritius, Zanzibar and Seychelles was below the normal while the air movement was slightly stronger than usual. Rainfall was in large excess in Seychelles, but Zanzibar practically received no rain at all instead of 2·78″, which is the normal quantity. The conditions over the Indian Ocean were favourable for a good monsoon in India.

TABLE 9.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	—·019	—·011	—·047
Actual mean wind direction	S 59° E	S 22° W	S 23° E

—	Mauritius.	Zanzibar.	Seychelles.
Normal mean wind direction	S 64° E	S 15° W	S 33° E
Actual mean wind velocity (miles per diem).	321	161	302
Normal mean wind velocity (miles per diem).	253	144	289
Rainfall departure from normal.	—0·49	—2·75	+1·49

Depressions and cyclonic storms.

9. Two feeble storms formed at the head of the Bay during the last week of the month. The first crossed the Orissa coast in the afternoon of the 28th, travelled rapidly in a west-north-westerly direction, passed into the Arabian Sea during the 30th, and gave moderate to heavy rain along its track.

The second storm commenced to form on the last day of the month.

Pressure.

10. The mean pressure of the month was more or less below normal over the whole of the plains of India, the deficiency being least along the Himalayas and greatest on the Bombay coast. The trough of low pressure was therefore further away from the hills than usual.

TABLE 10.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
Burma	—·011
Assam	—·007
Bengal	—·012
Bihar and Orissa	—·023
United Provinces	—·025
Punjab	—·011
North-West Frontier Province	—·031
Sind	—·037
Rajputana	—·030
Bombay	—·039
Central India	—·033
Central Provinces	—·033
Hyderabad	—·030
Mysore	—·024
Madras	—·027

Although the pressure was below normal over the whole of the plains of India the hill stations of the northern Himalayas from Chakrata to Leh experienced an excess of pressure. The vertical gradient was much less than usual in northern India, slightly less in central India and nearly normal in southern India. Darjiling and Dhubri was the only pair of stations showing pressure gradient above normal.

TABLE 11.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B—A.
Quetta	—·006	Jacobabad	—·038	—·032
Leh	+·013	Lahore	—·008	—·021
Murree	+·002	Peshawar	—·026	—·028
Simla	+·015	Ludhiana	—·003	—·018
Chakrata	+·012	Roorkee	—·004	—·016
Darjiling	—·025	Dhubri	0	+·025
Mount Abu	—·022	Deesa	—·031	—·009
Pachmarhi	—·031	Khandwa	—·037	—·006
Kodaikanal	—·010	Madura	—·012	—·002

Temperature.

11. During the first nine days of the month the temperature in the northern half of north-west India was higher than the average and on most days an area existed in which the temperature was more than 10° above normal. From the 17th to the 22nd the same region experienced low temperature. Throughout the rest of the country the temperature remained normal during the whole of the month, so that the monthly mean temperature was practically normal everywhere. The absence of any large temperature abnormality is clearly shown in Tables 12 and 13.

TABLE 12.

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	84·9	76·9	80·9	7·9	15·6	—0·7	—0·4	—0·3
2. Lower Burma	84·6	75·5	80·0	9·2	15·8	+0·2	+0·5	—0·3
3. Upper Burma	90·8	76·6	83·7	14·2	21·8	+0·4	0	+0·4
4. Assam	87·9	76·8	82·4	11·1	20·5	—0·6	—0·8	+0·2
5. Bengal	89·0	78·9	84·0	10·1	16·7	—0·3	—0·3	0
6. Orissa	88·2	78·1	83·2	10·1	20·9	+0·2	—0·1	+0·3
7. Chota Nagpur	89·4	76·7	83·1	12·6	24·7	+0·5	+0·1	+0·4
8. Bihar	89·3	78·6	83·9	10·8	20·9	—0·8	—0·2	—0·6
9. United Provinces, East	91·9	78·6	85·3	13·3	28·9	+0·6	+0·1	+0·5
10. Do. do., West	95·1	80·5	87·8	14·6	34·8	+3·0	+1·4	+1·6
11. Punjab, East and North	98·0	81·3	89·7	16·8	37·8	+1·4	+1·4	0
12. Do., South-west	103·8	84·7	94·3	19·0	40·2	+0·1	+1·5	—1·4
13. Kashmir	87·2	61·4	74·3	25·9	43·7	+4·6	+1·7	+2·9
14. North-West Frontier Province	104·4	82·9	93·7	21·5	43·3	+1·3	+2·0	—0·7
15. Baluchistan	101·3	75·3	88·3	25·9	39·2	+3·0	+2·7	+0·3
16. Sind	100·5	84·3	92·4	16·2	26·6	+2·2	+2·8	—0·6
17. Rajputana, West	99·4	82·1	90·7	17·3	30·9	+1·8	+1·2	+0·6
18. Do., East	92·8	79·5	86·0	13·3	31·4	+0·3	—0·2	+0·5
19. Gujarat	88·6	78·3	83·5	10·4	23·1	—0·7	+0·1	—0·8
20. Central India, West	87·8	74·1	80·9	13·7	30·2	+1·9	+0·7	+1·2
21. Do., East	91·1	78·7	84·9	12·3	31·3	+2·5	+1·2	+1·3
22. Berar	88·0	73·7	80·8	14·3	28·3	+1·4	+0·8	+0·6
23. Central Provinces, West	88·7	75·3	82·0	13·4	27·9	+2·5	+0·8	+1·7
24. Do., East	85·5	74·0	79·8	11·5	24·5	—0·3	0	—0·3
25. Konkan	83·6	76·3	79·9	7·3	14·2	+0·1	+0·2	—0·1
26. Bombay Deccan	85·0	71·4	78·2	13·5	25·3	+0·6	+0·8	—0·2
27. Hyderabad, North	85·4	71·7	78·6	13·6	26·2	—1·2	+0·2	—1·4
28. Do., South	87·9	73·7	80·8	14·2	25·9	—1·2	+0·5	—1·7

Sub-division.	Actual temperature. Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Departure from normal of Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
29. Mysore	80·3	67·0	73·7	13·3	22·7	—0·5	+0·5	—1·0
30. Malabar	82·8	74·5	78·7	8·3	14·4	—0·2	+1·1	—1·3
31. Madras, South-east	94·9	77·8	86·3	17·1	25·8	+0·5	+1·3	—0·8
32. Do., Deccan	92·2	76·6	84·4	15·6	26·3	—0·3	+0·8	—1·1
33. Do. Coast, North	90·3	78·1	84·2	12·2	25·0	—1·2	—0·9	—0·3

TABLE 13.

Division.	Departure from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·2	+0·3	+0·3
Assam	—0·6	—0·8	—0·7
Bengal	—0·2	—0·1	—0·1
Bihar and Orissa	—0·2	—0·1	—0·1
United Provinces	+1·8	+0·7	+1·3
Punjab	+1·0	+1·4	+1·2
North-West Frontier Province	+1·3	+2·0	+1·7

Division.	Departure from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Sind	+2·2	+2·8	+2·5
Rajputana	+0·8	+0·3	+0·5
Bombay	—0·1	+0·3	+0·1
Central India	+2·1	+0·9	+1·5
Central Provinces	+1·7	+0·7	+1·2
Hyderabad	—1·2	+0·4	—0·4
Mysore	—0·5	+0·5	0
Madras	—0·2	+0·7	+0·3

Winds.

12. The mean winds show the influence of the removal of the trough of low pressure towards the south, for the easterly current of air which is usually confined to the submontane regions invaded many stations of the Gangetic plain which normally have southerly winds, *e.g.*, Agra, Cawnpore, Allahabad and Benares. The current of air across Bengal was weaker than usual by 25 per cent. The wind was much steadier than the average in the United Provinces, while the reverse was the case in Rajputana; this again being a consequence of the southerly position of the trough of low pressure.

TABLE 14.

Division.	Departure from normal of Hourly wind velocity.	Wind steadiness.
Burma	—0·9	— 5
Assam	+0·3	+ 9

Division.	Departure from normal of Hourly wind velocity.	Wind steadiness.
Bengal	—1·1	— 1
Bihar and Orissa	0	+11
United Provinces	+0·1	+17
Punjab	+0·4	+ 7
North-West Frontier Province	—0·6	+ 1
Sind	—1·5	—11
Rajputana	+0·5	—23
Bombay	—0·9	+ 3
Central India	—0·6	—12
Central Provinces	+0·8	+ 4
Hyderabad	—1·1	+12
Mysore	+1·0	— 1
Madras	+0·7	— 1

Humidity and cloud.

13. The humidity was so nearly normal over the whole of India that on the mean of the month the percentage of humidity did not depart more than 4 per cent. from the average value in any division.

The mean of the month of the cloud amount was also practically normal.

TABLE 15.

DIVISION.	HYGROMETRY; 8 HRS.				CLOUD.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	89	0	·871	—·006	8·2	+0·1
Assam	91	— 1	·941	—·011	7·6	—1·3
Bengal	89	— 1	·957	—·007	7·9	—0·3
Bihar and Orissa	87	0	·926	—·007	7·6	—0·1
United Provinces	81	— 2	·930	+·001	6·6	—0·3
Punjab	69	— 2	·858	—·008	4·7	+0·2
North-West Frontier Province.	70	+ 4	·931	+·076	3·8	+1·0
Sind	74	+ 2	·989	+·097	5·0	—0·3
Rajputana	75	+ 3	·856	+·022	5·7	—0·4
Bombay	85	+ 2	·857	+·015	8·2	0
Central India	83	0	·834	+·003	8·2	+0·8
Central Provinces	83	— 2	·786	—·015	8·2	+0·2
Hyderabad	80	+ 2	·724	—·008	8·3	+0·6
Mysore	85	+ 2	·641	+·007	8·7	+0·1
Madras	77	+ 1	·805	+·011	7·6	+0·3

Rainfall.

14. The monsoon was on the whole more vigorous than usual and the total rainfall of the month in the plains of India was 14 per cent. in excess of the normal.

The excess was not however common to the whole country; the following divisions experienced a defect of more than 10 per cent., the United Provinces West (19 per cent.), Kashmir (12 per cent.) and Madras South-east (45 per cent.).

The chief excess occurred in Rajputana East, Gujarat, Central India, Mysore, Konkan, the Bombay Deccan, Hyderabad South, and Madras Coast North.

TABLE 16.

SUB-DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	23·0	20·9	17·26	14·79	+2·47	+17
2. Lower Burma	25·6	25·3	28·66	29·75	—1·09	— 4
3. Upper Burma	9·8	9·9	6·48	6·86	—0·38	— 6
4. Assam	20·1	18·9	20·65	17·91	+2·74	+15
5 Bengal	19·4	16·7	16·88	15·55	+1·33	+ 9
6. Orissa	16·8	15·0	13·68	12·53	+1·15	+ 9
7. Chota Nagpur	17·9	16·6	14·30	14·09	+0·21	+ 1
8. Bihar	15·5	14·5	13·82	13·05	+0·77	+ 6
9. United Provinces, East	14·2	12·7	12·79	11·97	+0·82	+ 7
10. Do., West	10·5	11·9	9·91	12·28	—2·37	—10

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
11. Punjab, East and North	6·9	6·9	6·71	6·67	+0·04	+ 1
12. Do., South-west	2·6	2·9	2·26	2·43	—0·17	— 7
13. Kashmir	4·6	4·9	3·43	3·90	—0·47	—12
14. North-West Frontier Province	4·6	4·2	4·18	3·17	+1·01	+32
15. Baluchistan	2·9	1·5	1·66	0·87	+0·79	+91
16. Sind	3·7	2·7	2·38	2·40	—0·02	— 1
17. Rajputana, West	7·5	4·7	5·19	3·88	+1·31	+34
18. Do., East	12·3	9·4	12·02	7·92	+4·10	+52
19. Gujarat	20·2	13·1	24·01	13·82	+10·19	+74
20. Central India, West	15·4	12·6	13·76	9·63	+4·13	+43
21. Do., East	16·9	14·1	17·90	13·51	+4·39	+32
22. Berar	14·5	12·0	9·38	9·12	+0·26	+ 3
23. Central Provinces, West	17·2	15·3	14·89	14·40	+0·49	+ 3
24. Do., East	19·7	16·7	19·10	16·66	+2·44	+15
25. Konkan	28·3	26·6	50·83	40·60	+10·23	+25
26. Bombay Deccan	13·4	11·6	11·85	7·99	+3·86	+48
27. Hyderabad, North	15·1	12·3	9·02	8·39	+0·63	+ 8
28. Do., South	14·5	10·2	8·37	5·73	+2·64	+46
29. Mysore	11·7	9·4	10·65	7·09	+3·56	+50
30. Malabar	28·1	27·5	42·72	39·21	+3·51	+ 9
31. Madras, South-east	2·7	3·6	1·07	1·95	—0·88	—45
32. Do. Deccan	8·2	6·2	2·99	3·07	—0·08	— 3
33. Do. Coast, North	13·4	9·7	8·72	6·32	+2·40	+38

TABLE 17.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	16·60	17·52	—0·92	— 5
Assam	20·65	17·91	+2·74	+ 15
Bengal	16·88	15·55	+1·33	+ 9
Bihar and Orissa	13·87	13·13	+0·74	+ 6
United Provinces	11·43	12·11	—0·68	— 6
Punjab	5·79	5·80	—0·01	0
North-West Frontier Province	4·18	3·17	+1·01	+ 32
Sind	2·38	2·40	—0·02	— 1

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Rajputana	9·98	6·82	+3·16	+ 46
Bombay	22·85	15·80	+7·05	+ 45
Central India	15·20	10·95	+4·25	+ 39
Central Provinces	13·58	12·75	+0·83	+ 7
Hyderabad	8·66	6·94	+1·72	+ 25
Mysore	10·65	7·09	+3·56	+ 50
Madras	7·32	6·74	+0·58	+ 9
Mean of India	12·73	11·14	+1·59	+ 14

Snowfall.

I.—AFGHANISTAN.

15. No information is available.

II.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Parachinar.*—No snow fell.

(*b*) *Drosh.*—No snow fell, and little remained below 14,000 feet.

(*c*) *Chitral.*—No snow fell except above 16,000 feet.

(*d*) *Malakand.*—No snow fell on the Lowarai pass, but slight fall in Swat.

(*e*) *Abbottabad.*—No snow fell in Kagan valley.

III.—KASHMIR.

No snowfall was known at Srinagar or Leh except on heights near Leh at the end of the month.

IV.—PUNJAB.

(*a*) *Chamba.*—There was no important fresh snow fall.

(*b*) *Kangra.*—No snow fell on the Indian side of the Mid-Himalayas except a sprinkling on the highest peaks.

(*c*) *Kilba.*—No snow fell. All the passes were open.

V.—THE UNITED PROVINCES.

(*a*) *Garhwal.*—Snow fell on the highest peaks towards the close of July.

(*b*) *Almora.*—The total fall was reported in feet as Lipulekh 1, Lampia 2, Untadhura 2, Relamdhura 1, Pindari 3 and Kaphini 3.

SUMMARY.

16. It appears that no snow fell during July except the usual amounts on the higher ranges.

G. C. SIMPSON.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 17 stations in India, etc., in July, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Tabl

Abstract of observations taken at 10 hrs. and 16 hr

Number of subdivision.	Station.	Elevation 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 gravity, 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 vious columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
	Calcutta . .	21	29·555	29·465	·090	29·516	—·024	29·484	89·1	78·8	10·3	92·9	74·6	18·3	84·8	81·8	83·6	+0·6	77·1	80·7	80·7	79·
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad . .	309	29·224	29·121	·103	29·176	—·029	29·435	92·1	79·0	13·1	106·0	74·5	31·5	86·4	89·1	84·5	0	76·9	79·8	80·4	79·
	VI.—Punjab.																					
11	Lahore . . .	702	28·812	28·709	·103	28·756	—·012	29·402	99·9	82·9	17·0	109·8	76·4	33·4	91·6	97·5	90·5	+1·4	76·7	80·2	81·1	79·
	IX.—Rajputana.																					
18	Jaipur . . .	1,431	28·134	28·045	·089	28·088	—·027	29·425	93·7	79·5	14·2	106·6	73·0	33·6	87·4	90·4	85·4	+0·7	75·4	78·9	79·2	77·
	X.—Bombay.																					
25	Bombay . .	37	29·643	29·596	·064	29·630	—·042	29.607	85·1	78·8	6·3	89·1	74·4	14·7	82·3	82·7	80·4	+0·9	78·1	78·5	78·6	77·
	XIV.—Mysore.																					
29	Bangalore . .	3,021	26·848	26·763	·085	26·813	—·015	29·656	81·3	66·0	15·3	89·9	63·5	26·4	74·1	77·5	71·7	—0·3	64·9	68·5	69·6	67·
	XV.—Madras.																					
31	Pudukkottai .	318	29·485	29·369	·116	29·427		29·668	98·9	79·2	19·7	102·1	75·2	26·9	90·5	95·2	89·1			77·0	79·6	
	Madras . .	22	29·731	29·618	·113	29·686	—·032	29·639	96·8	79·7	17·1	102·8	75·2	27·6	88·9	91·5	86·8	+1·1	75·6	79·4	79·8	78·
	Hill Stations, excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	22·992	22·947	·045	22·967	+·009	22·929	68·7	61·0	7·7	75·2	58·4	16·8	64·9	66·8	64·5	+0·2	58·6	62·5	63·8	61·
	Sarain . . .		23·021	22·966	·055	22·989		22·951	71·9	60·0	11·9	77·6	55·9	21·7	67·4	69·2	65·5			62·7	63·5	
	Kalabagh . .		20 080	20·047	·033	20·059		20·022	56·6	47·5	9·1	60·4	45·2	15·2	53·8	54·9	51·6			52·4	52·9	
	Mukteswar . .	7,592	22·717	22·664	·053	22·689		22·647	70·0	56·4	13·6	75·7	53·0	22·7	64·2	66·1	62·8		55·0	61·7	62·9	59·
	Katmandu . .	4,388	25·491	25·413	·078	25·450	+·060†	25·404	83·2	68·6	14·6	89·0	65·5	23·5	77·7	78·4	75·5	+0·4†	66·4	71·5	72·2	70·
	Ootacamund .	7,397	22·992	22·937	·055	22·964		22·899	61·5	52·1	9·4	67·8	48·2	19·6	58·6	57·8	56·4		50·7	55·6	55·4	53·
	Kodaikanal . .	7,688	22·774	22·720	·054	22·747		22·682	62·5	53·1	9·4	67·8	50·2	17·6	59·6	58·5	57·8		49·5	55·2	55·5	53·
	Dodabetta . .	8,539	21·997	21·938	·059	21·967		21·904	55·5	47·7	7·8	61·5	42·9	18·6	53·3	52·9	51·2		44·9	52·1	51·7	49·
	Extra India.																					
	Diego Garcia .																					
	Seychelles . .	15	29·985	29·905	·080	29·946	—·047†	29·884	80·8	76·2	4·6	83·1	73·2	9·9	78·9	80·0	77·2	+0·8†	70·0	73·9	74·3	72·
	Mauritius . .	181																				

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

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

A.

at 17 stations in India, etc., in July, 1912.

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.	Number of subdivision.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·907	·992	·993	·964	—·007	92	83	83	87	0	8·8	8·7	8·7	+0·1	3		3	9	14	13	18	2		S 11° E	S 1° W	55	63	83*	120	11·48	2·30	Calcutta	5
																															V.—United Provinces of Agra and Oudh.	
·901	·931	·9.4	·928	—·017	91	75	69	80	0	8·9	8·1	8·5	+0·4	10	2	15	16	3	2	1	9	4	N 57° E	N 75° E	31	6	78	175	10·47	2·55	Allahabad	9
																															VI.—Punjab.	
·836	·878	·842	·870	+·007	76	61	51	63	—2	4·3	3·2	3·7	—0·6	8	1	8	8	22	8	3	2	2	S 53° E	S 78° E	47	30	67	82	1·65	0·48	Lahore	11
																															IX.—Rajputana.	
·833	·883	·858	·867	+·033	83	69	63	74	—2	6·7	7·5	7·1	—0·3	2	4	11	12	2	1	3	19	8	N 45° W	N 78° W	29	30	112*	130	13·74	4·45	Jaipur	13
																															X.—Bombay.	
·859	·925	·919	·916	—·005	88	84	83	86	—1	8·7	8·5	8·6	—0·1						2	24	35	1	S 71° W	S 75° W	90	83	274*	466	25·40	6·47	Bombay	25
																															XIV.—Mysore.	
·600	·630	·630	·620	+·013	94	75	69	80	+3	9·0	8·8	8·9							1	22	31	8	S 78° W	S 72° W	85	88	191‡	230	4·15	0·95	Bangalore	29
																															XV.—Madras.	
	789	·800				54	49			7·1	8·6	7·9		4		1		2	2	14	28	11	S 84° W		71		179		0·44	0·18	Pudukkottai	31
·827	·873	·858	·868	+·056	82	65	60	70	+2	7·2	7·6	7·4	+0·1			1	3	9		15	27	7	S 40° W	S 51° W	81	66	115*	190	2·08	0·94	Madras.
																															Hill Stations, excluding Kashmir and Baluchistan.	
·467	·542	·560	·527	—·003	87	88	86	87	—1	8·3	8·3	8·3	—0·5																13·47	1·37	Simla.	
	·525	·528				78	75			8·6	8·4	8·5																	10·01	0·97	Sarain.	
	·384	·385				92	89			9·3	9·1	9·2		14	8			3	9	5		23	N 62° W		32		131		15·77	3·34	Kalabagh.	
·418	·525	·538	·498		92	88	85	88		8·2	8·2	8·2		22	1	2	5	5	4	1	22		S 66° W		23		153		10·87	4·74	Mukteswar.	
·620	·697	·714	·681	—·012	89	74	75	79	—2	7·4	8·3	7·9	+1·1	62									(a)	S 63° W		11	14*	21	17·28	2·15	Katmandu.	
·356	·410	·415	·391		91	84	87	87		9·3	9·6	9·5		2						5	42	13	N 84° W		89		118		8·81	1·18	Ootacamund.	
·320	·395	·413	·376		79	77	84	80		8·2	8·7	8·5			3			1	2	1	36	19	N 75° W		82		298*		3·29	0·71	Kodaikanal.	
·189	·376	·372	·312		44	92	93	76		9·8	9·9	9·9		2						19	34	7	S 81° W		88		310		71·6	1·01	Dodabetta.	
																															Extra India.	
													Observations not received.																		Diego Garcia.	
·651	·770	·773	·746	—·005	72	78	75	76	—2	5·9	6·4	6·1	+0·5†			4	27	27	4				S 23° E	S 23° E	85	86	302*	289	3·90	1·35	Seychelles.	
													Observations not received.																		Mauritius.	

* Uncorrected for scale error. † Departure from old normal. (a) Indeterminate. ‡ Mean of 30 days.

Table B.—Abstract of observations taken at 8 hrs. at 220 stations in India, etc., in July, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

		Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
	Pressure departure from normal.	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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	—·011	87·2	+0·2	75·9	+0·3	81·5	+0·3	11·2	18·3	—0·9	— 5	89	0	·871	—·006	8·2	+0·1	16·60	17·52	—0·92
Assam	—·007	87·9	—0·6	76·8	—0·8	82·4	—0·7	11·1	20·5	+0·3	+ 9	91	— 1	·941	—·011	7·6	—1·3	20·65	17·91	+2·74
Bengal	—·012	87·9	—0·2	78·3	—0·1	83·1	—0·1	9·6	16·7	—1·1	— 1	89	— 1	·957	—·007	7·9	—0·3	16·88	15·55	+1·33
Bihar and Orissa	—·023	89·0	—0·2	78·0	—0·1	83·5	—0·1	11·0	21·7	0	+11	87	0	·926	—·007	7·6	—0·1	13·87	13·13	+0·74
United Provinces of Agra and Oudh	—·025	93·4	+1·8	79·5	+0·7	86·4	+1·3	13·9	31·6	+0·1	+17	81	— 2	·930	+·001	6·6	—0·3	11·43	12·11	—0·68
Punjab	—·011	99·6	+1·0	82·2	+1·4	90·9	+1·2	17·4	38·5	+0·4	+ 7	69	— 2	·858	—·008	4·7	+0·2	5·79	5·80	—0·01
North-West Frontier Province	—·031	104·4	+1·3	82·9	+2·0	93·7	+1·7	21·5	43·3	—0·6	+ 1	70	+ 4	·931	+·076	3·8	+1·0	4·18	3·17	+1·01
Sind	—·037	100·5	+2·2	84·3	+2·8	92·4	+2·5	16·2	26·6	—1·5	—11	74	+ 2	·989	+·097	5·0	—0·3	2·38	2·40	—0·02
Rajputana	—·030	95·4	+0·8	80·6	+0·3	87·9	+0·6	14·9	31·2	+0·5	—23	75	+ 3	·856	+·022	5·7	—0·4	9·98	6·82	+3·16
Bombay	—·039	86·3	—0·1	75·7	+0·3	81·0	+0·1	10·5	21·5	—0·9	+ 3	85	+ 2	·857	+·015	8·2	0	22·85	15·80	+7·05
Central India	—·033	89·5	+2·1	76·4	+0·9	82·9	+1·5	13·1	30·7	—0·6	—12	83	0	·834	+·003	8·2	+0·8	14·56	10·95	+3·61
Central Provinces	—·033	87·5	+1·7	74·5	+0·7	81·0	+1·2	13·0	26·9	+0·8	+ 4	83	— 2	·786	—·015	8·2	+0·2	13·58	12·75	+0·83
Hyderabad	—·030	86·8	—1·2	72·8	+0·4	79·8	—0·4	14·0	26·0	—1·1	+12	80	+ 2	·724	—·008	8·3	+0·6	8·66	6·94	+1·72
Mysore	—·024	80·3	—0·5	67·0	+0·5	73·7	0	13·3	22·7	+1·0	— 1	85	+ 2	·641	+·007	8·7	+0·1	10·55	7·09	+3·56
Madras	—·027	91·1	—0·2	77·1	+0·7	84·1	+0·3	13·9	23·6	+0·7	— 1	77	+ 1	·805	+·011	7·6	+0·3	7·32	6·74	+0·58

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·728		29·805	29·802	16th	29·657	27th	·145	78·0	83·6		74·0		78·8		9·6	86·6	4th & 5th.	69·7	28th	16·9
	Mergui	65	29·784	—·014	29·780	29·833	5th	29·706	14th	·127	76·0	82·8	—1·7	72·6	+0·1	77·7	—0·8	10·2	87·0	2nd & 17th.	70·8	6 days	16·2
	Tavoy	19	29·825	—·021	29·777	29·878	21st	29·744	14th	·134	76·8	82·6	—0·7	74·8	+0·7	78·7	0	7·8	87·5	6th	71·8	1st	15·7
	Moulmein	94	29·720	+·002	29·752	29·786	4th	29·625	27th	·161	76·2	83·9	+0·9	74·7	+0·5	79·3	+0·7	9·2	87·5	6th	72·8	20th	14·7
	Rangoon	18	29·769	—·010	29·725	29·835	4th	29·655	27th	·180	79·9	85·4	+0·1	75·6	—0·2	80·5	—0·1	9·8	89·5	9th	72·0	28th	17·5
	Bassein	21?	29·732	—·015	29·696	29·823	5th	29·591	27th	·232	79·0	85·5	+0·8	76·1	+0·3	80·8	+0·5	9·4	89·2	9th	73·4	28th	15·8
	Diamond Island	41	29·715	—·031	29·691	29·790	4th	29·608	27th	·182	81·7	84·6	+0·3	77·9	+2·3	81·3	+1·3	6·7	87·9	5th	75·2	30th	12·7
	Toungoo	164	29·605	—·004	29·712	29·669	5th	29·481	27th	·188	78·9	88·0	+1·3	75·5	+0·4	81·8	+0·9	12·5	92·5	7th	73·4	28th	19·1
	Kyaukpyu	18	29·686		29·644	29·774	5th	29·490	27th	·284	79·0	84·7		76·0		80·4		8·7	89·0	10th, 14th & 16th.	74·4	5 days	14·6
	Akyab	20	29·672	—·017	29·633	29·759	5th	29·461	27th	·298	79·8	85·0	+0·3	77·3	—0·2	81·1	+0·1	7·7	89·9	14th	75·0	29th & 30th.	14·9
3	Thayetmyo	121	29·599	—·020	29·661	29·671	5th	29·445	27th	·226	80·3	88·8	—0·1	76·9	+0·6	82·9	+0·3	11·9	91·9	1st, 8th & 14th.	74·9	5th	17·0
	Minbu	*165*	29·544	—·010	29·652	29·610	5th	29·379	27th	·231	80·8	90·2	—1·1	76·6	—0·6	83·4	—0·9	13·6	95·3	8th	71·0	6th	24·3
	Yamethin	657	29·060	—·026	29·665	29·129	5th	28·903	27th	·226	78·4	90·2	+0·2	75·2	+0·6	82·7	+0·4	15·0	94·8	31st	73·5	6th	21·3
	Mandalay	250	29·455	—·004	29·651	29·534	16th	29·299	27th	·235	82·5	95·9	+1·7	78·2	—0·2	87·1	+0·7	17·7	99·7	25th & 28th.	75·1	27th	24·6
	Monywa	*980*	29·422		29·649	29·503	16th	29·268	27th	·235	82·3	94·9		79·4		87·1		15·5	99·3	10th	77·1	11th & 29th.	22·2
	Lashio	*2,820*	26·979	0	29·671	27·061	16th	26·871	27th	·190	73·5			70·6	+1·3						68·5	30th	
	Bhamo	*381*	29·321	+·013	29·655	29·415	16th	29·186	27th	·229	78·6	88·9	+1·1	74·9	—0·2	81·9	+0·5	14·0	93·4	13th	71·6	6th	21·8
	Myitkyina	458	29·215		29·632	29·307	29th	29·110	27th	·197	76·7	86·6		74·8		80·7		11·8	93·2	14th, 26th & 27th.	72·0	2nd	21·2
	II.—Assam.																						
4	Dibrugarh	353	29·296		29·609	29·377	11th	29·153	27th	·224	78·0	85·2		74·9		80·1		10·3	93·9	26th	71·1	2nd	22·8
	Sibsagar	333	29·323	—·009	29·613	29·430	11th	29·181	27th	·249	80·0	90·7	+0·7	75·9	—2·0	83·3	—0·7	14·8	94·1	5 days	74·0	5th & 6th.	20·1
	Tezpur	252	29·410		29·620	29·494	30th	29·287	27th	·207	79·9	89·0		77·1		83·1		11·9	93·8	27th & 29th.	73·2	11th	19·8
	Gauhati	195	29·450		29·599	29·536	16th	29·536	27th	·207	82·2	88·8		77·9		83·3		10·9	94·8	29th	73·1	11th	21·7
	Dhubri	115	29·509	0	29·578	29·613	16th	29·325	27th	·288	80·3	84·1	—1·8	77·7	—0·6	80·9	—1·2	6·4	89·5	17th	74·1	13th	15·4
	Silchar	104	29·555	—·013	29·611	29·641	16th	29·389	27th	·255	81·1	89·6	—0·6	77·4	+0·2	83·5	—0·2	12·2	95·3	26th & 30th.	71·8	10th	23·5
	III.—Bengal.																						
5	Cox's Bazar	36	29·616		29·597	29·697	11th	29·392	27th	·305	80·4	85·7		76·2		81·0		9·5	90·2	17th	72·7	12th	17·5
	Chittagong	87	29·558	—·020	29·591	29·636	11th	29·333	27th	·303	80·7	86·9	+1·2	77·0	+0·4	82·0	+0·8	9·9	89·5	29th	74·5	12th	15·0
	Noakhali	43	29·595		29·585	29·678	17th	29·407	27th	·271	80·6	85·1		77·7		81·4		7·4	87·8	28th & 29th.	75·4	19th	12·4
	Barisal	12	29·595	—·010	29·554	29·690	17th	29·408	27th	·282	81·9	87·1	—0·2	78·1	—0·5	82·6	—0·3	9·0	91·3	24th	74·6	2nd	16·7
	Narayanganj	26	29·578	—·020	29·553	29·670	16th	29·397	27th	·273	82·4	88·5	+0·2	79·0	—0·2	83·7	0	9·5	91·5	15th	76·2	2nd	15·2
	Mymensingh	63	29·565	0	29·580	29·665	16th	29·397	27th	·268	81·5	87·6	+0·5	78·8	+0·5	83·2	+0·5	8·8	93·1	29th	77·1	4 days	16·0
	Bogra	75	29·536	+·002	29·563	29·642	16th	29·362	27th	·279	81·8	88·2	—1·0	79·1	+0·6	83·7	—0·2	9·1	92·2	29th	75·7	3rd	16·5
	Dinajpur	123	29·465	—·007	29·542	29·577	16th	29·286	27th	·291	81·0	87·9	—1·2	78·5	—0·4	83·2	—0·8	9·4	93·3	29th	75·0	11th	18·3
	Jalpaiguri	223	29·334	+·003	29·572	29·429	16th	29·150	27th	·279	80·1	87·9	—0·3	76·7	—0·1	82·3	—0·2	11·2	96·4	29th	73·4	13th	23·0
	Saugor Island	25	29·540	—·023	29·510	29·644	17th	29·264	28th	·380	82·8	87·0	—0·8	79·6	—0·1	83·3	—0·9	7·4	89·2	1st, 15th & 29th.	75·2	2nd	14·0
	Midnapore	149	29·407		29·502	29·514	17th	29·163	28th	·351	82·7	90·7		78·9		84·8		11·8	95·3	2nd & 4th	75·2	17th	20·1
	Calcutta	21	29·546	—·023	29·514	29·648	17th	29·313	28th	·335	82·2	89·2	+1·2	78·9	+0·4	84·1	+0·8	10·3	93·1	15th	74·5	2nd	18·6

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

B.

in India, etc., in July, 1912.

Wind direction. Number of winds from: Calm	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall for period 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.	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	56	57
																																I.—Burma.
1	1	1	5	5	3	7	4	4	S 21° W		5·6*			27		89		·857		7·8		28			33·68			83·50			4·02	Victoria Point.
25			2	3		1			S 50° E	S 70° W	3·2	1·3	+1·9	13	−12	97	+ 5	·853	−·012	8·6	+1·1	31	25·60	+5·40	46·70	30·99	+15·71	96·53	78·48	+18·05	5·64	Mergui.
23					3	3			S 23° W	S 61° W	1·4*	1·2	+0·2	20	+ 2	93	+ 1	·861	−·008	6·8	−1·4	28	28·00	0	39·40	48·07	− 8·67	103·92	116·23	−12·31	5·78	Tavoy.
10		1	6	7	6	1			S 45° E	S 2° E	3·1	2·8	+0·3	49	+ 6	96	+ 3	·858	−·004	9·8	+1·3	30	28·20	+1·80	43·95	45·51	− 1·56	106·72	101·92	+ 4·80	7·80	Moulmein.
8				7	13	3			S 8° E	S 45° W	2·3	3·7	−1·4	66	− 8	91	− 3	·905	−·008	9·7	+0·7	26	25·70	+0·30	21·21	20·93	+ 0·28	49·32	50·73	− 1·41	2·81	Rangoon.
19				3	6	1	2		S 4° W	S 18° W	3·3	3·3	0	30	−35	94	0	·932	+·013	8·4	−0·4	30	26·80	+3·20	32·93	24·77	+ 8·16	55·77	58·03	− 2·26	4·80	Bassein.
			1	4	8	14	4		S 26° W	S 43° W	8·6	7·7	+0·9	76	− 5	85	− 1	·931	+·034	8·8	0	26	24·00	+2·00	25·16	25·54	− 0·38	63·39	60·47	+ 2·92	3·50	Diamond Island.
6				10	12	3			S 13° E	S 31° E	1·7	3·8	−2·1	72	−14	90	− 2	·883	−·021	9·1	−0·2	25	25·00	0	17·22	17·60	− 0·38	40·15	38·93	+ 1·22	4·03	Toungoo.
2				24	2	1	2		S 36° E		4·2*			76		91		·906		7·8		27			45·23			104·25			6·30	Kyaukpyu.
5		1	4	10	10	1			S 33° E	S 38° E	3·0	2·8	+0·2	66	+11	94	0	·950	−·010	8·1	−0·2	31	27·80	+3·20	64·26	52·77	+11·49	141·19	109·45	+31·74	5·15	Akyab.
1				12	17	1			S 16° E	S 7° E	3·5*	5·0	−1·5	92	+ 2	85	0	·879	+·006	9·7	+1·6	20	15·20	+4·80	8·48	6·77	+ 1·71	20·96	17·85	+ 3·11	1·00	Thayetmyo.
1				1	29				S 1° E	S 39° E	2·9	9·0	−6·1	99	+ 7	82	− 1	·850	−·023	6·6	+0·2	8	8·80	−0·80	4·84	4·19	+ 0·65	16·79	14·74	+ 2·05	1·07	Minbu.
				10	21				S 14° E	S 28° E	4·8*	7·6	−2·8	96	+ 4	85	+ 1	·806	−·028	6·8	+1·8	4	9·60	−5·60	2·26	4·05	− 1·79	14·83	15·29	− 0·46	0·93	Yamethin.
1				18	11	1			S 26° E	S 5° E	6·0	6·6	−0·6	89	+ 8	74	− 1	·809	−·034	4·4	−3·8	5	6·20	−1·20	2·11	3·26	− 1·15	19·19	14·29	+ 4·90	0·98	Mandalay.
3			2	20	6				S 39° E		3·3			82		81		·896		9·0		5	3·60	+1·40	2·92	1·70	+ 1·22	13·55	12·27	+ 1·23	1·74	Monywa.
13		1		1	5	10	1		S 29° W		3·5*			46		88	− 2	·721	−·003	9·5	+0·6	15			12·98	12·48	+ 0·50	25·92	29·40	− 3·48	2·16	Lashio.
29		1				1			(a)	N 70° W	0·9	1·4	−0·5			93	+ 1	·914	+·018	8·8	+0·1	20	21·50	−1·50	17·98	17·28	+ 0·70	29·08	37·49	− 8·41	3·97	Bhamo.
28				1	2				S 15° E		0·9			10		93		·856		8·0		22			23·30	19·35	+ 3·95	39·26	38·38	+ 0·58	3·72	Myitkyina.
																																II.—Assam.
30				1					S 45° E		0·9			3		97		·924		7·9		26	20·40	+5·60	29·00	20·23	+ 8·77	52·08	48·42	+ 3·66	5·45	Dibrugarh.
12	6	3		1	4	3		2	N 15° W	S 11° E	2·4	2·1	+0·3	10	− 6	90	− 3	·923	−·052	8·9	0	23	19·20	+3·80	27·06	16·64	+10·42	51·29	42·61	+ 8·68	5·34	Sibsagar.
		9	12	1	4	1	4		N 86° E		1·9			46		91		·925		7·4		21	17·20	+3·80	17·16	12·67	+ 4·49	31·53	32·27	− 0·74	2·80	Tezpur.
29				1				1	(a)		1·1					87		·962		7·8		13	14·80	−1·80	13·00	10·13	+ 2·87	38·91	34·31	+ 4·60	3·80	Gauhati.
4	1	8	9	4	3	2			S 88° E	S 83° E	4·2	3·4	+0·8	53	+24	92	+ 1	·918	+·004	9·4	+1·0	20	15·80	+4·20	28·58	16·49	+12·09	71·51	55·63	+15·91	5·74	Dhubri.
25	2	2	1					1	N 23° E	N 34° E	1·7	2·0	−0·3	17	+10	90	0	·961	+·014	4·2	−5·0	24	22·50	+1·50	22·75	19·12	+ 3·64	59·61	56·61	+ 3·03	4·35	Silchar.
																																III.—Bengal.
			5	24	2				S 50° E		6·4*			96		90		·924		7·0		24			18·25			71·85			2·15	Cox's Bazar.
2			2	27					S 47° E	S 36° E	1·8	5·3	−3·5	92	+18	85	− 4	·888	−·032	6·5	−1·8	13	19·45	−6·45	11·69	21·34	− 9·75	45·16	51·04	− 5·88	2·01	Chittagong.
2			2	23	2	2			S 40° E		5·7			84		90		·931		6·7		25	22·81	+2·19	22·44	24·27	− 1·83	41·31	56·91	−15·60	2·34	Noakhali.
18			3	5	3	2			S 33° E	S 14° E	0·9	3·1	−2·2	33	−10	89	+ 1	·960	−·019	8·7	−0·2	21	20·58	+0·42	13·48	15·23	− 1·75	41·69	39·50	+ 1·19	3·75	Barisal.
			8	10	12	1			S 36° E	S 27° E	4·2	5·7	−1·5	79	+ 8	88	− 2	·963	−·018	9·0	+0·3	18	17·78	+0·22	12·33	12·46	− 0·13	32·93	34·02	− 1·09	1·62	Narayanganj
8			8	12	3				S 55° E	S 49° E	2·0	3·0	−1·0	62	− 6	89	− 2	·956	−·004	8·9	+1·0	18	19·65	−1·65	10·11	16·68	− 6·47	46·53	48·45	− 1·92	1·63	Mymensingh.
15			11	1	4				S 69° E	S 48° E	0·9	3·1	−2·2	43	−22	90	+ 1	·986	+·007	8·4	+0·2	17	15·94	+1·06	11·48	12·83	− 1·35	39·47	34·40	+ 5·07	2·48	Bogra.
5	1	1	18	3	3				S 81° E	S 86° E	2·5	2·9	−0·4	69	+12	92	+ 2	·981	+·011	7·4	−1·0	20	16·36	+3·64	28·14	14·91	+13·23	60·31	36·09	+24·22	5·15	Dinajpur.
28		1		2					S 72° E	N 88° E	1·1			7	−50	91	− 1	·943	−·006	6·3	−2·2	21	20·16	+0·84	30·11	31·59	− 1·48	61·40	66·65	− 5·26	3·44	Jalpaiguri.
		4	3	2	12	7	1	2	S -	S 27° W	10·5	11·2	−0·7	45	− 9	90	+ 2	·999	+·003	8·3	−1·0	20	16·74	+3·26	16·00	15·32	+ 0·68	26·15	30·33	− 3·88	4·10	Saugor Island
2		1	2	12	11	2		1	S 25° E		1·9			63		85		·914		7·0		16	15·95	+0·05	14·22	12·78	+ 1·44	26·76	27·57	− 0·81	2·60	Midnapore.
		2	9	7	5	8			S 35° E	S 3° W	3·5*	3·7	−0·2	56	+ 6	89	0	·980	+·013	8·5	+0·1	20	18·96	+1·04	11·48	12·89	− 1·41	25·85	30·06	− 4·21	2·30	Calcutta.

(a) Indeterminate.

* Uncorrected for scale error.

stations, the elevations of which exceed 3,200 feet.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal—*concld.*																						
5	Jessore	33	29·559	—·013	29·539	29·658	17th	29·375	28th	·283	82·4	88·5	—0·7	78·7	—0·3	83·6	—0·5	9·8	90·5	1st, 4th & 10th.	75·7	2nd & 25th.	14·8
	Burdwan	99	29·470	—·017	29·516	29·581	17th	29·289	28th	·292	82·2	89·9	—0·3	78·7	—0·7	84·3	—0·5	11·2	93·4	2nd & 4th	75·8	1st, 2nd & 5th.	17·6
	Berhampore	67	29·509	—·020	29·525	29·625	16th	29·320	27th	·305	81·4	88·6	—0·8	78·8	0	83·7	—0·4	9·8	91·6	23rd	76·2	5th & 12th	15·4
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·510	—·020	29·504	29·616	13th	29·222	28th	·394	82·8	90·6	+2·1	78·4	0	84·5	+1·1	12·2	97·4	4th	75·1	15th	22·3
	False Point	21	29·553	—·034	29·517	29·655	13th	29·244	28th	·411	82·1	87·5	—0·1	78·1	—0·5	82·8	—0·3	9·4	93·2	14th	74·6	27th & 30th	18·6
	Cuttack	80	29·498	—·023	29·519	29·603	13th	29·206	28th	·397	82·0	89·5	—0·3	78·7	+0·1	84·1	—0·1	10·8	98·9	2nd	76·2	6 days	22·7
	Puri	24	29·557		29·520	29·663	5th	29·285	28th	·378	81·9	87·0		78·8		82·9		8·2	92·1	14th	75·1	28th	17·0
	Angul	455	29·117		29·529	29·224	13th	28·869	28th	·355	80·6	88·0		77·2		82·6		10·8	100·1	2nd	75·0	5 days	25·1
	Sambalpur	486	29·082	—·038	29·515	29·185	5th & 30th.	28·859	28th	·326	79·8	86·7	—0·8	77·5	+0·2	82·1	—0·3	9·2	93·6	1st	74·1	30th	19·5
7	Chaibasa	*733*	28·808	—·030	29·486	28·916	13th	28·625	28th	·291	80·7	89·6	—0·4	77·0	—0·7	83·4	—0·5	12·6	97·1	2nd	74·8	4 days	22·3
	Ranchi	2,128	27·455	—·017	29·480	27·566	16th	27·288	28th	·278	76·7	85·4	+1·4	72·9	+1·0	79·6	+1·2	11·5	94·2	1st	70·9	1st & 13th	23·3
	Purulia	*816*	28·746		29·506	28·859	16th	28·575	28th	·284	80·4†	90·5		77·1		83·8		13·4	96·5	20th	73·1	6th	23·4
	Daltonganj	*730*	28·812		29·491	28·915	16th	28·655	27th	·260	81·7	92·0		79·0		85·5		13·0	105·1	2nd	75·5	12th	29·6
8	Purnea	124	29·449	—·011	29·536	29·562	16th	29·275	27th	·287	81·6	88·0	—2·0	78·8	+0·1	83·4	—0·9	9·2	92·6	9th & 29th	73·8	11th	18·8
	Monghyr	155	29·402		29·508	29·534	16th	29·240	27th	·294	82·4	89·2		78·7		83·9		10·5	95·2	1st	74·9	12th	20·3
	Darbhanga	165	29·400	—·017	29·518	29·528	16th	29·270	27th	·258	82·2	88·8	—0·7	78·3	—1·5	83·5	—1·1	10·5	93·6	28th	75·2	10th	18·4
	Pusa	188	29·370		29·512	29·487	16th	29·221	27th	·266	82·6	89·6		77·8		83·7		11·8	94·7	29th	74·9	13th	19·8
	Patna	183	29·362	—·028	29·502	29·485	16th	29·217	27th	·268	82·5	88·3	—1·8	79·3	—0·5	83·8	—1·1	9·0	93·5	10th	75·7	2nd	17·8
	Buxar	239	29·287		29·480	29·394	16th	29·139	27th	·255	82·4	90·3		78·7		84·5		11·6	100·5	1st	72·1	12th	28·4
	Gaya	372	29·161	—·036	29·482	29·271	16th	29·007	27th	·264	83·1	92·2	+0·8	79·6	+0·8	85·9	+0·8	12·6	100·9	1st	76·2	11th & 13th	24·7
	Naya Dumka	489	29·080	—·001	29·519	29·205	16th	28·907	27th	·298	80·8	88·4	—0·2	77·5	—0·1	82·9	—0·1	10·9	93·4	23rd	74·0	1st	19·4
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·290	—·014	29·503	29·397	16th	29·147	27th	·250	81·6	89·4	—1·7	74·7	—4·7?	82·1	—3·2?	14·7	94·1	18th & 29th.	69·8	11th	24·3
	Benares	267	29·258	—·029	29·477	29·356	16th	29·090	27th	·266	83·6	92·2	+1·0	79·4	—0·2	85·8	+0·4	12·8	104·6	2nd	75·1	12th	29·5
	Allahabad	309	29·210	—·035	29·471	29·304	17th	29·050	27th	·254	83·4	92·9	+1·3	79·0	—0·4	86·0	+0·5	13·9	106·1	2nd	74·5	10th	31·6
	Cawnpore	416	29·101	—·020	29·468	29·212	17th	28·952	27th	·260	83·8	93·5	+1·0	80·5	+0·9	87·0	+0·9	13·0	109·2	2nd	75·4	13th	33·8
	Lucknow	368	29·163	—·020	29·485	29·266	17th	29·014	27th	·252	83·6	93·0	+0·8	79·9	+0·6	86·4	+0·7	13·1	104·0	2nd	74·6	12th	29·4
	Bahraich	401	29·135	—·021	29·492	29·233	16th	28·995	27th	·238	82·5	90·2	—1·1	78·2	—0·6	84·2	—0·9	12·0	99·1	1st	74·0	2nd, 5th & 12th.	25·1
10	Jhansi	824	28·706	—·042	29·473	28·813	17th	28·555	27th	·258	84·0	93·9	+2·7	79·9	+1·1	86·9	+1·9	14·0	107·0	2nd	74·0	12th	33·0
	Agra	556	28·960	—·039	29·464	29·072	17th	28·839	27th	·233	87·1	97·6	+4·3	82·5	+2·1	90·0	+3·2	15·1	112·5	2nd	76·0	12th	36·5
	Mainpuri	516	28·998	—·029	29·464	29·107	17th	28·874	27th	·233	85·4	96·0	+3·3	81·3	+1·8	88·6	+2·5	14·7	111·3	2nd	75·1	7th	36·2
	Bareilly	568	28·960	—·019	29·481	29·066	17th	28·843	27th	·223	84·1	94·4	+2·8	79·5	+0·8	87·0	+1·3	14·9	106·3	2nd	75·0	21st	31·3
	Roorkee	899	28·649	—·004	29·499	28·768	16th	28·553	27th	·215	84·0	93·8	+1·7	79·5	+1·3	86·7	+1·5	14·3	107·5	6th	70·4	6th	37·1
	VI.—Punjab.																						
11	Delhi	718	28·810	—·012	29·477	28·913	17th	28·719	27th	·194	86·1	97·4	+3·4	82·0	+1·3	89·7	+2·3	15·4	109·5	2nd	75·3	20th	34·2
	Sirsa	662	28·845	—·012	29·459	28·953	17th	28·750	23rd	·203	86·2	98·9	—1·6	81·9	+0·1	90·4	—0·7	17·0	110·8	1st	72·5	20th	38·3

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

† Mean of 20 days.

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau.

B—*continued.*

in India, etc., in July, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.	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	56	57
																																III.—Bengal—*concld.*
8			3	10	10				S 30° E	S 21° E	4·1	3·0	+1·1	66	+16	87	− 3	·960	−·043	7·9	−0·6	18	17·52	+ 0·48	15·46	12·38	+ 3·08	37·81	32·76	+ 5·05	3·26	Jessore.
2		2	6	10	5	5		1	S 38° E	S 3° E	2·1	3·1	−1·0	53	+14	88	+ 2	·973	+·031	9·1	+0·9	22	16·10	+ 5·90	15·67	12·91	+ 2·76	26·40	28·86	− 2·46	3·78	Burdwan.
	1	3	9	11	5	2			S 58° E	S 25° E	2·9	3·3	−0·4	66	+14	89	− 3	·960	−·033	9·4	+0·6	23	15·71	+ 7·29	12·30	10·80	+ 1·50	26·15	25·37	+ 0·78	1·29	Berhampore.
																																IV.—Bihar and Orissa.
3		2	2		4	19	1		S 34° W	S 37° W	3·5	4·3	−0·8	62	+ 8	80	− 8	·890	−·080	7·3	−0·9	9	14·94	− 5·94	6·00	11·10	− 5·10	11·59	25·51	−13·92	1·32	Balasore.
	2			2	2	9	12	4	S 76° W	S 59° W	7·0	8·2	−1·2	66	− 2	85	− 1	·933	−·033	8·6	+0·2	17	14·90	+ 2·10	13·02	11·80	+ 1·22	15·73	24·57	− 8·84	2·75	False Point.
10		1	1		1	9	8	1	S 66° W	S 60° W	2·0*	2·4	−0·4	46	− 6	82	+ 1	·902	+·011	8·0	+0·5	14	16·13	− 2·13	10·21	11·64	− 1·43	19·17	25·47	− 6·30	1·80	Cuttack.
4	3			2		11	8	3	S 77° W		8·7			55		87		·942		8·3		19	11·71	+ 7·26	16·01	9·50	+ 6·51	20·60	19·26	+ 1·34	3·18	Puri.
7	1	2		2	1		10	8	N 65° W		4·5†			45		85		·881		7·5		17			15·33	9·90	+ 5·43	18·51	19·53	− 1·02	2·65	Angul.
	1	1	1		22	5			S 51° W	S 24° W	3·9	3·5	+0·4	72	+12	89	+ 3	·897	+·007	9·4	+1·2	19	19·50	− 0·50	16·12	21·37	− 5·25	19·56	33·04	−13·48	2·19	Sambalpur.
7	1	3	1		4	12	3		S 42° W	S 66° W	1·8	2·0	−0·2	40	− 4	84	+ 1	·884	−·014	8·9	+1·2	19	16·68	+ 2·32	15·77	12·24	+ 3·53	23·36	24·04	− 0·68	1·71	Chaibasa.
1		1	6	4	5	7	6	1	S 10° W	S 63° W	6·7	5·8	+0·9	37	+	87	− 1	·791	−·005	8·4	+0·4	20	19·10	+ 0·90	15·85	15·23	+ 0·62	21·41	26·65	− 5·24	4·38	Ranchi.
6		5	3	4	4	3	5	1	S 11° E		2·1			16		87†		·901†		4·6		20	17·42	+ 2·58	14·54	12·28	+ 2·26	22·93	22·44	+ 0·49	2·49	Purulia.
17		2	3	1	1	6	1		S 1° W		2·9			16		85		·916		5·9		19	16·16	+2·84	12·11	11·26	+ 0·85	14·70	17·44	− 2·74	3·04	Daltonganj.
12		7	8	4					N 82° E	S 81° E	2·7	2·6	+0·1	53	+ 4	92	+ 3	·981	0	6·6	−0·6	16	17·13	− 1·13	14·64	14·16	+ 0·48	29·31	29·68	− 0·37	3·02	Purnea.
2		2	19	7				1	S 83° E		5·9			81		89		·982		8·9		15			9·23			16·15			1·90	Monghyr.
4		1	25	1					E	S 80° E	3·3	3·5	−0·2	85	+30	88	0	·969	0	6·9	−0·2	14	14·37	−0·37	13·04	11·79	+ 1·25	20·77	22·94	− 2·17	5·83	Darbhanga.
1		6	14	9		1			S 83° E		4·1			78		89		·986		7·9		13			14·48			22·55			3·46	Pusa.
2	1		24	3			1		S 88° E	N 81° E	5·7	3·4	+2·3	82	+40	89	+ 3	·991	+·022	8·4	−0·2	16	14·16	+ 1·84	14·31	12·21	+ 2·10	18·09	21·74	− 3·65	2·55	Patna.
1		2	23	4		1			S 86° E		3·1			87		88		·966		7·5		16	14·39	+ 1·61	14·43	11·17	+ 3·26	15·51	17·16	− 1·65	3·91	Buxar.
5	3	14	1	2		3	3		N 37° E	S 2° E	2·1	2·9	−0·8	37	+27	84	0	·950	+·021	6·6	−2·4	14	15·68	− 1·68	9·17	12·79	− 3·62	11·63	21·08	− 9·45	3·65	Gaya.
19	2		3	3	2	1	1		S 52° E		1·6			14		86	− 4	·907		6·4		17	18·72	− 1·72	14·57	14·09	+ 0·48	26·99	27·46	− 0·47	3·15	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
6		10	14	1					N 75° E	N 63° E	2·4	1·7	+0·7	76	+44	88	+ 2	·948	−·003	4·6	−1·3	14	14·70	− 0·70	12·82	13·39	− 0·57	17·52	22·77	− 5·25	2·50	Gorakhpur.
5	2	5	7	8	2	1	1		S 79° E	S 7° E	3·1	3·4	−0·3	46	+36	84	− 2	·954	+·002	8·0	0	16	14·60	+ 1·40	10·75	11·00	− 0·25	12·80	16·70	− 3·90	2·15	Benares.
3		7	9	1	1	1	6	2	N 52° E	S 27° W	3·6	5·3	−1·7	27	+21	82	− 2	·938	−·003	8·7	+0·5	19	13·30	+ 5·70	10·47	11·76	− 1·29	12·16	16·94	− 4·78	2·55	Allahabad.
9		2	10	5	2	2	1		S 66° E	S 1° E	2·9	3·4	−0·5	46	+32	83	+ 1	·959	+·018	5·5	−1·9	14	12·10	+ 1·90	10·62	10·92	− 0·30	12·94	14·41	− 1·47	2·37	Cawnpore.
8		4	11	4	3	1			S 76° E	S 82° E	2·2	2·8	−0·6	53	+29	83	− 1	·967	+·026	7·1	+0·2	12	14·10	−2·10	10·16	11·85	− 1·69	13·10	17·38	− 4·28	2·12	Lucknow.
1		4	14	11	1				S 77° E	S 68° E	3·3	2·6	+0·7	86	+46	82	− 3	·898	−·059	6·0	−0·7	16	12·80	+3·20	11·02	10·82	+ 0·20	14·02	18·62	− 4·60	2·39	Bahraich.
3	1	2	5	1	3	8	7	1	S 45° W	S 72° W	4·1	3·2	+0·9	27	−20	76	− 2	·864	−·006	8·7	+2·2	18	13·10	+4·90	16·32	11·91	+ 4·41	17·85	17·13	+ 0·72	5·84	Jhansi.
2	1	6	10	3	3	3	3		S 80° E	S 24° W	5·5	4·0	+1·5	37	− 5	73	− 6	·915	−·007	5·7	−1·3	9	10·80	−1·80	7·45	9·57	− 2·12	7·96	12·56	− 4·60	2·76	Agra.
2	1	3	10	7	1	1	3	3	S 83° E	S 41° E	2·4	1·5	+0·9	37	+24	78	− 4	·928	0	4·5	−1·5	12	10·20	+1·80	9·56	7·16	+ 2·40	11·72	10·43	+ 1·29	1·70	Mainpuri.
27			4						E	S 47° E	0·8	2·4	−1·6	13	−19	85	0	·989	+·057	7·5	+0·9	9	13·45	−4·45	8·20	14·02	− 5·82	11·67	20·14	− 8·47	2·41	Bareilly.
15			1	12				3	S 49° E	S 38° E	3·0	2·1	+0·9	30	−9	75	− 7	·861	−·018	6·0	−0·4	10	11·90	−1·90	16·08	12·36	+ 3·72	16·67	18·29	− 1·62	7·49	Roorkee.
																																VI.—Punjab.
			15	6	3		6	1	S 62° E	S 22° E	4·9	3·1	+1·8	44	+22	77	+ 2	·931	+·061	6·0	−0·3	7	9·20	−2·20	6·62	8·06	− 1·44	8·65	11·79	− 3·14	2·00	Delhi.
8	7	2	5		7		1	1	N 66° E	S 16° W		5·2		17	−12	71	+ 4	·864	+·007	4·9	−1·0	8	5·00	+3·00	6·14	3·91	+ 2·23	6·53	6·17	+ 0·36	2·15	Sirsa.

stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Punjab—*concld.*																						
11	Patiala	*818*	28·706		29·475	28·834	17th	28·607	27th	·227	85·1	95·5		81·3		88·4		14·2	106·4	6th	74·2	19th	32·2
	Ambala	892	28·638	—·006	29·480	28·762	16th	28·541	24th	·228	85·0	96·9	+3·6	80·6	+1·8	88·8	+2·7	16·3	110·5	6th	74·9	21st	35·6
	Ludhiana	812	28·716	—·003	29·483	28·837	17th	28·626	24th	·211	84·3	97·3	+0·3	81·6	+1·3	89·5	+0·8	15·7	110·5	5th & 6th	71·0	10th	39·5
	Lahore	702	28·800	—·008	29·457	28·944	17th	28·704	24th	·240	88·9	100·6	0	82·7	+3·3	91·7	+1·7?	17·9	111·9	1st	76·2	17th	35·7
	Sialkot	830	28·682	—·007	29·468	28·801	17th	28·578	24th	·223	85·5	97·4	−0·2	80·9	+1·4	89·2	+0·6	16·5	110·0	1st & 5th	73·5	20th, 21st & 25th.	36·5
	Rawalpindi	1,674	27·861	—·010	29·447	27·996	17th	27·757	24th	·239	86·3	100·3	+3·0	79·2	+2·5	89·8	+2·7	21·1	117·4	1st	68·9	29th	50·5
12	Khushab	612	28·879	+·002?	29·448	29·039	17th	28·784	19th	·255	88·1	102·3	−0·3	83·4	+1·3	92·8	+0·5	18·9	114·4	1st & 3rd	70·4	6th & 13th	44·0
	Montgomery	558	28·914	—·009	29·427	29·056	17th	28·806	11th	·250	89·5	102·0	−2·7	83·9	0	93·0	−1·3	18·1	111·9	8th	72·5	20th	39·4
	Multan	420	29·032	—·028	29·403	29·157	17th	28·894	11th	·263	91·8	107·0	+3·2	86·9	+3·2	97·0	+3·2	20·1	114·3	1st & 9th	77·0	21st	37·3
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·385	—·026	29·439	28·525	17th	28·269	10th	·256	87·9	105·6	+2·7	82·0	+2·6	93·8	+2·7	23·6	119·2	1st & 2nd	72·9	20th	46·3
	D. I. Khan	590	28·876	—·036	29·422	29·046	17th	28·767	10th	·279	88·8	103·2	−0·2	83·9	+1·4	93·6	+0·6	19·3	114·4	1st	74·1	21st	40·3
	VIII.—Sind.																						
16	Jacobabad	186	29·250	—·038	29·390	29·332	17th	29·136	11th	·196	93·4	110·6	+2·8	88·0	+3·7	99·3	+3·3	22·6	119·6	1st	82·8	21st	36·8
	Hyderabad	96	29·382	—·033	29·429	29·152	1st	29·285	20th	·167	87·1	101·2	+2·3	82·8	+2·0	92·0	+2·1	18·4	105·0	23rd	77·0	31st	29·0
	Karachi	13	29·508	—·040	29·472	29·589	1st	29·398	30th	·191	84·3	89·6	+1·5	82·1	+2·6	85·8	+2·1	7·5	92·0	1st, 2nd & 7th.	78·0	31st	14·0
	IX.—Rajputana.																						
17	Bikaner	*771*	28·726	—·030	29·441	28·812	16th	28·628	24th	·184	88·2	102·2	+1·8	84·0	+1·2	93·0	+1·5	18·2	110·0	8th	78·5	20th	31·5
	Jodhpur	780	28·751	—·024	29·477	28·841	14th	28·653	27th	·188	83·5	96·6	−2·6?	80·3	—0·8	88·5	−1·7?	16·3	105·5	8th & 9th	75·3	31st	30·2
18	Jaipur	1,431	28·123	—·027	29·479	28·219	13th	28·012	25th	·207	83·4	94·5	+1·0	78·3	+1·1	86·9	+1·1	15·2	106·7	7th	73·1	20th	33·6
	Ajmer	1,611	27·949	—·033	29·479	28·036	14th	27·841	27th	·195	80·7	89·0†	+1·1†	79·7	+2·4?	81·1†	+0·7?	9·3	97·4	4th	74·7	13th	22·7
	Kotah	819?	28·692	—·037	29·455	28·798	14th	28·560	28th	·238	83·9	94·8	—0·3	79·5	—1·5	87·1	—0·9	15·3	112·6	5th	74·6	12th, 13th & 21st.	38·0
	X.—Bombay.																						
19	Deesa	466	29·105	—·031	29·521	29·217	13th	28·966	29th	·251	81·7	92·9	+1·2	78·3	+0·7	85·6	+0·9	14·6	104·3	9th	72·4	13th	31·9
	Bhuj	395	29·160	—·037	29·504	29·265	13th	29·014	30th	·251	81·6	90·7	+0·7	78·6	+0·5	84·7	+0·6	12·1	100·0	9th	72·5	29th	27·5
	Jamnagar	61	29·512		29·518	29·609	14th	29·379	30th	·230	83·1	88·3		78·1		83·2		10·2	98·5	1st	75·2	23rd & 31st.	23·3
	Dwarka	37?	29·542	—·034	29·525	29·624	1st & 14th.	29·397	30th	·227	82·5	86·4	—0·4	80·6	0	83·5	—0·2	5·8	91·3	11th	75·7	30th	15·6
	Rajkot	429	29·162	—·036	29·537	29·258	14th	29·028	28th	·230	80·8	88·6	—2·0	76·4	+0·6	82·5	—0·7	12·2	98·6	5th	73·3	31st	25·3
	Veraval	*18*	29·593	—·045	29·564	29·683	2nd	29·461	28th	·222	81·6	84·0	+0·3	79·6	+0·4	81·8	+0·3	4·4	86·6	1st & 2nd	74·3	29th & 30th.	12·3
	Bhavnagar Para	55	29·555	—·067?	29·555	29·660	3rd	29·408	28th	·252	81·4	89·7	—3·6	78·1	—0·7	83·9	—2·1	11·6	98·0	9th	75·0	27th	23·0
	Surat	39	29·695	—·038	29·577	29·692	3rd	29·438	29th	·255	80·6	86·2	—1·1	76·6	—0·7	81·4	—0·9	9·6	93·9	9th	73·6	30th	20·3
	Ahmadabad	163	29·420	—·054	29·531	29·521	13th	29·272	29th	·249	81·2	91·0	—0·4	78·3	+0·1	84·6	—0·1	12·7	103·6	9th	74·7	26th & 27th.	28·9
25	Bombay	37	29·650	—·052	29·627	29·742	3rd	29·528	28th	·214	81·3	85·3	+0·9	78·7	+1·2	82·0	+1·1	6·6	89·0	2nd & 3rd	74·5	30th	14·5
	Ratnagiri	110	29·622	—·045	29·670	29·704	3rd	29·528	28th	·176	80·4	84·6	+0·7	76·5	+0·8	80·6	+0·7	8·1	87·3	2nd	73·4	19th	13·9
	Goa	199	?	?	?	?	?	?	?	?	78·6	82·0	—0·4	75·8	—0·2	78·9	—0·2	6·2	84·1	8 days	69·1	4th	15·0
	Marmagao	*60*	29·711	—·040	29·706	29·801	3rd	29·632	28th	·169	80·0	83·4	—0·3	75·7	—0·5	79·5	—0·4	7·7	87·0	1st	72·7	17th	14·3
	Karwar	44	29·751	—·035	29·730	29·841	9th	29·674	28th	·157	78·0	82·6	—0·4	74·8	—0·3	78·7	—0·3	7·8	85·2	1st	72·0	4 days	13·2

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

† Mean of 16 days.

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.

B—*continued.*

in India, etc., in July, 1912—continued.

Wind direction. Number of winds from Calm.	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 percentages.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.	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	56	57
																																VI.—Punjab—*concld.*
	1	3	20		2		3	2	S 43° E		5·5			61		73		·859		5·2		7			7·68	6·43	+1·25	9·33	9·26	+0·07	3·55	Patiala.
4		8	14				5		S 52° E	S 62° E	3·9	1·1	+2·8	56	+33	73	−13	·849	−·088	5·8	+0·1	10	9·80	+0·20	7·70	7·88	−0·18	8·83	12·16	−3·33	2·45	Ambala.
13	1	2		10	1		3	1	S 43° E	S 34° E	1·0	1·8	−0·8	27	−9	72	−4	·818	−·075	4·7	−1·7	7	7·60	−0·60	10·43	8·32	+2·11	11·17	11·50	−0·33	2·96	Ludhiana.
2		1	5	14	4	2	2	1	S 40° E	S 42° E	2·7	2·5	+0·2	59	+20	69	−2	·869	−·008	4·8	+0·5	5	3·30	+1·70	1·65	5·49	−3·84	2·39	8·00	−5·61	0·48	Lahore.
5		5	10	5	1	4	1		S 74° E	S 65° E	1·6	2·0	−0·4	46	−1	74	0	·882	−·003	4·5	+0·6	5	9·00	−4·00	5·30	7·88	−2·58	6·10	11·53	−5·43	1·66	Sialkot.
7	5	3	2	4	6	1	2	1	S 63° E	S 82° E	2·1	1·8	+0·3	10	−15	67	−5	·809	+·001	6·5	+2·3	6	9·10	−3·10	6·23	8·06	−1·83	8·05	11·58	−3·53	2·63	Rawalpindi.
1		3	18	1	7		1		S 74° E	N 62° E	5·5	5·5	0	69	+15	66	+1	·863	+·016	4·3	+1·6	6	3·50	+2·50	2·96	3·73	−0·82	4·67	5·96	−1·29	0·87	Khushab.
	1	7	12	5	6				S 36° E	S 15° E	8·3	7·0	+1·3	69	+30	59	−1	·795	−·043	3·0	+0·1	2	3·20	−1·20	2·74	2·18	+0·56	3·27	3·62	−0·35	1·88	Montgomery.
11	5	1		4	8	2			S 18° E	S 89° W	1·1	2·3	−1·2	23	−11	62	0	·900	+·050	1·7	−0·7	1	2·50	−1·50	1·44	2·04	−0·60	2·52	2·92	−0·40	1·37	Multan.
																																VII.—North-West Frontier Province.
8	8	5	1		1	1	4	3	N 11° W	N 9° W	2·2	3·0	−0·8	40	−2	63	0	·824	+·026	4·3	+1·1	1	2·10	−1·10	0·28	1·42	−1·14	1·68	2·67	−0·99	0·23	Peshawar.
2	1	7	1	8	2				S 82° E	N 69° E	1·4	1·8	−0·4	37	+5	77	+8	·1·038	+·126	3·3	+0·9	2	3·10	−1·10	4·35	2·27	+2·08	4·64	3·36	+1·28	4·05	D. I. Khan.
																																VIII.—Sind.
16		2	1	7	3	1		1	S 43° E	S 49° E	3·5	4·1	−0·6	30	−25	71	+6	·1·108	+·205	2·5	−0·1	1	1·60	−0·60	0·37	1·01	−0·64	0·44	1·31	−0·87	0·22	Jacobabad.
	1	1			15	14			S 21° W	S 47° W	8·3	12·2	−3·9	82	+1	69	+2	·883	+·068	5·9	−0·1	5	3·30	+1·70	1·81	2·92	−1·11	1·81	3·62	−1·81	0·88	Hyderabad.
		1			1	11	18		S 72° W	S 76° W	12·6	12·6	0	86	+2	82	−2	·975	+·018	6·5	−0·8	3	3·00	0	2·77	3·12	−0·35	2·77	4·16	−1·39	1·87	Karachi.
																																IX.—Rajputana.
6		2	3		5	9	6		S 39° W	S 29° W	6·0	6·1	−0·1	43	−21	66	0	·871	+·027	3·7	−0·7	5	4·90	+0·10	1·48	3·30	−1·82	2·61	5·37	−2·76	0·44	Bikaner.
3		2	2		3	16	4	1	S 46° W		4·2			59		74	+7	·842		7·0		6	5·30	+0·70	4·79	4·21	+0·58	6·94	5·69	+1·25	1·79	Jodhpur.
3	1	5	6	2		1	11	2	N 31° W	S 73° W	4·8*	3·9	+0·9	17	−25	77	+1	·867	+·029	6·2	−0·6	11	10·90	+0·10	13·74	7·87	+5·87	14·77	10·45	+4·32	4·45	Jaipur.
3	1	5	1			5	14	2	N 80° W	S 87° W	6·7	5·8	+0·9	46	−22	82	+2	·849	+·011	5·7	+0·1	11	9·50	+1·50	5·57	6·98	−1·41	6·95	9·76	−2·81	1·81	Ajmer.
10	2	2		1		6	6	4	N 83° W		1·8			37		75	+5	·852		5·9		16	10·30	+5·10	12·92	10·15	+2·77	14·09	13·28	+0·81	2·58	Kotah.
																																X.—Bombay.
2					8	13	5	3	S 47° W	S 61° W	9·6	11·2	−1·6	72	+7	83	0	·896	+·030	8·3	−0·2	15	10·73	+4·27	8·57	9·61	−1·04	10·42	11·72	−1·30	1·82	Deesa.
	1				9	15	6		S 87° W	S 78° W	10·4	13·3	−2·9	82	+4	83	+3	·879	+·002	8·8	+1·1	12	6·20	+5·80	17·34	6·65	+10·69	18·32	8·59	+9·73	4·58	Bhuj.
1					1	22	5	2	S 55° W		12·9			86		84		·943		7·1		19			23·53	7·89	+15·64	24·73	9·81	+14·92	4·60	Jamnagar.
					1	18	11	1	S 62° W		13·7			86		88	+4	·979		8·1		13			13·60	6·69	+11·91	19·36	9·09	+10·27	5·61	Dwarka.
					2	15	13	1	S 64° W	S 76° W	11·3	10·4	+0·9	86	+5	87	+4	·899	+·026	9·3	+1·3	20	11·20	+8·80	13·85	11·70	+2·15	22·25	16·03	+6·22	2·77	Rajkot.
2						10	19		S 75° W	S 75° W	7·6	9·8	−2·2	89	+6	88	0	·942	+·010	8·6	0	11	10·90	+0·10	8·78	7·70	+1·08	20·32	11·23	+9·09	4·48	Veraval.
2					2	16	8	3	S 63° W	S 48° W	3·1	10·7	−7·6	78	+1	87	+7	·925	+·003	8·3	+0·7	18	10·20	+7·80	26·59	6·49	+20·10	28·80	10·12	+18·68	5·77	Bhavnagar
	1				4	14	10	2	S 61° W	S 56° W	5·5	9·5	−4·0	76	−1	91	+5	·961	+·048	8·4	+0·4	27	16·10	+10·90	36·81	17·54	+19·27	43·85	25·58	+18·27	6·05	Para. Surat.
4				1	1	23		2	S 46° W	S 55° W	4·4	4·8	−0·4	76	+5	87	+4	·931	+·041	7·3	−1·5	17	13·50	+3·50	18·05	12·18	+5·87	20·51	16·63	+3·85	5·71	Ahmadabad.
						12	18	1	S 74° W	S 70° W	11·4*	14·2	−2·8	92	+18	87	+1	·923	+·012	9·1	+0·1	21	23·00	−2·00	25·40	25·17	+0·23	36·62	44·36	−7·74	6·47	Bombay.
2	1			1	2	18	6	1	S 54° W	S 65° W	10·5	8·5	+2·0	76	+8	87	−1	·894	+·003	7·9	−0·8	25	25·90	−0·90	35·45	34·41	+1·04	69·61	64·68	+4·96	3·93	Ratnagiri.
	1	1	4			12	11	2	S 72° W	S 76° W	10·6	7·3	+3·3	53	−21	91	+3	·876	−·011	10·0	+0·9	29			39·71	33·39	+6·32	86·97	66·26	+20·71	4·20	Goa.
2			1			5	22	1	S 81° W	N 63° W	10·4*	9·6	+0·5	82	+2	91	+2	·933	+·027	9·2	+1·6	28			35·93	32·10	+3·83	73·75	63·65	+10·10	4·16	Marmagao.
10					2	18		1	S 44° W	S 75° W	4·6	4·2	+0·4	62	−5	88	+2	·880	+·038	7·7	−0·3	31	27·40	+3·60	43·06	38·98	+4·08	75·65	80·31	−4·66	4·11	Kazwar.

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay *—concld.*																						
26	Malegaon	1,436	28·219	—·035	29·578	28·322	4th	28·068	29th	·254	79·6	89·5	+2·1	74·2	+0·9	81·9	+1·5	15·3	98·4	9th	70·1	31st	28·3
	Ahmadnagar	2,154	27·554	—·026	29·602	27·650	4th	27·417	28th & 29th.	·233	76·7	86·1	+0·9	71·2	+0·7	78·6	+0·3	14·9	93·6	9th	68·0	31st	25·6
	Poona	1,846	27·849	—·052	29·616	27·940	4th	27·717	29th	·223	75·5	84·0	+1·7	72·2	+1·4	78·1	+1·5	11·8	92·0	9th	69·3	30th	22·7
	Sholapur	1,590	28·120	—·041	29·636	28·214	4th	28·005	28th	·209	77·0	89·2	—0·3	72·4	+0·7	80·8	+0·2	16·8	101·8	1st	67·6	22nd	34·2
	Bijapur	*1,948*	27·789	—·032	29·649	27·869	3rd	27·696	28th	·173	75·5	85·8	—0·4	71·5	+0·7	78·7	+0·1	14·3	93·2	8th	69·3	29th	23·9
	Belgaum	2,539	27·229	—·025	29·669	27·310	4th	27·115	28th	·155	70·9	75·2	—0·5	67·1	+0·2	71·1	—0·1	8·1	80·2	3rd	63·0	15th	17·3
	XI.—Central India.																						
20	Neemuch	1,624	27·954	—·039	29·501	28·060	4th	27·804	28th	·256	78·1	89·1	+1·7	74·7	+0·6	81·9	+1·1	14·4	100·4	8th	67·5	27th	32·9
	Indore	1,823	27·790	—·029	29·534	27·894	4th	27·603	29th	·291	77·1	86·5	+2·0	73·4	+0·8	80·0	+1·4	13·1	97·1	8th	69·6	13th	27·5
21	Nowgong	754	28·788	—·026	29·487	28·885	17th	28·634	27th	·251	83·2	92·5	+2·6	80·1	+2·0	86·3	+2·3	12·4	105·5	2nd	75·0	12th, 13th & 15th.	30·5
	Sutna	1,041	28·487	—·037	29·470	28·585	17th	28·317	27th	·268	80·4	89·7	+2·3	77·4	+0·4	83·5	+1·3	12·3	105·3	2nd	73·2	20th	32·1
	XII.—Central Provinces.																						
22	Buldana†	2,132	27·526		29·563	27·629	3rd	27·353	29th	·276	75·4	84·8		71·7		78·3		13·1	94·3	4th	68·6	30th	25·7
	Akola	945	28·705	—·032	29·573	28·808	4th	28·537	29th	·271	79·1	90·7	+1·7	75·1	+0·8	82·9	+1·3	15·6	101·7	7th	72·1	26th, 27th & 31st.	29·6
	Amraoti	1,215	28·408	—·033	29·534	28·505	4th	28·220	29th	·285	77·8	88·4	+1·1	74·3	+0·8	81·3	+0·9	14·1	98·8	5th	69·3	11th	29·5
23	Khandwa	1,044	28·565	—·037	29·552	28·679	4th	28·369	29th	·310	79·5	90·5	+2·9	76·6	+1·3	83·5	+2·1	13·9	100·2	5th	72·6	25th	27·6
	Hoshangabad	1,006	28·594	—·028	29·543	28·703	13th	28·399	29th	·304	79·1	90·0	+3·3	75·8	+0·6	82·9	+1·9	14·2	101·1	5th, 6th & 7th.	72·4	4 days	28·7
	Saugor	1,807	27·763	—·039	29·487	27·861	13th	27·583	29th	·278	78·0	88·1	+2·9	74·9	+1·0	81·5	+1·9	13·2	99·3	6th	71·1	21st	28·2
	Jubbulpore	1,327	28·224	—·047	29·485	28·324	2nd	28·022	29th	·302	78·5	88·8	+2·9	76·0	+1·4	82·4	+2·1	12·8	99·3	4th	72·8	7th & 26th	26·5
	Seoni	2,033	27·579	—·028	29·520	27·683	2nd	27·367	29th	·316	76·7	85·2	+1·4	72·1	—0·5	78·7	+0·5	13·1	97·1	6th	69·5	5 days	27·6
	Nagpur	1,017	28·586	—·030	29·544	28·698	2nd	28·384	29th	·314	79·0	89·4	+1·6	76·2	+1·2	82·8	+1·4	13·1	100·6	5th	71·8	6th & 7th	28·8
24	Pendra	2,123†	27·541		29·468	27·641	3rd	27·387	28th	·254	76·7	85·6		73·3		79·5		12·3	95·3	2nd	70·7	5th	24·6
	Raipur	970	28·622	—·020	29·534	28·724	5th	28·433	23th	·291	78·1	86·5	0	75·3	+0·4	80·9	+0·2	11·2	94·7	4th	71·6	5th	23·1
	Chanda	*634*	28·984	—·039	29·562	29·108	5th	28·827	28th	·281	79·2	88·1	—0·5	75·5	—0·4	81·8	—0·5	12·6	97·0	1st	72·0	4th, 26th & 30th.	25·0
	Jagdalpur	1,813	27·831		29·564	27·942	5th	27·651	28th	·291	75·1	82·0		71·9		77·0		10·1	93·2	1st	68·1	28th & 29th.	25·1
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	27·786	—·040	29·610	27·885	3rd	27·644	29th	·241	75·2	85·8	—1·1	71·3	+0·7	78·6	—0·2	14·5	93·9	4th	66·7	31st	27·2
	Nizamabad	1,248	28·414		29·600	28·514	3rd	28·277	28th	·237	76·5	86·8	—1·3	73·6	—0·3	80·2	—0·8	13·2	96·4	15th	69·2	29th	27·2
	Bidar	*2,165*									74·1	83·5		70·3		76·9		13·2	91·5	14th	67·4	29th	24·1
28	Gulbarga	1,503	28·216	—·033	29·659	28·299	4th	28·110	28th	·189	75·0	88·2	—1·5	72·3	+0·5	80·3	—0·5	16·0	96·0	14th	69·3	29th	26·7
	Raichur	*1,311*	28·427	—·027	29·671	28·509	4th	28·320	28th	·189	77·3	88·9	—1·2	73·0	—0·1	81·0	—0·7	15·9	95·5	14th	69·1	16th	26·4
	Hyderabad (Deccan).	1,690	28·010	—·032	29·623	28·095	5th	27·876	28th	·219	75·8	86·6	—0·5	73·3	+1·6	80·0	+0·5	13·3	94·8	14th	70·2	16th & 29th.	24·6
	Hanamkonda	877	28·791	—·020	29·606	28·886	3rd	28·662	28th	·224	79·5	87·6	—1·6	76·0	—0·1	81·8	—0·9	11·6	97·0	1st	71·2	29th	25·8
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·395	—·027	29·697	27·463	4th & 5th.	27·295	28th	·168	72·8	81·4	—0·5	69·2	+0·8	75·3	+0·1	12·2	89·1	3rd	67·8	22nd	21·3
	Hassan	3,149	26·724	—·016	29·738	26·797	4th	26·651	28th	·146	69·4	77·5	+0·6	65·7	+0·7	71·6	+0·7	11·8	82·8	3rd	63·9	23rd	19·9
	Bangalore	3,021	26·840	—·022	29·730	26·906	4th	26·763	28th	·143	69·4	81·4	—0·5	66·0	+0·2	73·7	—0·1	15·4	89·8	2nd	63·3	31st	26·5
	Mysore	2,518	27·335	—·030	29·746	27·404	4th	27·267	28th	·137	71·9	81·1	—1·6	67·2	+0·3	74·2	—0·7	13·9	88·5	2nd	65·5	17th & 31st.	23·0

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

† Mean of 30 days.

NOTE.—The barometric readings are not reduced to sea-level, in the

B—*continued.*

in India, etc., in July, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.	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	56	57
																																X.—Bombay—*concld.*
				1		15	13	1	S 65° W	S 75° W	11·8	10·6	+1·2	86	0	77	−1	·778	+·023	6·3	−1·4	8	7·30	+0·70	4·04	4·95	−0·91	7·29	10·26	−2·97	1·55	Malegaon.
						15	14	1	S 68° W	S 71° W	6·9	15·1	−8·2	92	+17	74	−8	·673	−·043	6·0	−0·9	4	6·40	−2·40	2·22	3·39	−1·17	4·60	9·11	−4·51	0·70	Ahmadnagar
10						11	10		S 67° W	S 76° W	8·1	12·3	−4·2	66	−20	80	−2	·699	−·010	6·2	−2·6	10	12·50	−2·50	8·80	7·43	+1·37	10·86	13·12	−2·26	3·15	Poona.
						16	13	2	S 69° W	S 69° W	14·5	10·5	+4·0	92	+8	80	+8	·734	+·053	8·8	+0·7	11	7·60	+3·40	4·52	4·28	+0·24	7·37	10·01	−2·64	1·08	Sholapur.
					4	20	7		S 49° W	S 74° W	12·4	7·4	+5·0	89	+4	80	0	·704	+·006	8·4	+0·3	10	5·10	+4·90	2·50	2·00	+0·50	5·16	6·53	−1·37	0·51	Bijapur.
						15	16		S 68° W	S 77° W	19·1	19·3	+0·1	96	+9	92	−1	·698	+·016	9·6	+0·3	23	21·80	+1·20	40·86	15·97	+24·89	46·90	26·80	+20·10	7·00	Belgaum.
																																XI.—Central India.
1	3		2		1	7	15	2	S 85° W	S 71° W	10·1	8·9	+1·2	62	−18	86	+4	·811	+·011	8·4	+1·6	13	10·10	+2·90	9·20	8·87	+0·33	11·16	13·24	−2·08	2·07	Neemuch.
7						1	16	7	N 79° W	S 81° W	5·8	4·9	+0·9	72	−3	84	−3	·776	−·006	8·9	+0·2	17	12·50	+4·50	13·63	9·84	+3·79	16·41	15·95	+0·46	2·22	Indore.
5	1		4		3		18		S 82° W	S 84° W	2·7	3·1	−0·4	46	−12	79	−4	·875	−·010	7·6	+0·6	14	14·80	−0·80	23·35	13·69	+9·66	24·39	20·45	+3·94	5·27	Nowgong.
15			2	1		5	7	1	S 67° W	S 74° W	2·6	6·7	−4·1	30	−15	85	+2	·873	+·015	7·8	+0·7	20	15·00	+5·00	19·52	13·93	+5·59	21·07	20·13	+0·94	3·07	Sutna.
																																XII.—Central Provinces.
					1	12	15	2	S 72° W		6·2*	6·8	−0·6	87		80		·698		7·8		16			10·96	9·02	+1·94	13·31	15·97	−2·66	2·45	Buldana
						7	15	9	N 87° W	N 88° W	7·0	6·6	+0·4	86	+4	78	−1	·767	−·015	7·6	−0·3	13	12·30	+0·70	5·91	10·03	−4·12	12·09	15·52	−3·43	1·12	Akola.
1						2	16	12	N 75° W	S 88° W	10·5	6·6	+3·9	83	+6	84	−2	·781	−·013	7·6	−0·2	11	12·30	−1·30	7·57	9·47	−1·90	10·92	16·58	−5·66	2·25	Amraoti.
						9	16	4	S 83° W	W	8·0	6·9	+1·1	89	+3	79	−2	·794	−·008	8·6	+1·1	11	11·10	−0·10	6·84	8·93	−2·09	7·74	14·44	−6·70	1·41	Khandwa.
1					1	15	10	4	S 70° W	S 54° W	5·1	3·5	+1·6	79	+4	83	−5	·815	−·027	8·3	−0·1	18	16·10	+1·90	19·72	15·75	+3·97	20·75	22·17	−1·42	7·00	Hoshangabad
		3			1	3	19	5	N 83° W	S 80° W	8·0	4·7	+3·3	76	+5	84	−3	·786	−·020	8·1	+0·9	17	16·50	+0·50	12·74	14·56	−1·82	13·62	21·95	−8·33	3·30	Saugor.
4		1		1	4	7	11	3	S 68° W	S 74° W	2·7	3·4	−0·7	59	−6	83	−4	·802	−·026	8·4	+0·3	16	18·40	−2·40	13·45	18·44	−4·99	15·01	26·62	−11·61	2·20	Jubbulpore.
1		1	1		3	8	13	4	S 75° W	S 76° W	5·1	4·5	+0·6	66	+1	81	−6	·734	−·055	8·5	+0·3	16	18·60	−2·60	18·10	15·87	+2·23	19·00	25·43	−6·43	2·90	Seoni.
1		1			2	6	13	8	W	S 76° W	5·5	6·4	−0·9	71	+3	82	−1	·805	−·020	9·1	+0·7	17	15·80	+1·20	20·52	14·38	+6·14	21·59	23·84	−2·25	4·28	Nagpur.
6	2	1	1	3	8	6	2	2	S 21° W		4·4			37		88		·806		7·2		20			13·74	14·52	−0·78	15·95	23·62	−7·67	2·19	Pendra.
			1		3	18	8	1	S 54° W	S 49° W	6·3	8·1	−1·8	82	+17	88	+2	·840	−·001	7·8	−0·8	18	15·80	+2·20	14·41	14·95	−0·54	15·66	24·26	−8·60	2·25	Raipur.
2				1		11	16	1	S 72° W	S 68° W	6·7	4·4	+2·3	82	+4	82	+4	·820	−·024	8·5	+0·5	16	16·80	−0·80	19·95	17·14	+2·81	22·72	25·01	−2·29	4·80	Chanda.
					6	5	20		S 68° W					79		89		·772		9·4		23			18·13			22·10			2·00	Jagdalpur.
																																XIII.—Hyderabad.
1						10	14	6	S 84° W		14·1			82		85	+4	·736		8·9		14	11·60	+2·40	5·87	6·66	−0·79	10·80	12·52	−1·72	1·03	Aurangabad.
8						19	3	1	S 54° W		6·4			69		81	+1	·739		6·6		19	15·70	+3·30	13·57	10·26	+3·31	17·02	15·44	+1·58	2·28	Nizamabad.
						16	10	5	S 72° W		8·4			84		85		·729		9·4		18	12·60	+5·40	12·68	8·03	+4·65	14·59	13·79	+0·80	2·25	Bidar.
						15	14	2	S 71° W	S 84° W	9·5	11·5	−2·0	89	+8	80	+1	·694	−·024	6·9	−1·3	19	9·10	+9·90	9·65	6·21	+3·44	11·41	12·53	−1·12	1·49	Gulbarga.
						15	15	1	S 70° W	S 50° W	11·1	10·9	+0·2	92	+23	77	+2	·721	+·008	8·1	+1·5	10	9·20	+0·80	3·87	5·25	−1·38	5·33	9·70	−4·37	1·30	Raichur.
1							30		W	N 85° W	5·6	7·2	−1·6	97	+5	80	+2	·701	−·007	9·2	+1·7	12			6·51	5·90	+0·61	8·63	11·16	−2·53	1·40	Hyderabad (Deccan).
1					3	7	18	2	S 75° W		6·7			82		75	+3	·746		9·0		18	12·50	+5·50	9·55	9·50	+0·05	10·70	15·89	−5·19	1·37	Hanamkonda
																																XIV.—Mysore.
						14	15	2	S 72° W	S 72° W	7·1	8·5	−1·4	89	−4	82	0	·662	+·003	7·9	−1·4	9	8·60	+0·40	4·31	3·20	+1·11	10·92	9·58	+1·34	0·77	Chitaldrug.
						12	16	3	S 77° W	S 87° W	8·6	3·7	+4·9	90	+1	87	+2	·622	−·001	9·1	+0·6	14	12·60	+1·40	8·58	5·27	+3·31	12·37	14·52	−2·15	1·75	Hassan.
						16	14	1	S 68° W	S 66° W	8·0*	7·0	+1·0	92	+2	87	+3	·627	+·008	9·2	+1·0	11	8·20	+2·80	4·15	4·17	−0·02	9·37	11·38	−2·01	0·95	Bangalore.
						19	11	1	S 63° W	S 67° W	9·9	10·5	−0·6	89	−1	84	+2	·652	+·020	8·7	+0·2	7	7·30	−0·30	2·32	2·52	−0·20	10·40	10·48	−0·08	0·50	Mysore.

case of hill or plateau stations, the elevations of which exceed 3,000 feet.

* Mean of 29 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation of bar-cisterns 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras.																						
30	Mangalore	65	29·771	—·036	29·768	29·847	13th	29·697	10th	·150	77·7	83·6	—0·2	74·1	+1·4	78·9	+0·6	9·5	87·3	1st & 2nd	70·9	13th, & 14th	16·4
	Calicut	27	29·830	—·035	29·785	29·893	4th	29·769	10th	·124	76·5	80·9	—1·6	74·4	+0·5	77·7	—0·5	6·5	85·3	31st	72·1	22nd. 13th, 23rd & 24th.	13·2
	Cochin	9	29·874	—·022	29·810	29·937	30th	29·812	10th	·125	78·1	83·7	+0·2	74·3	+0·2	79·0	+0·2	9·4	86·7	2nd & 6th	71·7	12th &	15·0
	Trivandrum	198	29·681	—·013	29·810	29·765	30th	29·628	10th	·137	77·8	82·9	+0·8	75·2	+2·2	79·1	+1·5	7·7	85·5	14th	72·5	13th, 9th	13·0
31	Pamban	37	29·769	—·028	29·733	29·863	30th	29·705	8th	·158	81·0	90·8	+1·7	79·4	—0·1	85·1	+0·8	11·4	92·2	6 days	77·0	28th &	15·2
	Madura	447	29·362	—·012	29·737	29·431	30th	29·293	8th	·138	84·5	97·0	—0·2	78·7	+2·3	87·9	+1·1	18·3	102·0	2nd &	73·1	30th. 31st	28·9
	Pudukkottai	318	29·481		29·727	29·531	30th	29·416	9th	·115	84·4	98·8		79·0		88·9		19·8	102·1	5th. 4th	75·2	13th	26·9
	Negapatam	31	29·758	—·028	29·718	29·839	30th	29·711	28th	·128	84·8	97·1†	+1·3†	79·6†	+1·5†	88·4†	+1·4†	17·5	102·5	2nd &	77·7	30th	24·8
	Trichinopoly	255	29·546	—·023	29·732	29·626	30th	29·477	8th	·149	83·9	97·8	+0·3	79·2	+1·3	88·5	+0·8	18·6	101·6	5th. 11th	75·3	13th	26·3
	Coimbatore	1,341	28·459	—·039	29·730	28·534	30th	28·394	8th	·140	76·0	86·5	—1·5	70·9	+0·2	78·7	—0·7	15·6	93·0	5th	68·8	13th	24·2
	Salem	940	28·895	—·021	29·765	28·967	30th	28·843	10th	·124	79·6	95·2	+2·1	74·8	+1·8	85·0	+1·9	20·4	100·0	5th	72·8	4 days	27·2
	Cuddalore	37	29·734	—·026	29·701	29·824	30th	29·674	8th	·150	84·3	96·1	+0·2	79·9	+2·2	88·0	+1·2	16·2	100·8	4 days	75·7	14th	25·1
	Vellore	707	29·050		29·686	29·124	30th	28·975	28th	·149	82·9	95·2		78·2		86·7		17·0	102·2	3rd	72·0	14th	30·2
	Madras	22	29·728	—·038	29·681	29·815	30th	29·658	28th	·157	84·0	96·7	+1·0	80·0	+1·3	88·3	+1·1	16·7	103·0	31st	75·0	20th	28·0
32	Cuddapah	433	29·316	—·030	29·684	29·381	5th	29·212	28th	·169	82·0	95·1	—0·2	79·2	+1·2	87·1	+0·5	15·9	101·2	11th	74·6	1st & 16th.	26·6
	Bellary	1,475	28·266	—·042	29·665	28·339	4th & 5th.	28·166	28th	·173	78·7	90·5	—0·4	75·4	+0·8	82·9	+0·2	15·1	98·0	3rd & 12th.	71·8	15th	26·2
	Kurnool	923	28·798	—·044	29·657	28·879	5th	28·684	23th	·195	78·4	91·0	—0·4	75·2	+0·5	83·1	+0·1	15·8	96·7	12th & 14th.	70·6	16th	26·1
33	Nellore	66	29·651	—·028	29·653	29·739	30th	29·562	28th	·177	84·2	95·3	—2·0	78·8	—0·8	87·1	—1·4	16·5	103·6	1st	73·6	16th	30·0
	Masulipatam	15	29·679	—·023	29·629	29·769	30th	29·554	28th	·215	80·9	91·9	—0·8	77·2	—0·9	84·6	0·9	14·7	102·3	1st	72·7	16th	29·6
	Cocanada	26	29·644	—·013	29·607	29·734	30th	29·507	28th	·227	80·3	85·3	—2·4	77·4	—1·9	83·4	—2·1	11·9	102·2	1st	74·1	1st	28·1
	Waltair (Vizagapatam).	*226*	29·409	—·020	29·576	29·495	5th	29·216	28th	·279	79·8	87·5		77·2		82·4		10·3	95·6	5th	73·9	15th & 28th.	21·7
	Calingapatam	19	29·592		29·549	29·687	30th	29·382	28th	·305	81·4	89·7		78·8		84·3		10·9	98·3	5th	75·8	28th	22·5
	Gopalpur	72	29·558	—·017	29·532	29·656	30th	29·331	28th	·325	81·6	87·9	+0·5	79·2	0	83·6	+0·3	8·7	94·2	2nd	76·0	7th & 29th.	18·2
	Bay Islands.																						
1	P. V. Fraser ‡	8	29·593§		29·519§	29·680	13th & 17th.	29·285	28th	·395	82·9												
	Port Blair	58	29·740	—·032	29·728	29·793	2nd	29·653	28th	·140	80·5	84·7	—0·7	77·0	—0·4	80·8	—0·5	7·7	88·2	6th	71·5	28th	16·7
	Slipper Island	90	29·670		29·694	29·729	4th & 5th.	29·548	27th	·181	81·2	85·0		76·9		81·0		8·1	87·1	15th	72·6	30th	14·5
	Kashmir.																						
13	Muzaffarabad	2,475	27·181		29·540	27·276	29th	27·038	10th	·238	80·3	98·0		74·0		86·0		24·0	113·5	9th	65·3	5th	48·2
	Srinagar	5,204	24·653	—·014	24·624	24·792	5th	24·513	11th	·279	73·5	88·9	+4·0	66·6	+2·0	77·8	+3·0	22·3	96·1	12th	58·1	1st	38·0
	Gulmarg	*8,500*	21·762	—·002	21·730	21·851	30th	21·654	20th	·197	65·2	73·6	+5·2	53·0	+2·2	63·2	+4·1	20·6	84·2	12th	44·8	6th	39·4
	Dras	*10,050*	20·716	+·007	20·684	20·793	5th	20·563	20th	·230	62·2	76·9		47·9		62·4		29·0	83·5	11th, 30th & 31st.	40·0	22nd	43·5
	Leh	*11,503*	19·656	+·013	19·624	19·759	8th	19·498	20th	·261	61·9	78·7	+0·5	50·4	—0·2	64·6	+0·1	28·3	84·9	16th & 31st.	43·5	21st	41·4
	Skardu	*7,505*	22·678	—·016	22·648	22·810	5th	22·567	20th	·243	72·7	91·2	+6·2	63·5	+2·9	77·4	+4·6	27·7	99·0	16th & 17th.	52·1	22nd	46·9
	Minimarg	*9,359*																					
	Astor	*7,955*																					
	Gilgit	4,890	24·850		24·823	25·040	5th	24·737	20th	·303	82·0	103·4	+6·8	74·2	+0·9	88·8	+3·9	29·2	111·2	10th	62·7	5th	48·5

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau stations.

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

‡ Mean of 30 days. § Mean of 29 days. † Mean of 14 days.

B—*continued.*

in India, etc., in July, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.	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	56	57
																																XV.—Madras.
1		3	6	3		3	12	3	W	N 76° W	5·6	2·3	+3·3	19	−21	89	−2	·848	−·013	8·6	−0·4	30	27·80	+2·20	41·09	38·64	+2·45	81·26	81·66	−0·40	4·30	Mangalore.
12	1	2		1	1	8	4	2	S 69° W	N 11° W	2·6	5·8	−3·2	30	+8	93	+2	·850	+·018	8·8	+0·2	26	26·20	−0·20	34·66	31·20	+3·46	87·19	73·18	+14·01	5·05	Calicut.
7	2	2	5			6	5	4	N 70° W	N 24° W	4·9	4·6	+0·3	23	−9	88	0	·838	+·003	8·6	+0·3	24	23·40	+0·60	25·02	22·88	+2·14	83·69	62·40	+21·29	2·40	Cochin.
3	14						2	12	N 25° W	N 18° W	4·7	6·6	−1·9	79	0	86	−2	·826	+·015	8·8	+0·3	17	13·10	+3·90	11·93	7·16	+4·77	42·25	28·80	+13·45	2·60	Trivandrum.
8				6	15	2			S 37° W	S 51° W	7·0	8·8	−1·8	69	−6	77	0	·889		3·8		0	0·60	−0·60	0	0·32	−0·32	0·89	1·24	−0·35	0	Pamban.
1					3	15	12		N 76° W	N 59° W	9·3	2·8	+6·5	86	+21	60	−4	·703	−·022	8·2	+3·0	1	3·00	−2·00	0·11	1·95	−1·84	5·21	6·20	−0·96	0·11	Madura.
2				1	5	9	14		N 77° W		7·4			71		63		·736		8·0		2			0·44	3·98	−3·54	4·99	7·40	−2·41	0·18	Pudukkottai.
					7	24			S 80° W	S 77° W	6·0	5·4	+0·6	96	+13	68	+1	·818	+·041	5·6	−0·2	2	3·50	−1·50	0·52	1·99	−1·47	1·43	5·13	−3·70	0·12	Negapatam.
					14	17			S 70° W	S 86° W	6·9	7·2	−0·3	96	+9	59	−3	·682	−016	6·3	−0·8	1	1·90	−0·90	0·21	1·31	−1·10	6·53	5·99	+0·54	0·15	Trichinopoly.
				6	24	1			S 37° W	S 49° W	9·5	5·3	+4·2	96	+17	65	+1	·766	+·018	5·7	−0·8	8	3·70	+4·30	2·45	1·38	+1·07	5·14	5·41	−0·27	0·53	Coimbatore.
1				8	14	6			S 45° W	S 25° W	6·2	3·4	+2·8	82	+9	75	−3	·761	−·005	8·3	+1·9	6	7·90	−1·00	1·18	3·84	−2·66	6·46	11·90	−5·44	0·36	Salem.
3					23	5			S 53° W	S 76° W	5·8	1·8	+4·0	86	+14	66	−11	·773	−·0992	7·0	+0·3	6	5·50	+0·50	1·49	3·44	−1·95	3·73	5·73	−2·00	0·43	Cuddalore.
2					3	26			S 86° W		3·7			90		66		·731		6·2		8	6·30	+1·70	2·15	5·06	−2·91	3·71	10·72	−7·01	0·90	Vellore.
1	1			1	6	12	10		S 52° W	S 72° W	4·9	5·8	−0·9	72	−12	75	+6	·868	+·076	7·3	−0·1	5	12·70	−7·70	2·08	4·09	−2·01	3·86	7·07	−3·21	0·94	Madras.
	4	3	6	2	1	2	7	6	N 26° W	S 88° W				47	−52	71	+3	·775	+·022	6·6	−1·[illegible]	9	6·20	+2·80	2·73	3·84	−1·11	4·05	8·54	−4·49	0·50	Cuddapah.
					6	19	6		W	S 87° W	8·1	8·7	−0·6	88	−2	69	+4	·675	+·028	8·4	+0·2	5	3·70	+1·30	1·36	1·71	−0·35	2·54	5·79	−3·25	0·58	Bellary.
				2	14	7	8		S 74° W	S 87° W	9·5			76	+4	77	+5	·739	+·019	8·7	+0·[illegible]	10	9·30	+0·70	4·31	4·89	−0·55	5·80	9·01	−3·21	0·84	Kurnool.
4				1	9	11	6		S 82° W	N 78° W	5·9	7·3	−1·4	69	−3	67	−1	·779	−·029	9·1	+1·5	9	4·80	+4·20	3·32	2·74	+0·58	4·69	4·70	−0·01	0·95	Nellore.
1	1			1	6	12	10		N 83° W	N 69° W	7·0	6·4	+0·6	76	−6	86	+7	·895	+·023	8·5	+0·[illegible]	15	9·40	+5·60	10·29	6·02	+4·27	11·06	11·85	−0·79	2·55	Masulipatam.
1					8	22			S 78° W	S 74° W	6·0	6·1	−0·1	96	+12	85	+8	·883	+·049	8·9	+0·9	16	9·90	+6·10	9·47	5·71	+3·76	10·35	11·61	−1·26	2·04	Cocanada.
1		1		1	27	1			S 45° W	S 75° W	7·8			89	+9	85	+9	·854	−·013	9·4	+1·1	17	7·70	+9·30	6·91	4·01	+2·90	8·54	10·90	−2·36	1·65	Waltair.
1	1	1		1	11	10	5		S 78° W		8·7			66		88		·921		7·3		14			10·09	5·38	+4·71	12·62	11·40	+1·22	2·03	(Vizagapatam) Cadagapatam.
3	2	1		1	8	10	1	5	S 47° W	S 49° W	9·4	9·3	+0·1	46	−19	86	+1	·915	−·015	7·1	−1·2	10	9·40	+0·60	5·70	7·30	−1·60	8·64	15·07	−6·43	1·32	Gopalpur.
																																Bay Islands.
1		1	1	2	4	19	2		S 34° W					73		88		·984		8·4		17			12·44			19·68			3·97	P.V.Fraser.
6					6	5	10	4	S 68° W	S 61° W	6·5	8·5	−2·0	56	−25	86	−1	·895	−·032	9·0	+0·5	24			17·45	15·70	+1·75	44·62	51·84	−7·22	2·63	Port Blair.
	1				6	18	4	2	S 48° W		14·2			76		93		·980		7·5		22			17·07	13·89	+3·18	46·61	39·15	+7·46	3·10	Slipper Island.
																																Kashmir.
	2	6		3	6	9		5	S 21° W		6·8			19		64		·651		5·6		17			22·01			26·28			4·00	Muzaffarabad.
8	3	1	1	7	4	3	1	3	S 15° E	S 48° E	1·4	2·8	−1·4	17	−5	79	−6	·652	+·010	3·3	−1·3	4	5·30	−1·30	1·95	2·87	−0·92	5·03	7·23 ¶	−2·20	1·22	Srinagar.
5	3	8	8	5	1			1	N 74° E		4·1			53		72	−9	·445		4·1		4			1·69	4·28	−2·59	10·48‖	8·05	+2·43	0·68	Gulmarg.
27						1	2	1	W		4·6			11		57	−4	·320		1·2		2	0·90	+1·10	0·49	0·81	−0·32	5·21	4·61	+0·60	0·37	Dras.
30				1					S	S 85° W	2·5	1·5	+1·0	3	−40	46	−6	·259	+·004	2·4	−1·8	1	1·20	−0·20	0·18	0·47	−0·29	0·60	0·85	−0·25	0·15	Leh.
20			1	1		6	3		S 48° W		2·7			27		39	−12	·303		1·8		0	0·70	−0·70	0·11	0·57	−0·46	3·87	2·18	+1·69	0·06	Skardu.
																																Misimarg, *
28			2		1				S 63° E		1·0			7		** 40	−6	** ·435	−·016	2·1	−2·0	1	2·00	−1·00	0·15	0·59	−0·44	1·33	1·93	−0·60	0·12	Astor.
																																Gilgit.

stations, the elevations of which exceed 3,000 feet. ** Mean of 28 days. ¶ Normal rainfall since 1st June. * Uncorrected for scale error. ‖ Since 3rd May, 1912.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Baluchistan.																						
15	Fort Sandeman		25·172		25·141	25·259	30th	25·062	20th	·197	83·1	100·0		75·0		87·5		25·0	106·9	1st, 2nd & 3rd.	62·6	6th	44·3
	Quetta	5,502	24·420	—·006	24·380	24·497	17th	24·320	20th	·177	79·4	95·8	+2·1	68·8	+4·1	82·3	+3·6	27·0	93·1	4 days	64·7	23rd & 24th.	34·4
	Chaman	4,311	25·405	—·034	25·367	25·481	17th	25·317	11th	·164	90·0	103·9	+2·9	78·4	+1·4	91·1	+2·1	25·5	107·8	10th	71·3	41st	36·5
	Kalat	6,630	23·553		23·515	23·645	17th	23·461	23rd & 25th.	·184	70·7	93·6		56·6		75·2		37·0	99·0	4th	49·7	23rd & 25th.	49·3
	Dalbandin	2,779	26·754		26·786	26·830	17th	26·683	20th & 28th.	·147	94·4	111·3		81·1		96·2		30·2	115·3	2nd & 12th.	68·3	21st	47·0
	Pasni		29·500		29·460	29·591	13th	29·388	20th	·203	83·7	91·3		81·8†		86·6†		9·5	96·5	30th	79·0	4 days	17·5
	Panjgur		26·435		26·393	26·505	17th	26·358	20th	·147	80·9	103·9		77·6		90·8		26·3	107·6	29th	68·5	31st	39·2
	Robat		26·481		26·439	26·595	12th	26·377	9th	·218	90·4	110·2		83·2		96·7		27·0	118·0	10th	72·8	21st	45·2
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*									81·1	98·8		70·8		84·8		28·0	106·6	11th & 12th.	57·0	5th	49·6
	Para Chinar	6,000	24·259		24·235	24·345	30th	24·154	20th	·191	78·1	89·0		69·1		79·0		19·9	98·2	1st & 3rd	62·1	21st	36·1
	Cherat	*4,256*	25·485	+·003	25·453	25·601	17th	25·391	11th	·210	76·4	89·7	+1·1	72·1	+1·4	80·9	+1·3	17·6	104·2	1st, 2nd & 3rd.	62·4	20th & 21st.	41·8
	Murree	6,333	23·706	+·002	23·674	23·801	30th	23·607	20th	·194	68·8	77·3	+0·3	66·6	+4·1	71·9	+2·2	10·7	93·6	1st	58·2	21st	35·4
	Simla	7,232	22·982	+·015	22·944	23·059	17th	22·899	20th	·160	63·7	69·1	—0·1	60·9	+0·8	65·0	+0·3	8·2	79·3	1st	58·4	26th	20·9
	Sarain		23·012		22·974	23·129	16th	22·937	20th & 24th.	·192	64·8	72·2		59·9		66·0		12·3	78·4	1st	55·9	12th	22·5
	Kalabagh		20·063		20·025	20·170	16th	19·982	20th	·188	52·4	58·6		47·5		52·0		9·1	60·4	12th & 30th.	45·2	6th & 20th.	15·2
	Chakrata	7,022	23·154	+·012	23·114	23·255	16th	23·080	24th	·175	63·9	70·1	+0·2	59·9	—0·3	64·9	—0·1	10·2	75·7	1st	56·7	14th	19·0
	Mukteswar	7,592	22·704	—·020	22·663	22·799	16th	22·631	27th	·168	62·1	70·3	—0·8	56·3	—2·4	63·3	—1·6	14·0	75·5	12th & 30th.	53·0	21st	22·5
	Darjiling	7,376	22·888	—·025	22·843	22·974	16th	22·780	27th	·194	60·9	66·2	+0·2	58·0	+0·3	62·1	+0·3	8·2	70·3	27th & 28th.	55·2	12th & 13th.	15·1
	Shillong	4,920	24·970		24·922	25·061	16th	24·839	27th	·222	68·4	74·6		64·4		69·5		10·2	79·9	29th	60·2	7th	19·7
	Cherrapunji	4,309	25·532		25·483	25·605	16th	25·403	27th	·202	67·3	72·2		61·9		68·5		7·3	79·2	29th	64·1	9 days	15·1
	Maymyo	3,545	26·293	+·006	26·238	26·360	16th	26·163	27th	·197	70·0	77·3	+0·2	66·8	+1·4	72·0	+0·8	10·5	82·0	14th	64·6	21st	17·4
	Pachmarhi	3,528	26·188	—·031	26·135	26·300	2nd & 5th.	26·013	29th	·287	70·7	78·9	+3·1	68·7	+0·7	73·8	+1·9	10·2	95·0	1st	65·6	30th & 31st.	29·4
	Mount Abu	4,945	25·794	—·022	25·744	25·876	4th	25·676	29th	·200	69·6	76·2	+1·6	67·1	+1·4	71·6	+1·5	9·1	85·2	8th	62·4	13th	22·8
	Mercara	3,781	26·136	—·031	26·089	26·196	4th & 5th.	26·075	28th	·121	64·5	68·8	—0·1	62·3	+0·1	65·6	0	6·5	74·0	2nd	60·0	13th	14·0
	Ootacamund	*7,397*	22·985		22·921	23·044	4th	22·918	28th	·126	55·8	61·6		52·1		56·9		9·5	68·0	3rd	48·2	1st	19·8
	Kodaikanal	7,683	22·757	—·010	22·692	22·824	3rd	22·690	28th	·134	57·2	62·5	—0·4	53·0	+0·3	57·7	—0·1	9·5	68·0	4th	50·0	23rd	18·0
	Extra India.																						
	Singapore (*a*)	10	29·904		29·835	29·969	3rd	29·846	12th	·123	83·7	87·9		76·1		82·0		11·8	90·8	22nd	73·0	2nd & 3rd.	17·8
	Penang (*a*)	20	29·834		29·779	29·968	30th	29·782	7th	·186	83·6	90·5		73·6		82·1		16·9	93·0	25th, 28th & 29th.	71·0	24th & 25th.	22·0
	Trincomalee	99	29·708	?	29·736	29·797	30th	29·650	8th	·147	74·9	93·2	+1·6	76·1†	—1·5†	84·6†	+0·1	17·1	97·5	6th & 10th.	74·0	10th	23·5
	Colombo	24	29·855	—·036	29·808	29·936	30th	29·795	8th	·141	78·8	85·7	+1·3	77·0	—0·6	81·9	+0·2	9·7	88·5	7th	72·0	26th	16·5
	Minicoy	7	29·897			29·952	30th	29·827	10th	·125													
	Amini Divi	*13*	29·820	—·038	29·771	29·891	30th	29·756	10th	·135	82·3	86·8	+1·8	78·9	+1·4	82·8	+1·6	7·9	90·1	1st	71·3	13th	18·8
	Gyantse	13,120	17·084		17·045	17·172	13th	17·007	23rd	·165	54·2	71·9		40·1		56·0		31·8	82·5	23rd	32·0	11th	50·5
	Pharijong	14,400									51·3	59·2		35·1		47·2		24·1	62·9	31st	30·0	15th	32·9
	Gangtok	5,660?									66·6	74·4		63·0		68·7		11·4	79·6	10th	60·2	12th	19·4
	Gartok (*b*) ‖	15,100?	17·465			17·570	28th	17·390	5th	·180	53·2	69·3		35·4		52·4		33·9	79·7	27th	29·6	3rd	50·1

N.B.—Elevations in italics indicate barometrical determinations.
(*a*) 9 hrs. observations.
(*b*) Aneroid corrected.

† Mean of 30 days.

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill

B—*continued.*

in India, etc., in July, 1912—continued.

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st May to 31st July, 1912. (53)	Normal rainfall for period, 1st May to 31st July. (54)	Departure from normal of period, 1st May to 31st July, 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																Baluchistan.
7	8	6	1	1			5	3	N 4° W		3·9			27		65		·730		2·3		5			2·51			2·83			0·94	Fort Sandeman.
20				3	7	1			S 9° E	S 6° W	1·7	2·4	−0·7	33	+26	59	+ 2	·593	+·056	1·8	+0·7	1	0·60	+0·40	0·46	0·74	− 0·28	0·64	1·29	− 0·65	0·32	Quetta.
6	1		1		10	7	4	2	S 37° W	S 33° W	4·8	6·9	−2·1	53	− 7	28	− 5	·393	−·035	0·6	0	1	0·30	+0·70	0·33	0·06	+ 0·27	0·40	0·20	+ 0·20	0·29	Chaman.
19		2		6		3	1		S 28° E	S 21° W	4·5			20	−22	66		·500		1·5		3	1·00	+2·00	0·60	0·62	−0·02	0·97	1·18	−0·21	0·20	Kalat.
1	1	2	5	3	4	8	6	1	S 24° W		4·8			33		35		·567		2·1		0			0·02			0·04			0·02	Dalbandin.
21			1	1		5	3		S 49° W		4·2			23		95		1·103		2·5		3			0·88			0·88			0·37	Pasni.
9	1	2	3		2	12	2		S 37° W		6·0			33		77		·806		3·0		1			1·46			1·59			1·38	Panjgur.
8	2	4	5	3	5	2	2		S 60° E		2·1			27		45		·637		1·8		0			0			0			0	Robat.
																																Hill stations, excluding Kashmir and Baluchistan.
26	4							1	N 14° W		6·2			13		52		·551		3·5		0			0·02	0·40	− 0·38	1·40	2·95	− 1·55	0·02	Chitral.
20				4	5	1	1		S 7° E		2·1			30		62		·577		2·0		4	7·80	− 3·80	2·48	3·57	− 1·09	4·67	8·54	− 3·87	1·02	Para Chinar.
6	3	1		8	11	1		1	S 22° E	S 18° E	6·9	6·6	+0·3	46	−14	74	+ 2	·635	+·002	6·1	+1·9	6			3·02	3·86	− 0·84	4·53	6·64	− 2·11	0·83	Cherat.
10	3		1	5	5	1		2	S 35° E	S 86° E	3·5	4·5	−1·0	33	+28	72	− 5	·489	−·028	6·4	+1·7	15	16·20	−1·20	14·93	11·67	+ 3·26	19·95	18·12	+ 1·83	2·31	Murree.
												2·6				90	+ 2	·529	+·017	8·2	−0·2	22	18·90	+3·10	13·47	16·95	− 3·48	18·40	26·54	− 8·14	1·37	Simla.
																84		·514		8·7		24			10·01	10·96	− 0·95	15·38	18·79	− 3·41	0·97	Sarain.
13	3			2	1	2		10	N 49° W		4·0			29		93		·266		9·1		25			15·77	15·37	+ 0·40	20·10	23·38‡	− 3·28	3·34	Kalabagh.
8	2			5	14			1	S 13° E	S 48° W	2·7	4·5	−1·8	49	+38	90	− 1	·536	−·001	8·8	+2·9	23	19·80	+3·20	26·73	20·22	+ 6·51	31·57	30·47	+ 1·10	4·71	Chakrata.
8	2	1	6	5	1		8		S 50° E		6·6			10		93	+ 3	·526		8·5		16			10·87	13·50	− 2·63	18·39	21·47	− 3·08	4·74	Mukteswar.
21		2	4	2				2	N 75° E	S 83° E	0·6	2·6	−2·0	17	−13	97	0	·525	+·001	9·5	−0·1	28	22·94	+5·06	34·38	32·37	+ 2·01	57·99	63·88	− 5·89	3·17	Darjiling.
27			1	2	1				S 45° E		1·8			10		87		·601		8·2		19	18·00	+1·00	21·07	15·29	+ 5·78	41·04	41·64	− 0·60	2·99	Shillong.
20			2	1	2	6			S 13° W		5·1			23		96		·641		9·3		26	27·30	−1·30	87·30	104·70	−17·40	188·28	227·81	−39·53	7·91	Cherrapunji.
12				2		17			S 38° W		2·3			58		91	+ 5	·668		7·8		12	12·10	−0·10	7·54	5·56	+ 1·98	22·83	23·89	− 1·06	1·57	Maymyo.
	2			1		16	8	4	S 72° W	S 85° W	7·5	7·9	−0·4	72	− 3	91	+ 1	·677	+·012	9·5	+0·7	25	22·00	+3·00	23·92	23·93	− 0·01	26·97	33·86	− 6·89	2·75	Pachmarhi.
	1	1	1		7	16	4	1	S 42° W	S 55° W	5·7	8·4	−2·7	69	+ 1	96	0	·688	+·043	9·2	+0·2	24	17·60	+6·40	18·20	22·96	− 4·76	22·31	28·93	− 6·62	3·45	Mount Abu.
1						7	20	3	S 84° W	N 84° W	6·1	7·2	−1·1	83	− 1	99	+ 3	·590	+·003	9·2	+0·4	30	29·10	+0·90	51·64	42·28	+ 9·36	78·11	73·81	+ 4·30	6·10	Mercara.
4						2	19	6	N 83° W		5·3			82		89		·399		9·1		15	12·30	+2·70	8·81	9·02	− 0·21	20·05	22·96	− 2·91	1·18	Ootacamund.
				1		1	22	7	N 83° W		12·1*			89		78	− 3	·367		7·5		7	8·40	−1·40	3·29	5·01	− 1·72	12·99	14·73	− 1·74	0·71	Kodaikanal.
																																Extra India.
6		2		11	8	4			S 20° E		5·2¶			59						5·5		9			4·37	6·79	−2·42	21·16	19·67	+1·49	1·39	Singapore. (a)
		11	1	13	1	1			S 89° E		8·9			46								5			4·05	6·53	−2·48	27·38	22·62	+4·76	2·70	Penang. (a)
						30	1		S 46° W	S 45° W	9·0*	11·9	−2·9	99	− 1	84	+ 6	·808	−·059	7·7	+4·5	2			1·23	1·99	−0·76	6·19	5·66	+0·53	0·82	Trincomalee.
3		1				11	7	9	S 88° W	S 65° W	4·2*	6·8	−2·6	66	−17	88	+ 9	·870	+·018	7·4	+1·2	10			4·61	5·05	−0·44	43·69	23·37	+20·32	1·46	Colombo.
						8	22	1	S 84° W	N 87° W	9·0	12·4	−3·4	90	+ 3					5·7	−0·5	12			6·76	8·00	−1·24	29·70	24·20	+5·50	1·63	Minicoy.
	1				6	19	1	4	S 47° W		13·6			74		81		·889		7·6		13			7·12	11·83	−4·71	24·56	28·64	−4·08	3·51	Amini Divi.
29				1		1			S		0·5**			4		77		·325		1·7		8			2·22			4·15			0·78	Gyantse.
20				8	2			1	S 36° E		9·9			29		68		·254		4·9		17			7·20			14·14			1·50	Pharijong.
26		2		1			1	1	N 13° E		1·0			6		93		·608		2·3		29			31·34	24·90	+6·44	73·83	64·97	+8·86	3·02	Gangtok.
17		1		6		2			S 31° E		5·3§			23						3·1		2			0·38			0·38			0·20	Gartok.

‡ Normal rainfall since 1st June.

(a) plateau stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

** Mean of 28 days.

¶ Mean of 15 days
§ " 25 "
‖ " 26 "

Table

(2) Abstract of observations taken at 8 hrs. at 220 stations

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India—*concld.*																						
	Kashgar (a) . .	4,255																					
	Kabul . .		24·087†		24·056†	24·183	16th	23·973	20th	·210	80·9	100·5	+8·2	78·3	+16·7	89·4	+12·5	22·2	106·4	7th	70·8	21st	35·6
	Meshed . .	3,104	26·603		29·550	26·739	13th	26·394	7th	·345	79·0	94·0		62·5	−3·0	78·2		31·5	105·2	9th	51·6	20th	53·6
	Jask . . .	13	29·461	−·069	29·427	29·550	18th	29·352	31st	·198	88·1	96·6	+0·8	87·1	+2·3	91·8	+1·5	9·5	105·3	31st	84·3	5th & 6th.	21·0
	Muscat . .	20	29·419	−·067	29·417	29·523	4th	29·313	31st	·210	90·3	96·9	+5·5	87·2	−0·3	92·1	+2·6	9·7	110·3	7th	81·1	20th	29·2
	Bahrein . .	18	29·483		29·454	29·613	9th	29·366	11th	·247	91·2	96·3		86·0		91·1		10·3	102·7	5th	81·3	5th	21·4
	Bushire . .	14	29·436	−·045	29·413	29·587	9th	29·368	28th	·219	87·5	92·6	−2·7	84·0	−0·3	88·3	−1·5	8·6	97·8	14th	78·5	5th	19·3
	Busrah . .	25	29·478		29·472	29·678	9th	29·377	13th	·301	86·9	105·6		83·2		94·4		22·4	113·9	13th	78·3	9th	35·6
	Kerman . .										84·0	103·2		63·3		83·3		39·9	110·8	4th	47·5	30th	63·3
	Ispahan (b) . .	*5,817*	24·106			24·230	11th	24·000	6th & 22nd.	·230	80·7	97·8	−0·6	67·4	+1·1	82·6	+0·3	30·4	101·9	1st	62·2	13th	39·7
	Tehran (b) . .	*4,002*	25·538			25·695	12th	25·425	7th	·270	83·1	100·8	+2·4	73·6	+1·4	87·2	+1·9	27·2	105·8	25th	64·2	7th	41·6
	Baghdad . .	127	29·404	−·041	29·503	29·669	9th	29·258	7th	·411	87·5	108·6	+1·3	77·7	−1·7	93·1	−0·2	30·9	115·6	13th	70·9	8th	44·7
	Beirut ‡ . .				29·716						80·2	84·1		71·4		77·8		12·7	96·3	10th	63·3	7th	33·0
	Aden . . .	94	29·621	+·001	29·645	29·760	17th	29·540	12th	·160	85·4	93·2	+0·1	81·9	−0·4	87·6	−0·1	11·3	97·6	11th	78·9	29th & 31st.	18·7
	Zanzibar . .	72	30·087	−·011	30·086	30·130	6th	30·015	1st	·115	74·4	81·5	+1·3	73·0	+0·3	77·2	+0·8	8·5	82·9	23rd & 31st.	70·8	11th	12·1

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) Aneroid corrected.
(b) ,, uncorrected.

† Mean of 29 days.

‡ 8½ hrs. observations.

B—*concluded.*

in India, etc., in July, 1912—concluded.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.	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	56	57
																																Extra India —*concld.*
																Observation not available.																Kashgar.
	1		4	5	8	5	7	1	S 17° W	S 68° E				45	+42	55		·583		P		0			0	0·13	—0·13	0	1·32	—1·32	0	Kabul.
24	2		1	1	1	1		1	N 45° E		1·4			4		36		·360		1·0		0			0	0·07	—0·07	1·60	1·79	—0·19	0	Meshed.
2	1	1	20	7					S 83° E	S 66° E	8·3	11·1	—2·8	86	+29	79	+ 7	1·047	+·018	5·4	+3·7	0			0	0·01	—0·01	0	0·06	—0·06	0	Jask.
8	1		13		1		1	7	N 55° E	N 72° E	4·1	3·4	+0·7	27	—19	71	— 5	·992	—·039	8·0	+5·5	0			0	0·02	—0·02	0	0·17	—0·17	0	Muscat.
	8	1	1	1			3	16	N 32° W‡		5·6			77		62		·903		0·9		0			0	0	0	0	0·10	—0·10	0	Bahrein.
10			1		1	1	6	12	N 64° W	N 37° W	8·8	6·2	+2·6	49	+ 5	76	+12	·987	+·071	1·6	—0·3	0			0	0	0	0	0·02	—0·02	0	Bushire.
2	1					3	15	10	N 76° W		4·6			81		45		·573		0		0			0	0	0	0	0·46	—0·46	0	Buirah.
27	1	1	1					1	N 27° E		2·4			6		32		·370		0·2		0			0			0			0	Kerman.
22	3				2	1	3		N 84° W	N 49° W	2·2	2·6	—0·4	3		42		·440		0·3		0			0	0·03	—0·03	0·22	0·29	—0·07	0	Ispahan.
14		2	1	2	4	7	1		S 13° W	S 44° W	2·5	1·7	+0·8	23		40		·442		0·5		0			0·03	0·22	—0·19	0·88	0·75	+0·13	0·02	Tehran.
	8	2					1	20	N 30° W	N 11° W	6·7	3·4	+3·3	90	+16	35	— 7	·452	—·129	0	0	0			0	0	0	0	0·23	—0·23	0	Baghdad.
5					17	6	2	1	S 18° W					71		63		·649		1·5												Beirut.†
6		5	5	7		8			S 48° E	S 12° W	6·8	7·7	—0·9	33	—19	70	— 1	·849	—·029	4·6	+0·9	0			0·02	0·03	—0·01	0·02	0·23	—0·21	0·02	Aden.
					16	15			S 22° W	S 15° W	6·7	6·0	+0·7	97	+ 7	84	— 1	·706	—·010	6·1	+0·1	0			0·03	2·78	—2·75	3·95	15·99	—12·04	0·03	Zanzibar.

‡ Wind direction 30 days.

† Rainfall not recorded.

Table C.—Abstract of observations taken at 8 hrs. at 63 fourth and fifth class stations in India, etc., in July, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Bishnath	79·5	90·3	...	76·3	...	83·3	...	14·0	95·4	30th	72·9	24th	22·5	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	79·6	89·7	...	75·2	..	82·5	...	14·5	95·0	27th & 29th.	72·7	11th	22·3	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	81·4	93·1	...	75·8	...	84·5	...	17·3	98·4	26th	71·0	13th	27·4	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	79·0	89·1	...	75·8	...	82·5	..	13·3	98·1	26th	72·7	2nd	25·4	...	...	...	...	...	...	...	...	...	...	...
	Dikom	79·3	89·1	...	75·9	...	82·5	...	13·2	98·2	26th	72·6	2nd	25·6	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	80·6	?	...	76·2	...	?	...	?	?	?	72·6	27th	?	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	...	...	...	...	...	...	Observations			not received.		...	...	...	...	...	...	...	...		...	..	...	...
	Jorehat	79·6	89·2	...	75·7	...	82·5	...	13·5	97·1	26th	72·8	24th	24·3	...	...	...	...	...	...	...	...	...	...	...
	Lumding	80·1	91·2	...	76·5	...	83·9	...	14·7	95·1	27th	74·4	11th	20·7	...	...	...	...		...	...	...	...	...	...
	Messa	85·3	93·4	...	75·5	...	84·5	...	17·9	97·9	29th	73·0	11th	24·9	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	76·9	89·3	...	73·6	..	81·5	...	15·7	94·6	27th	68·5	12th	26·1	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	82·6	91·1	...	76·9	..	84·0	...	14·2	95·3	25th	75·2	21st	20·1	...	...	...	...	...	...	...	...	...	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...
	Brahmanbaria	83·6	88·5	...	77·9	...	83·2	...	10·6	93·2	29th	75·1	1st	18·1	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo (c)	84·0	88·5	...	78·3	...	83·4	...	10.2	92·6	15th	74·1	8th	1·85	...	...	...	...	...	...	...	...	...	...	...
	Pabna	82·9	88·8	...	77·3	...	83·1	...	11·5	91·4	18th	72·6	11th	18·8	...	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	79·8	91·5	...	75·2	...	83·3	..	16·3	97·9	29th	72·2	13th	25·7	...	...	...	...	...	...	...	...	...	...	...
	Kalchini (d)	78·6	85.1	...	72·7	...	78·9	...	12·4	92·1	15th	69·9	11th	2·22	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	79·6	87·8	...	75·0	...	81·4	...	12·8	95·1	29th	72·0	13th	23·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

(c) Observations of 29 days.
(d) Do. 17 do.

C.

at 63 fourth and fifth class stations in India, etc., in July, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July 1912.	Normal rainfall of period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	...	...	...	99	...	·997	...	...	...	19	...	...	26·59	17·27	+9·32	44·25*	39·78	+4·47	7·19	Bishnath.
...	...	...	...	...	91	...	·923	...	...	...	26	...	...	26·93	17·59	+9·34	45·43	40·96	+4·47	4·20	Borjuli.
...	...	...	...	...	92	...	·991	...	...	...	22	...	...	12·55	18·57	−6·02	41·94	54·89	−12·95	1·55	Chandkhira.
...	...	...	...	...	92	...	·910	...	...	...	22	...	..	27·45	19·82	+7·63	53·55	46·05	+7·50	6·15	Doom Dooma.
...	...	...	...	...	92	...	·919	...	...	...	23	...	...	26·52	20·18	+6·34	48·95	47·10	+1·85	4·30	Dikom.
...	...	...	...	...	89	...	·930	...	...	...	20	...	...	20·20	12·79	+7·41	39·19	30·92	+8·27	2·21	Golaghat.
...	...	...	...	...	...	...	Observations not received.					...	...	...	...	...	...	...	...	...	Hailakandi.
...	...	...	...	...	92	...	·925	...	...	...	23	...	...	27·44	13·60	+13·84	49·20	33·17	+16·03	3·24	Jorehat.
...	...	...	...	...	89	...	·907	...	...	...	?	...	..	11·43	...	...	18·84	...	...	?	Lumding.
...	...	...	...	...	85	...	1·035	...	...	...	24	...	...	19·22	21·21	+1·99	35·08	42·48	−7·40	2·70	Messa.
...	...	...	...	...	96	...	·888	...	...	...	19	...	...	14·52	14·62	−0·10	36·31	39·15	−2·84	3·30	Panerihat.
...	...	...	...	...	87	...	·966	...	...	...	24	...	...	15·01	15·39	−0·38	40·76	45·48	−4·72	2·27	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	20	19·07	+0·93	15·91	14·69	+1·22	46·16	43·49	+2·67	2·41	Comilla.
...	...	...	...	...	80	...	·912	...	...	...	14	...	...	7·39	12·87	−5·48	36·90	37·85	−0·95	1·21	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	23	17·13	+5·87	14·23	12·78	+1·45	35·20 E	34·48	+0·72	2·33	Faridpur.
...	...	...	...	...	87	...	1·015	...	...	...	13	...	...	5·32	11·72	−6·40	30·75	31·27	−0·52	1·19	Goalundo.
...	...	...	...	...	89	...	1·002	...	...	...	24	...	...	14·88	13·77	+1·11	33·64	31·30	+2·34	6·39	Pabna.
...	...	...	...	...	...	...	...	...	...	...	16	14·26	+1·74	10·67	11·66	−0·99	25·23	31·85	−6·62	2·03	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	14	15·15	−1·15	10·34	10·66	−0·32	24·01	26·43	−2·42	1·66	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	17	15·45	+1·55	16·77	10·50	+6·27	27·34	23·79	+3·55	3·80	Malda.
...	...	...	...	...	...	...	...	...	...	...	19	15·42	+3·58	30·12	14·37	+15·75	50·63	41·75	+8·88	5·05	Rangpur.
...	...	...	...	...	91	...	·918	...	...	...	23	...	...	35·28	42·62	−7·34	79·85 F	84·11	−4·26	6·46	Dam Dim.
...	...	...	...	...	94	...	·930	...	...	...	13	...	...	13·05	39·23	−26·18	41·31	79·67	−38·36	1·65	Kalchini.
...	...	...	...	...	88	...	·889	...	...	...	23	...	...	29·81	42·73	−12·92	69·56	85·97	−16·41	4·39	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	23	18·79	+4·21	37·70	29·53	+8·17	67·48	78·24	−10·76	6·40	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	21	15·87	+5·13	15·10	11·38	+3·72	39·14	27·33	+11·81	4·03	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	19	16·46	+2·54	22·54	12·64	+9·90	31·91	27·42	+4·49	4·82	Bankura.
...	...	...	...	...	...	...	...	...	...	...	21	16·39	+4·61	15·63	12·38	+3·25	20·94	25·38	−4·44	2·52	Raniganj.

* Rainfall, 8th to 14th May not included.
E „ 1st and July „
F „ 17th to 30th „ „

Table

Abstract of observations taken at 8 hrs.

Number of sub division.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	82·9	90·2	...	78·6	...	84·4	...	11·6	95·2	10th	72·6	12th	22·6	...	...	...	...	...	...	...	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XII.—Central Provinces.																								
23	Chhindwara	75·4	84·7	...	72·4	...	78·5	...	12·3	97.5	6th	67·9	7th	29·6	...	...	...	1	...	4	7	10	9	S 81° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	79·3	92·1	...	74·9	...	83·5	...	17·2	99·0	12th	71·1	14th	27.9	...	...	...	...	...	...	...	...	...	...	...
33	Guntur	81·5	92·5	...	77·6	...	85·1	...	14·9	101·2	11th & 12th.	73·3	31st	27·9	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	85·9	95·6	...	77·6	...	86·6	...	18·0	110·1	1st	64·5	31st	45·6	...	13	10	...	...	8	...	...	...	N 30° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	72·1	95·0	...	62·2	...	78·6	...	32·8	109·7	9th	54·0	5th	55·7	...	12	3	7	8	...	...	...	1	N 57° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C—*continued.*

at 63 fourth and fifth class stations in India, etc., in July, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity, at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall of period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	13	18·74	−5·74	13·76	13·30	+0·46	22·17	23·78	−1·61	3·29	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	15	15·39	−0·39	14·53	12·38	+2·15	24·65	23·33	+1·32	2·95	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	16	14·39	+1·61	14·30	12·55	+1·75	21·36	23·05	−1·69	3·99	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	15	12·48	+2·52	10·21	15·40	−5·19	18·37	27·69	−9·32	2·07	Motihari.
...	...	...	...	...	...	...	...	...	...	...	15	14·23	+0·77	12·29	11·76	+0·53	17·73	19·36	−1·63	4·81	Chapra.
...	...	...	...	...	...	...	...	...	...	...	16	15·13	+0·87	15·51	12·89	+2·62	20·38	20·96	−0·58	2·82	Arrah.
...	...	...	...	...	...	...	...	...	...	...	18	14·72	+3·28	9·42	10·83	−1·41	10·97	17·86	−6·89	1·48	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	83	...	·995	...	...	...	...	...	...	No	rain g	auge.	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	8	9·40	−1·40	9·34	9·29	+0·05	10·59	13·11	−2·52	2·41	Meerut.
...	...	...	...	...	...	...	...	...	...	...	16	21·20	−5·20	12·53	27·00	−14·47	18·23	36·90	−18·67	1·87	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	14	9·50	+4·50	13·73	7·82	+5·91	15·40	11·35	+4·05	3·75	Udaipur.
																					XII.—Central Provinces.
2·6	...	...	65	...	84	...	·740	...	5·7	...	19	...	...	13·29	...	...	15·75	...	...	2·30	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	0	0·60	−0·60	0·01	0·42	−0·41	3·13	2·44	+0·69	0·01	Tinnevelly.
...	...	...	...	...	75	...	·742	...	9·0	...	5	...	...	2·05	...	...	4·52	...	...	1·12	Anantapur.
...	...	...	...	...	84	...	·896	...	8·8	...	14	...	...	6·37	...	...	9·67	...	...	1·85	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	17	...	...	17·22	8·27	+8·95	60·96	32·88	+28·08	2·55	Car Nicobar.
																					Kashmir.
...	...	...	45	...	68	...	·818	...	5·9	...	9	...	...	11·16	...	...	11·78	...	...	3·20	Jammu.
...	...	...	...	...	...	...	...	...	...	...	7	...	...	2·59	4·06	−1·47	10·26	12·99	−2·73	0·72	Sonamarg.
...	...	...	52	...	43	...	·343	...	1·9	...	1	...	...	0·16	...	...	4·13	...	...	0·13	Kargil.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor.

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	78·5	86·9	...	73·9	...	80·4	...	13·0	93·9	29th	71·0	12th & 13th.	22·9	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	68·2	75·9	...	64·9	...	70·4	...	11·0	81·7	29th	62·2	13th	19·5	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	83·5†	...	61·3	...	72·5†	...	22·2	91·5	13th	57·9	6th	33·6	11	...	...	...	...	...	2	18	...	S 87° W	...
	Kailang	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drosh‡	83·4	101·3	...	76·9	...	89·1	...	24·4	110·1	11th & 12th.	66·1	5th	44·0	7	2	4	...	1	...	4	8	4	N 68° W	..
	Pishin	...	99·5	.	71·8	...	85·6	...	27·7	103·9	9th	65·1	25th	38·8	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	108·7	...	95·6	...	102·1	...	13·1	117·3	12th	83·0	9th	34·3	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	56·4	66·1	...	51·5	...	58·8	...	14·6	70·9	17th	44·2	15th	26·7	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	76·0	95·8	...	59·5	...	77·7	...	36·3	106·4	12th	46·4	9th	60·0	...	...	...	...	...	..	...	...	...	...	...
	Koweit	...	101·6	...	84·1	...	92·9	...	17·5	115·3	13th	78·4	9th	36·9	...	1	...	...	..	...	4	8	18	N 65° W	...
	Maidan	...	113·9	...	86·2	...	100·1	...	27·7	122·6	11th	76·2	9th	46·4	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	100·3	...	82·6	...	91·4	...	17·7	105·5	15th & 17th.	73·4	9th	32·1	...	1	...	...	...	...	...	...	22	N 43° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	104·8	...	81·1	...	93·0	...	23·7	111·8	9th	69·0	22nd	42·8	1	10	...	...	...	...	...	...	20	N 30° W	...

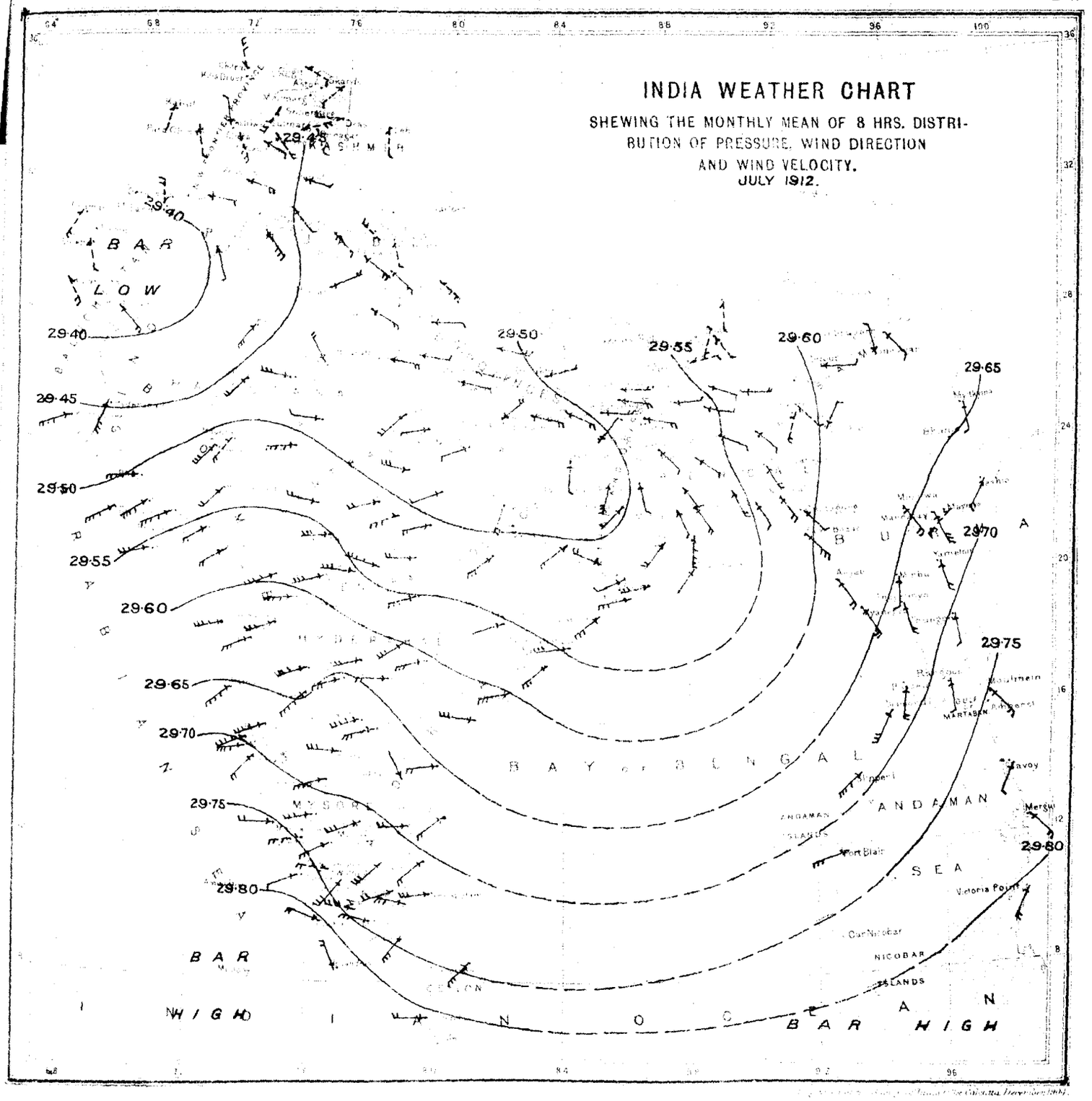
‡ Observations of 30 days. † Mean of 30 days.

C—*concluded.*

at 63 fourth and fifth class stations in India, etc., in July, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity, at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st July, 1912.	Normal rainfall for period, 1st May to 31st July.	Departure from normal of period, 1st May to 31st July 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	87	...	·846	...	...	...	25	...	...	25·92	35·30	−9·38	66·34	70·78	−4·44	2·80	Panighatta.
...	...	...	...	...	93	...	·636	...	...	...	29	...	...	45·79	43·74	+2·05	81·18	81·85	−0·67	4·62	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	28	...	...	28·72	...	...	75·83	...	...	3·15	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	18	...	...	9·49	...	...	20·61	...	...	1·18	Lachung.
...	...	...	...	...	...	...	...	...	...	...	31	...	...	37·08	...	...	86·75*	...	...	3·07	Ringim.
...	...	...	61	...	...	...	...	...	5·3	...	0	...	...	0·02	0·74	−0·72	1·16	2·04	−0·88	0·01	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·39	...	...	...	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	21	...	...	30·67	...	...	33·43	...	...	3·70	Bakloh.
...	...	...	37	...	46	...	·529	...	...	...	0	...	...	0	0·57	−0·57	2·65	3·58	−0·93	0	Drosh.
...	...	...	...	...	...	...	...	...	0·5	...	2	...	...	0·63	0·07	+0·56	1·08	0·30	+0·78	0·46	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	...	.	0	...	...	0	...	...	0	...	...	0	Ahwaz.
...	...	...	...	...	88	...	·399	...	6·6	...	18	...	...	6·57	...	...	13·55	...	...	0·77	Chumbi.
...	...	...	...	...	29	...	·276	...	...	...	0	...	...	0	...	...	0·20	...	...	0	Kirmanshah.
...	...	...	84	...	...	...	...	...	0·2	...	0	...	...	0	...	...	0	...	...	0	Koweit.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Maidan.
...	...	...	71	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Muhammerah.§
...	...	...	...	...	...	...	...	...	...	...	6	...	...	3·40	3·69	−0·29	7·56	27·22	−19·66	1·21	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·81	...	...	...	...	...	Prison Island.
16·11	...	...	90	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Seistan.

* Total rainfall since 1st June. § Wind variable 8. ‖ Mean of 27 days.

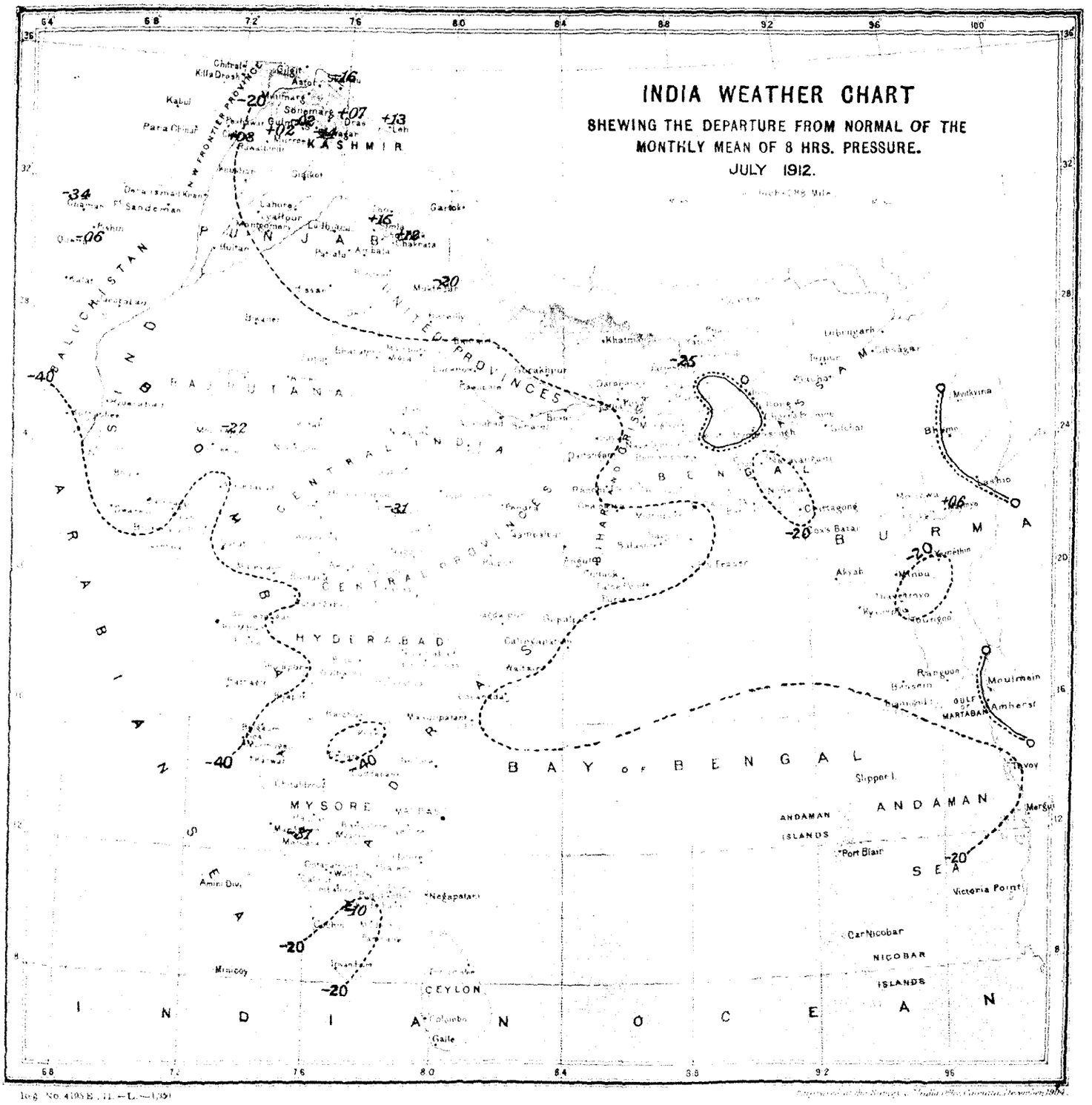


The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.



Reg. No. 4195 E. II.—L.—1,350

Engraved at the Survey of India Office, Calcutta, December 1904.

LITHO. BY S. S. MUNDLE.

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

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

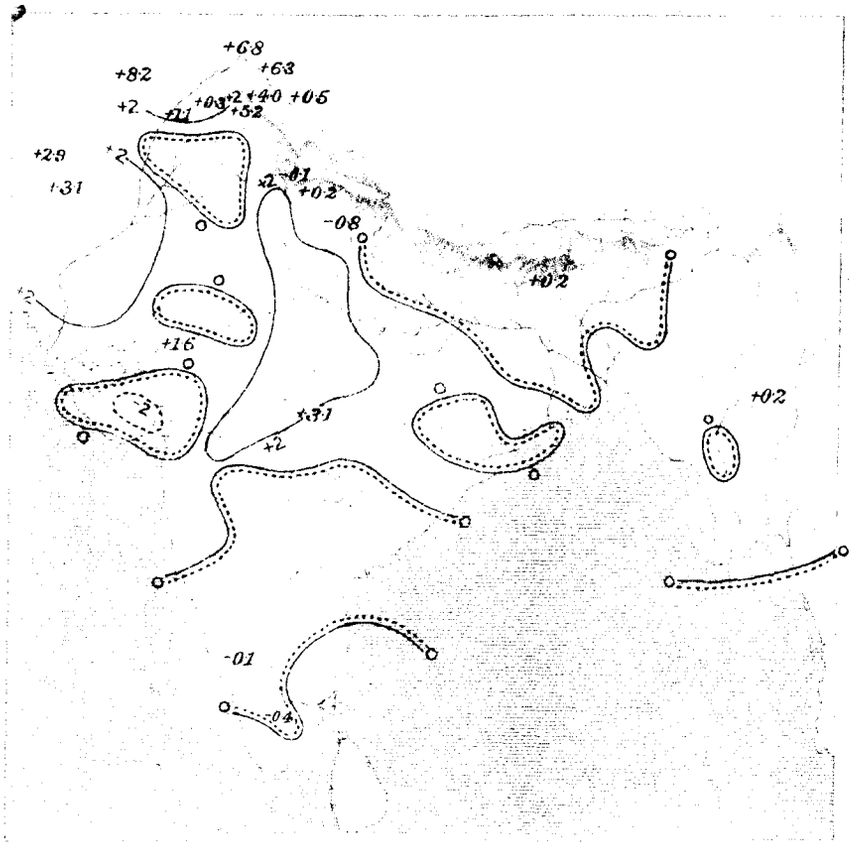
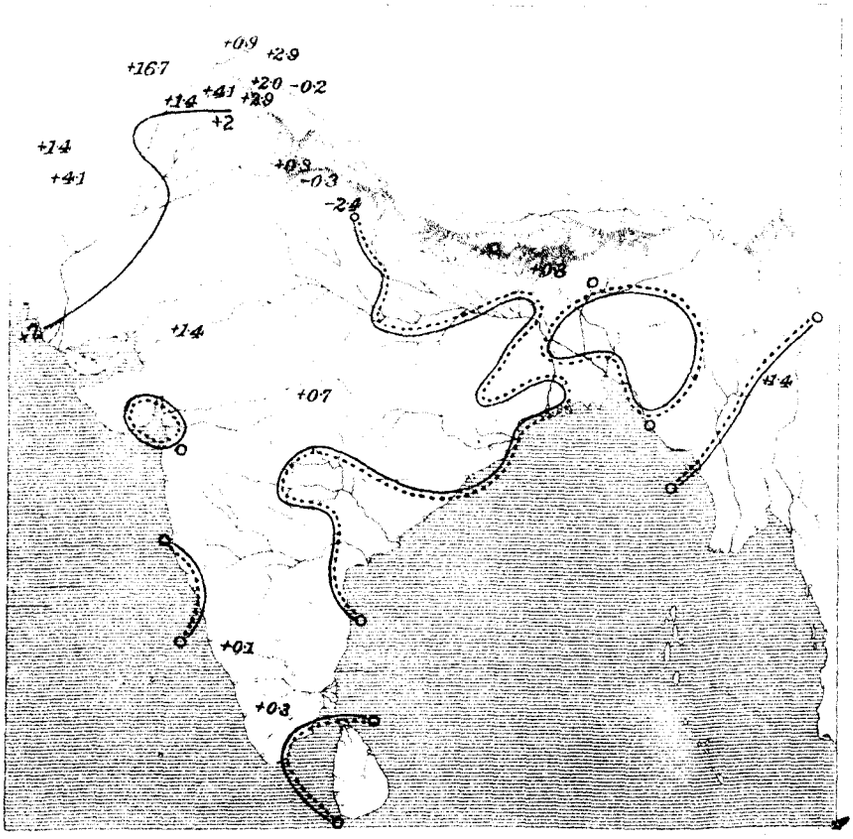


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO BY S & M

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

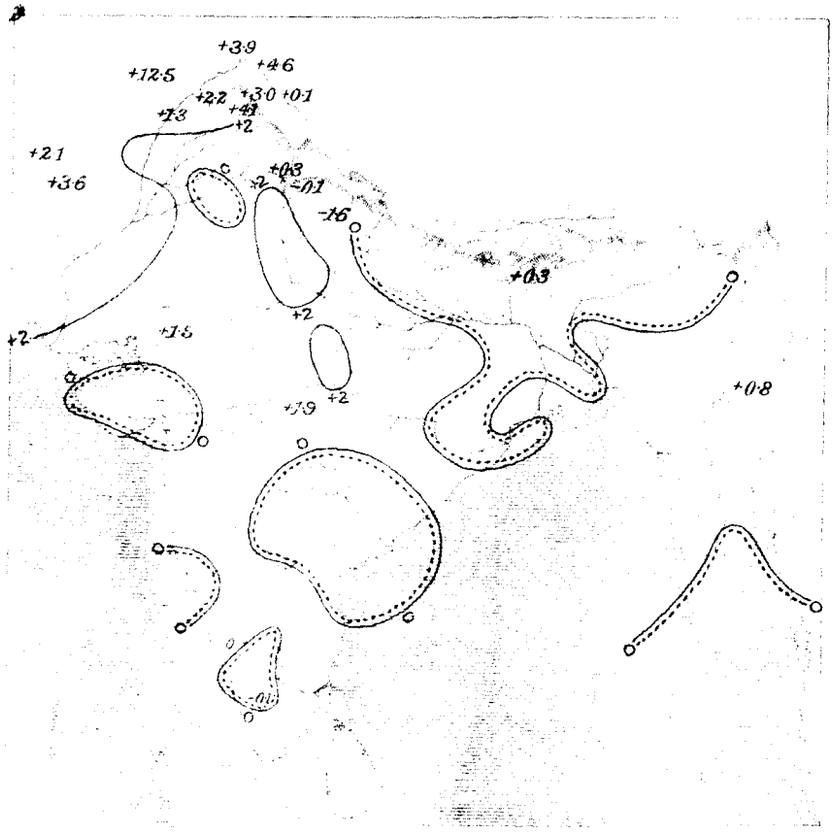


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

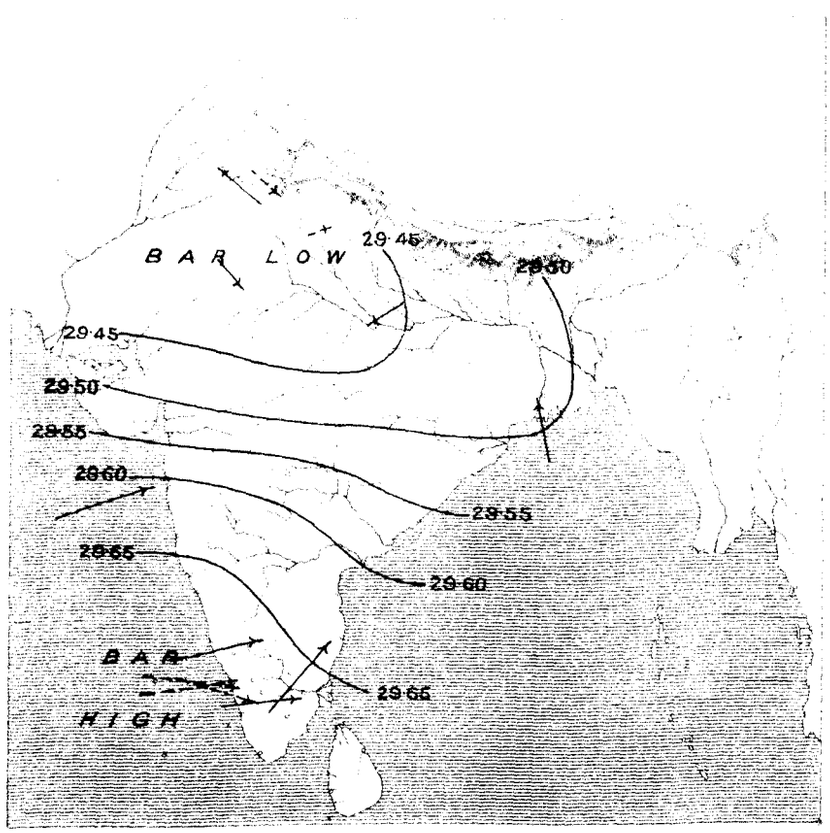


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

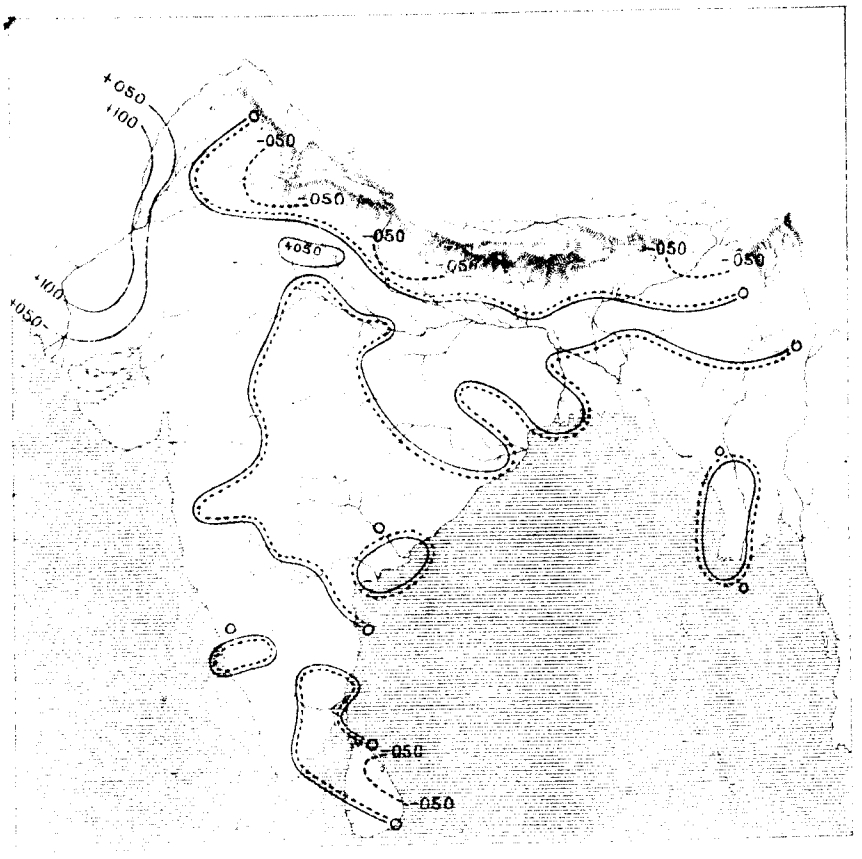
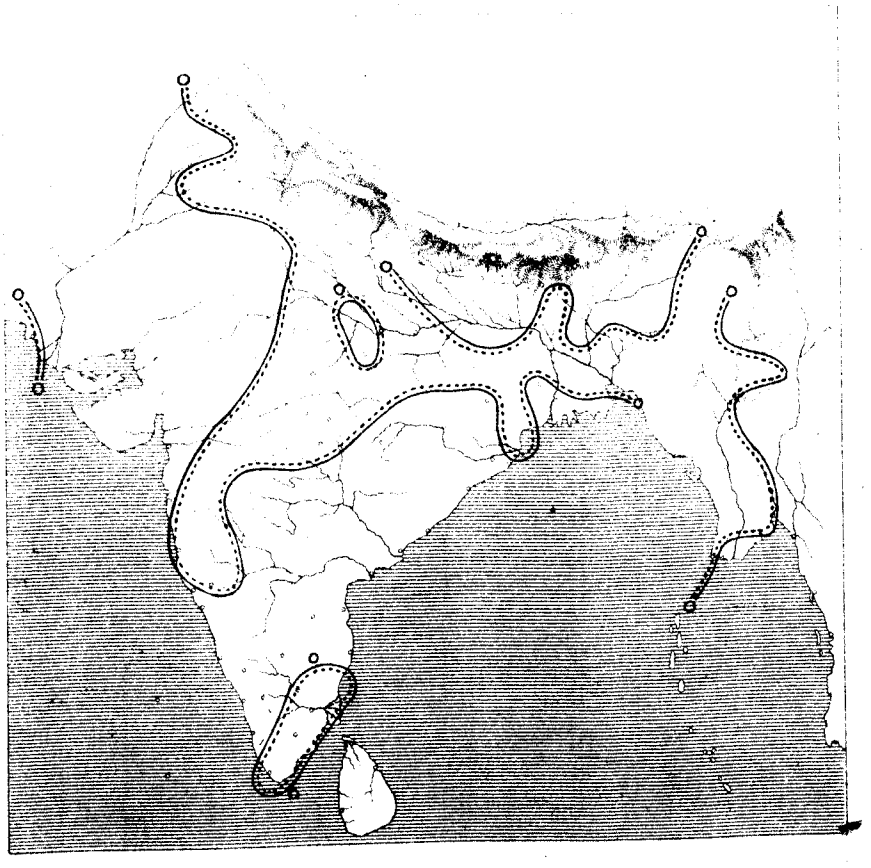


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.



LITHO. BY S.S. MUNDLE.

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

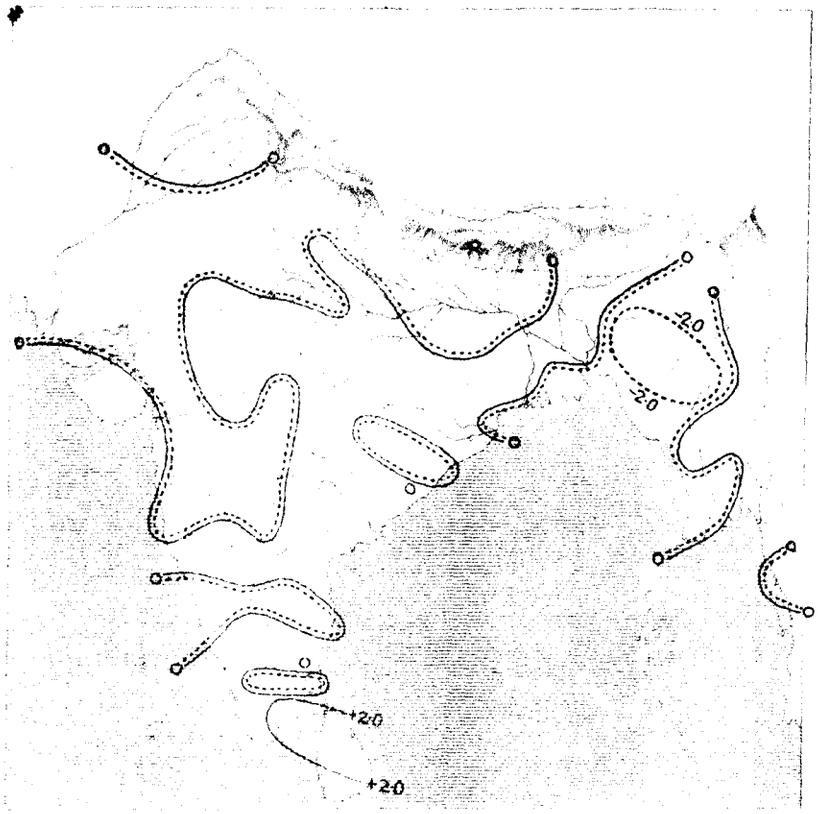
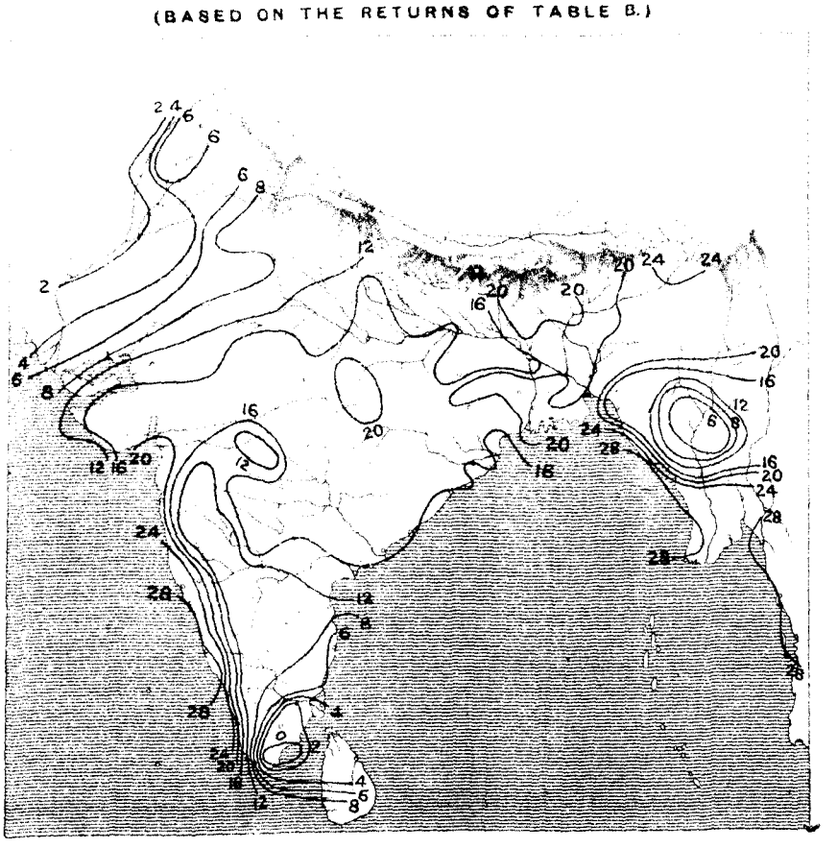
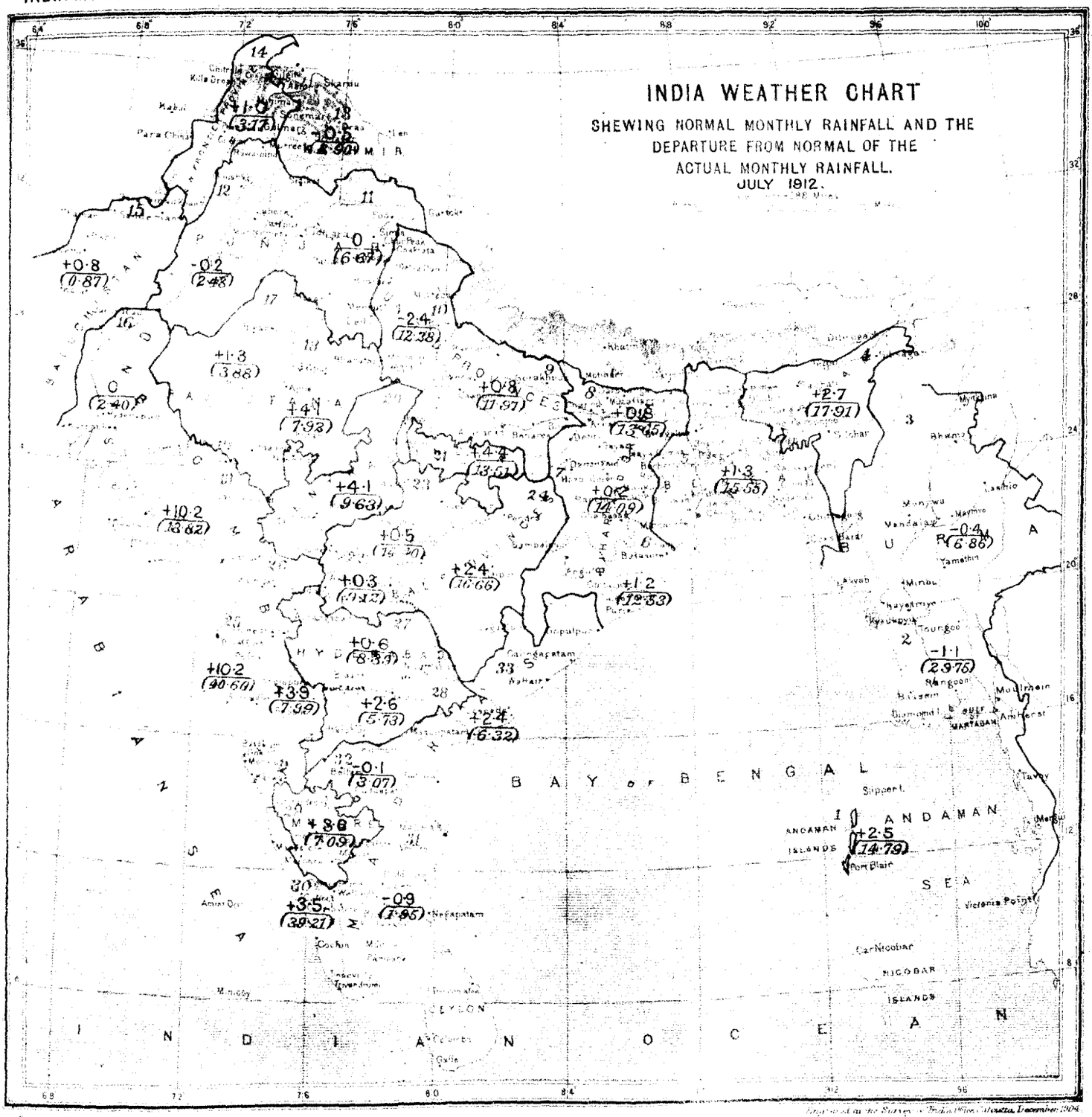


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)





Reg. No. 4195 a. (1)—L. M.—1912. Engraved at the Survey of India Office, Calcutta, December 1904.

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 monthly 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
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

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, AUGUST, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of August, 1912, is based on observations taken daily at 8 hrs. at 220 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 18 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. The monsoon was on the whole somewhat more active than usual, and, although an almost complete break in the rains obtained over north-west and central India between the 12th and the 23rd, the total amount of precipitation recorded in the plains of India exceeded the normal by 7 per cent. Three disturbances appeared during the month over the Bay and travelled inland. Although feeble barometrically they were instrumental in concentrating the activity of the monsoon in the belt of country including Ganjam, Orissa, Chota Nagpur, the Central Provinces, Central India West, Rujputana and Gujarat, to the detriment of the areas lying to the north and south.

Of the other climatic elements cloud inclined to be low in most places, while temperature and humidity differed but little from the normal.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—Solar observations were made on all days during the month excepting two, and on six other days prominences could not be observed.

Sunspots.—Only two small spots were observed, one on the 11th and other on the 28th, neither of them lasting more than a day. They both appeared in the southern hemisphere at latitude 6°.

Prominences.—There were 42 large and 2 eruptive prominences recorded during the month, but no metallic prominences were observed. The greatest height attained was 170″ and occurred on the 31st when a very large prominence was photographed extending over nearly 30° of the sun's south-west limb, and which was slowly rising without altering its general shape. The heights attained at different times were as follow :—

at 8h.	11m.	the height was	120″
„ 9h.	11m.	„ „ „	150″
„ 9h.	45m.	„ „ „	100″
„ 10h.	17m.	„ „ „	170″

Magnetic disturbances.—Moderate magnetic disturbances were recorded on the following dates :—1st, 6th, 17th, 19th, 27th to 28th. An approximate interval of the sun's rotation period separates the first and the last disturbances, and the same interval may be traced back to moderate disturbances that occurred on July 4th, June 8th to 11th, and May 12th to 14th, the mean interval being

26·62 days. The mean synodic rotation period of the solar equator derived from spots is 26·80 days.

Seismological records.

TABLE 1.

No.	Date.	P. T. commencement. G. M. T.	L. W. commencement. G. M. T.	Maximum. G. M. T.	End. G.M. T.	Duration. G. M. T.	Maximum amplitude.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	h. m.	m m.	
52	Aug. 3	...	9 16·0	9 18·5	9 28·0	0 12·0	0·6=0·2	No P.T.S.
53	„ 6	13 28·2	13 36·3	13 38·4	15 26·0	1 57·8	4·8=2·0	
54	„ 6	21 23·6	...	...	22 37·9	1 14·3	...	Widening of line.
55	„	1 38·7	1 46·4	2 06·2	5 19·0	3 40·3	17=7·3	
56	„ 10	22 54·0	...	...	23 17·2	0 23·2	...	Widening of line.
57	„ 17	19 20·8	19 28·2	19 48·1	22 28·6	3 07·8	5·5=2·4	
58	„ 21	17 42·8	...	56·4 ...	18 19·7	0 36·9	5·2=2·3 ...	Widening of line.
59	„ 23	14 08·2	14 12·3	14 13·5	15 10·0	1 01·8	4·5=1·9	
60	„ 23	21 51·3	21 53·1	21 57·4	22 13·6	0 22·3	1·0=0·4	

J. EVERSHED,
Director,
Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of August, 1912, the traces showed 10 calm days, 19 days of small and 2 days of moderate disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 3rd, 4th, 13th, 26th, and 30th.

The following table represents the magnetic character of each day during the month :—

TABLE 2.

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

C=calm ; S=small ; M=moderate ; G=great ; V. G.=very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follow :—

Easterly declination . . .	0° 50′ 44″
Horizontal force . . .	0· 3 869 C. G. S. unit.
Vertical force	0·16376 C. G. S. unit.
Inclination	23° 57′·0
Inclination (observed) . . .	23° 55′·3
Horizontal force range . .	0·00026 C. G. S. unit.
Horizontal force summed range .	0·00171 C. G. S. unit.
Declination range . . .	4′·1
Declination summed range .	16′·9.

(NOTE :—Summed range means sum without regard to sign of 24 ordinates of the diurnal inequality).

Seismic disturbances.

TABLE 3.

Date.	Commencement.		Maximum.		End.		Maximum amplitude.	Duration.	
1912.	h.	m.	h.	m.	h.	m.	mm.	h.	m.
August 6	13	33·1	13	41·9	14	20·1	1·5	0	47·0
„ 9	1	37·3	Traces overlap.		5	1·8	Traces overlap.	3	24·5
„ 17	19	21·1	19	34·6	21	24·5	4·4	2	3·4
„ 21	17	48·8	18	4·8	18	19·4	0·4	0	30·6
„ 23	14	6·6	14	12·2	14	45·6	1·3	0	39·0
„ 22	21	48·4	21	48·8	22	31·6	1·1	0	43·2
„ 31	23	5·4	23	10·9	23	36·2	0·7	0	30·8

All times given above denote G. M. T.
Sensibility to tilt 1 mm.= 0″·37.

N. A. F. MOOS,
Director,
Bombay & Alibag Observatories.

CALCUTTA OBSERVATORY.

5.—*List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. commencement G. M. T.	L. W. commencement G. M. T.	Maximum G. M. T.	End G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
August 3rd	9 16·9	...	9 20·4	10 5·7	0 48·8	1·00	
„ 6th	13 21·9	13 37·7	13 42·8	14 37·2	1 15·3	3·00	

Date.	P. T. Commencement G. M. T.	L. W. Commencement G. M. T.	Maximum G.M. T.	End G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
	h. m.	h. m	h. m.	h. m.	h. m.	mm.	
August 6th	21 23·5	21 33·6	21 36·7	22 52·0	1 28·5	0·75	
	*8-8-12	9-8-12	9-8-12	9-8-12	...	†	* Begins with air tremor. † Measured from base line.
„ 8th & 9th.	21 13·9	1 46·4	2 4·7	6 9·7	8 55·8	16·00	
„ 15th	13 58·6	...	14 6·7	14 19·9	0 21·3	0·50	
„ 17th	19 19·4	19 24·5	19 43·3	22 34·1	3 14·7	12·00‡	‡ Measured from base line.
„ 18th	21 47·9	...	21 51·3	22 6·2	0 18·3	0·50	
„ 21st	17 41·3	...	17 46·4	18 20·4	0 39·1	0·75	
„ 23rd	13 40·3	14 3·1	14 4·7	15 1·6	1 21·3	16·50§	§ Measured from base line.
„ 23rd	21 46·4	...	21 49·9	22 16·9	0 30·5	2·00	
„ 31st	22 49·1	22 56·7	22 58·8	23 36·9	0 47·8	0·75	

Sensibility 1 mm. = 0·38″ of tilt.

E. P. HARRISON,
Offg. Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. List of earthquakes recorded by the Omori-Ewing seismographs :—

TABLE 5.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Maximum amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
August		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
3rd	A	19 39·8	?	?	19 39·9	20 31·2	0 51·4	0·8	Local.
3rd	B	19 39·8	?	?	19 39·9	20 30	0 50	1·1	Do.
6th	A	13 33·5	13 38·0	13 42·1	13 49·0	14 45	1 12	0·9	
6th	B	13 33·5	13 38·2	13 41·6	13 42·4	14 32	0 59	1·7	
6th	A	20 39·4	21 35·0	21 38·7	21 38·8	22 21	1 42	0·3	
6th	B	20 39·4	21 34·8?	21 41·8?	21 52·4	22 58	2 19	0·8	
9th	A	1 36·9	1 43·1	1 51·5	?	3 38	2 1	?	Mass touched stops :— Max. at about 1 hr. 53 mins.
9th	V	1 36·9	?	1 53·2?	1 57·4	2 39	1 2	2·2	
15th	A	13 49·0	?	?	13 56·7	14 5	0 16	Very small.	Not shown by B.
15th	V	13 48·9	?	?	13 49·1	13 50·7	0 2	0·6	
17th	A	19 21·4	19 28·8	19 33·8	19 46·8	21 13	1 52	2·5	
17th	B	19 21·2	19 28·7	19 34·8	19 38·8	20 58	1 37	4·7	
17th	V	19 21·2	?	?	19 21·9	20 13	0 52	0·7	
18th	A	13 35·1	13 36·3	13 37·7	13 36·3	13 44	0 9	Small.	
18th	V	13 35·5	?	?	13 36·1	13 38	0 3	„	
23rd	A	13 59·3	14 1·8	14 3·8	14 2·0	14 50	0 51	3·8	
23rd	B	13 59·3	14 1·8	14 3·8	13 59·5	14 48	0 49	11·0	
23rd	V	13 59·3	?	14 4·3	14 6·3	14 29	0 40	2·3	
23rd	A	21 43·3	21 44·1	21 44·7	21 44·7	22 38	0 55	1·4	
23rd	B	21 43·3	21 44·2	21 44·8	21 44·8	22 13	0 30	2·5	
23rd	V	21 43·3	21 44·2	21 44·7	21 45·8	22 14	0 31	8·5	
25th	A	1 3·0	1 3·8	1 4·5	1 4·6	1 33	0 30	0·5	
25th	B	1 3·1	1 3·9	1 4·5	1 4·5	1 18	0 15	0·8	

August 3rd A Slight tremors from about 9 hrs. 13 mins. to about 9 hrs. 49 mins.
„ 3rd B „ „ „ „ 9 hrs. 17 „ „ 9 hrs. 29 mins.
„ 9th B Instrument not working owing to mass bearing against stops.
„ 10th A Slight tremors from about 9 hrs. 34 mins. to about 10 hrs. 26 mins.
„ 10th B „ „ „ „ 9 hrs. 31 mins. „ 10 hrs. 20 mins.
„ 18th B Slight disturbance from 13 hrs. 35·9 mins. to 13 hrs. 38 mins.
„ 18th A „ „ „ about 21 hrs. 39 mins. to about 22 hrs. 19 mins.
(Hidden by other disturbances on B, trace.)
„ 21st A „ tremors from about 17 hrs. 36 mins. to about 18 hrs. 13 mins.
„ 21st B „ „ „ „ 17 hrs. 44 mins. „ 18 hrs. 16 mins.
„ 22nd A „ disturbance from 8 hrs. 41·3 mins. to 8 hrs. 50·7 mins.
„ 22nd B „ „ „ 8 hrs. 39 mins. to 8 hrs. 46·9 mins.

All times are given in G. M. T.
A = E—W component.
B = N—S component.
V = Vertical component.
Magnification of A = 15, B = 15, V = 60.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquakes.	Duration.	Intensity Rossi-Forel scale.	No. of shocks.	REMARKS.
	Aug.	h. m.	Sec.			
Mount Abu . .	3rd	7 30	10	3	1	
Jodhpur . .	4th	16 59	40	5	1	
Shillong . . .	6th	16 36	1	3	1	
Ditto . .	15th	15 46	1	3	1	
Drosh . . .	19th	0 57	3	6	2	
Ditto . . .	20th	18 0	3	6	3	
Ghora Gali (Murree)	23rd	21 0	9	5	2	
Drosh . . .	23rd	21 30	35	6	4	
Cherat . . .	23rd	21 40	10	6	1	
Gulmarg . .	23rd	21 41	60	7	4	

Place at which felt.	Date.	G. M. T. of earthquake.		Duration.	Intensity Rossi Forel scale.	No. of shocks.	REMARKS.
	Aug.	h.	m.	sec.			
Bannu . . .	23rd	21	42	...	...	1	Felt also at Sheikhudin.
Rawalpindi . .	23rd	21	42	10	7	3	
Lahore . .	23rd	21	43	40	6	2	
Dera Ismail Khan .	23rd	21	44	6	7	1	
Mansihra (Hazara Dist.)	23rd	21	45	60	6	1	
Sialkot . . .	23rd	21	45	50	5	11	
Srinagar . .	23rd	21	45	75	7	3	
Khushab . .	23rd	21	50	10	4	1	
Multan . .	23rd	21	55	3	4	4	
Salonah . . .	24th	10	1	5	5	1	
Borjuli . .	24th	10	5	1	5	1	
Mymensingh . .	24th	10	5	2	3	3	
Shillong . . .	24th	10	6	1	5	1	
Gulmarg . .	25th	1	0	20	6	2	
Skardu . .	25th	1	0	8	6	3	
Srinagar . . .	25th	1	5	75	6	2	
Drosh . . .	26th	22	0	3	6	2	

Solar radiation.—No observations with the Angstrom's Pyrheliometer were possible during the month owing to overcast skies.

W. A. HARWOOD,
Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. Barometric pressure was normal or almost so at all the three representative stations. The air movement was of about the average strength at Mauritius and Zanzibar, but was very weak at Seychelles.

Weather was dry at all the three places, particularly at Seychelles which received only about 30 per cent. its normal supply of rainfall.

The rise of pressure which had occurred in the Indian Ocean since July was prejudicial to the prospects of rainfall in India during September.

TABLE 7.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	0	+·010	—·007
Actual mean wind direction .	S 63° E	S 22° W	S 30° E
Normal mean wind direction .	S 66° E	S 1° W	S 35° E
Actual mean wind velocity (miles per diem).	279	118	227
Normal mean wind velocity (miles per diem).	254	120	316
Rainfall departure from normal .	—0·47	—0·68	—1·75

Depressions and cyclonic storms.

9. The storm which formed in the Bay on the last day of July was shown on the 1st of August as a depression having a pressure deficiency of a little over "·150" with its centre just off the Orissa coast between Gopalpur and False Point. From this position it moved very slowly inland and its centre only reached the neighbourhood of Jubbulpore on August 5th. During the next twentyfour hours it filled up rapidly and had almost entirely disappeared on the following morning. This storm gave some heavy falls of rain in the Central Provinces.

On August 7th a feeble depression appeared off Gopalpur and passed inland. It only existed three days, but gave useful rain over the central parts of the country and north-west India. The third depression appeared off the north Madras coast on August 24th and for the first four days of its existence it was only a large area of low pressure extending over the north-west of the Bay and the north-east of the Peninsula. On August the 28th, however, it concentrated over the Orissa coast and adjacent sea, and from this position it moved in a west-north westerly direction having its centre near to Ranchi, Jhansi and Jaipur on August 29th, 30th and 31st respectively. This depression gave good rain over the whole of northern India with the exception of the Punjab, Sind and Baluchistan.

Pressure.

10. The mean pressure for the month was slightly below normal over the whole of India with the exception of the Punjab and Rajputana where it was a little in excess. The departures from normal were too small to affect the weather materially.

TABLE 8.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
Burma	—·013
Assam	—·011
Bengal	—·012
Bihar and Orissa	—·017
United Provinces	—·006
Punjab	+·005
North-West Frontier Province	—·020
Sind	—·008
Rajputana	+·004
Bombay	—·011
Central India	—·004
Central Provinces	—·010
Hyderabad	—·010
Mysore	—·003
Madras	—·012

The vertical gradient between Quetta and Jacobabad was less than usual and between Darjiling and Dhubri somewhat more; with these exceptions the vertical gradient was nearly normal everywhere. The large defect in the gradient between Murree and Peshawar must be neglected in view of the fact that if Rawalpindi is substituted for Peshawar the negative vertical gradient becomes positive by ·01″.

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B—A.
	″		″	″
Quetta	+·008	Jacobabad	—·009	—·017
Leh	0	Lahore	+·001	+·001
Murree	0	Peshawar	—·022	—·022
Simla	+·020	Ludhiana	+·011	—·009
Chakrata	+·011	Roorkee	+·009	—·002
Darjiling	—·023	Dhubri	—·008	+·015
Mount Abu	+·003	Deesa	+·001	—·002
Pachmarhi	—·010	Khandwa	—·009	+·001
Kodaikanal	—·010	Madura	—·003	+·007

Temperature.

11. During the first few days of the month temperature was below normal in the extreme north, the chief defect being in the maximum temperatures of the Punjab. After the 6th the mean temperature seldom departed largely from the normal, but on some days small areas having excesses or defects between 4° and 8° would be shown on the maps. On the whole of the month the mean temperature of no division departed by more than 2° from the average and very few by as much as 1°.

TABLE 10.

SUB-DIVISION.	ACTUAL TEMPERATURE.					DEPARTURE FROM NORMAL OF		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	84·3	77·3	80·8	6·9	12·6	—1·0	—0·3	—0·7
2. Lower Burma	84·2	75·3	79·8	8·9	14·6	—0·1	+0·4	—0·5
3. Upper Burma	89·6	76·3	82·9	13·3	22·1	—0·7	—0·1	—0·6

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
4. Assam	88·5	77·2	82·8	11·3	20·8	+0·3	0	+0·3
5. Bengal	88·1	78·4	83·3	9·7	17·2	+0·7	+0·3	+0·4
6. Orissa	87·7	78·1	82·9	9·6	16·9	0	+0·3	—0·3
7. Chota Nagpur	87·5	76·1	81·7	11·3	18·9	—0·1	+0·2	—0·3
8. Bihar	89·3	78·6	84·0	10·7	19·8	+0·4	+0·1	+0·3
9. United Provinces, East	90·3	77·8	84·0	12·5	20·9	+0·5	0	+0·5
10. Do., West	90·5	78·2	84·4	12·3	21·0	+0·3	+0·3	0
11. Punjab, East and North	93·4	78·1	85·7	15·3	25·7	—1·2	—0·1	—1·1
12. Do., South-west	100·6	81·9	91·3	18·7	30·6	—0·3	+0·4	—0·7
13. Kashmir	81·0	57·0	69·0	24·0	38·3	+0·5	—0·2	+0·7
14. North-West Frontier Province	98·3	79·7	89·0	18·7	31·1	—1·8	+0·3	—2·1
15. Baluchistan	96·5	68·8	82·6	27·7	38·7	+0·3	—1·1	+1·4
16. Sind	96·1	80·6	88·4	15·5	24·4	+1·5	+1·6	—0·1
17. Rajputana, West	94·7	77·9	86·3	16·7	26·9	—1·2	—1·5	+0·3
18. Do., East	87·9	76·4	82·2	11·4	19·8	—2·7	—1·3	—1·4
19. Gujarat	87·2	76·6	81·9	10·5	17·6	—0·9	+0·1	—1·0
20. Central India, West	82·7	71·9	77·3	10·7	18·9	—1·3	+0·1	—1·4
21. Do., East	86·7	76·9	81·7	9·8	16·8	—0·3	+0·5	—0·8
22. Berar	83·8	72·3	78·1	11·5	19·9	—1·7	+0·5	—2·2
23. Central Provinces, West	84·4	73·5	79·0	10·9	19·3	—0·4	+0·1	—0·5
24. Do., East	84·1	73·5	78·9	10·5	19·3	—1·7	—0·1	—1·6
25. Konkan	83·3	75·8	79·6	7·5	12·5	+0·2	+0·2	0
26. Bombay Deccan	83·6	69·8	76·7	13·8	22·1	—0·5	+0·3	—0·8
27. Hyderabad, North	83·3	70·5	76·9	12·8	21·2	—1·5	+0·1	—1·6
28. Do., South	86·7	72·7	79·7	14·1	22·6	—1·0	+0·2	—1·2
29. Mysore	80·9	66·7	73·8	14·2	21·6	—0·6	+0·6	—1·2
30. Malabar	82·7	74·5	78·5	8·2	14·1	—0·4	+0·8	—1·2
31. Madras, Southeast	94·2	76·4	85·3	17·8	27·3	+1·1	+0·7	+0·4
32. Do., Deccan	92·1	75·3	83·7	16·8	26·0	+0·7	+0·6	+0·1
33. Do. Coast, North	89·8	78·1	84·0	11·7	22·7	0	—0·1	+0·1

TABLE 11.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	—0·3	+0·2	0
Assam	+0·3	0	+0·2
Bengal	+0·7	+0·3	+0·5
Bihar and Orissa	+0·2	+0·2	+0·2
United Provinces	+0·4	+0·2	+0·3
Punjab	—0·9	+0·1	—0·4
North-West Frontier Province	—1·8	+0·3	—0·8
Sind	+1·5	+1·6	+1·6
Rajputana	—1·9	—1·5	—1·7
Bombay	—0·5	+0·2	—0·1
Central India	—0·8	+0·3	—0·3
Central Provinces	—0·9	+0·1	—0·4
Hyderabad	—1·1	+0·1	—0·5
Mysore	—0·6	+0·6	0
Madras	+0·5	+0·5	+0·5

Winds.

12. During the month the winds were practically normal in velocity, direction and steadiness over the greater part of the country, and in the few places where abnormalities occurred they were irregular and varied from station to station.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	—0·9	— 8
Assam	—0·1	+ 4
Bengal	—0·7	— 6
Bihar and Orissa	+0·4	— 6
United Provinces	—0·3	— 1
Punjab	—0·1	— 5
North-West Frontier Province	—0·6	+ 1
Sind	—2·0	—14
Rajputana	+0·3	—14
Bombay	—1·3	+ 1
Central India	—0·8	— 7
Central Provinces	+0·6	+ 5
Hyderabad	—1·0	0
Mysore	+0·7	+ 8
Madras	+0·4	— 2

Humidity and cloud.

13. There were no departures from the normal of importance in either the relative or absolute humidities. Cloud was in defect in Assam where the amount was only 7·2 instead of 9·2, and in slight defect in the United Provinces and Sind; in Central India there was a slight excess.

TABLE 13.

Division.	Hygrometry, 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	90	+ 1	·869	—·003	8·1	0
Assam	90	— 3	·937	—·002	7·2	—2·0
Bengal	89	— 1	·964	+·006	7·8	—0·4
Bihar and Orissa	87	— 1	·926	+·001	7·1	—0·5
United Provinces	84	— 2	·930	—·002	6·2	—0·9
Punjab	76	+ 1	·872	—·003	3·8	—0·5
North-West Frontier Province.	77	+ 5	·920	+·023	2·3	—0·4
Sind	76	0	·897	+·036	4·2	—0·8
Rajputana	79	+ 4	·814	—·007	6·4	0
Bombay	87	+ 3	·834	+·024	7·9	+0·2
Central India	91	+ 1	·839	+·015	8·3	+0·6
Central Provinces	86	— 1	·779	—·013	7·9	—0·1
Hyderabad	81	+ 1	·718	—·009	7·5	—0·8
Mysore	85	+ 3	·636	+·007	8·8	+0·4
Madras	79	+ 1	·812	+·005	6·9	+0·1

Rainfall.

14. Rainfall was in defect by 10 per cent. or more in the following sub-divisions: Bay Islands, Punjab South-west, Kashmir, Baluchistan, Sind, Central India East, Hyderabad North, and Madras South-east; but over India taken as a whole the rainfall was 7 per cent. above normal, the largest excesses having occurred in Rajputana, Gujarat, the Central Provinces, Berar, Mysore, Malabar and Madras Coast, North.

TABLE 14.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	16·5	20·9	11·67	13·83	—2·16	— 16
2. Lower Burma	24·8	24·0	26·56	26·68	—0·12	0
3. Upper do.	12·3	10·8	9·14	7·39	+1·75	+ 24
4. Assam	16·7	17·7	16·64	16·81	—0·17	— 1
5. Bengal	17·6	16·5	13·65	14·59	—0·94	— 6
6. Orissa	16·3	15·1	13·84	12·24	+1·60	+ 13
7. Chota Nagpur	18·4	16·4	13·96	13·35	+0·61	+ 5
8. Bihar	15·3	13·8	12·03	11·86	+0·17	+ 1
9. United Provinces, East	13·5	12·	10·46	11·35	—0·89	— 8
10. Do., West	12·1	11·8	10·67	11·71	—1·04	— 9
11. Punjab, East and North	7·9	6·7	7·90	6·51	+1·39	+ 21
12. Punjab, South-west	2·4	2·8	1·68	2·08	—0·40	— 19
13. Kashmir	5·5	4·9	3·02	3·51	—0·49	— 14
14. North-West Frontier Province	5·2	4·1	3·81	3·29	+0·52	+ 16
15. Baluchistan	1·0	1·3	0·52	0·83	—0·31	— 37

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
16. Sind	2·9	2·2	1·89	2·21	—0·32	— 14
17. Rajputana, West	6·9	4·3	4·57	3·32	+1·25	+ 38
18. Do., East	12·1	9·1	9·96	7·32	+2·64	+ 36
19. Gujarat	13·9	11·1	10·67	8·40	+2·27	+ 27
20. Central India, West	15·4	12·3	10·64	10·23	+0·41	+ 4
21. Do., East	15·6	14·6	10·74	13·05	—2·31	— 18
22. Berar	12·1	10·1	8·95	6·68	+2·27	+ 34
23. Central Provinces, West	15·3	13·7	14·12	11·78	+2·34	+ 20
24. Do., East	16·9	15·1	20·67	13·97	+6·70	+ 48
25. Konkan	26·9	24·7	22·53	24·84	—2·31	— 9
26. Bombay Deccan	10·0	9·7	5·59	5·53	+0·06	+ 1
27. Hyderabad, North	9·8	11·4	6·40	7·91	—1·51	— 19
28. Do., South	10·7	10·4	6·90	6·43	+0·47	+ 7
29. Mysore	10·5	8·5	6·73	5·42	+1·31	+ 24
30. Malabar	25·8	21·2	30·55	20·64	+9·91	+ 48
31. Madras, South-east	4·8	5·6	2·80	3·77	—0·97	— 26
32. Do., Deccan	7·5	6·8	4·53	4·04	+0·49	+ 12
33. Do. Coast, North	11·8	10·2	9·93	6·88	+3·05	+ 44

TABLE 15.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	17·25	16·37	+0·88	+ 5
Assam	16·64	16·81	—0·17	— 1
Bengal	13·65	14·59	—0·94	— 6
Bihar and Orissa	12·80	12·23	+0·57	+ 5
United Provinces	10·56	11·52	—0·96	— 8
Punjab	6·61	5·59	+1·02	+ 18
North-West Frontier Province	3·81	3·29	+0·52	+ 16

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Sind	1·89	2·21	—0·32	— 14
Rajputana	8·09	6·24	+1·85	+ 30
Bombay	10·30	9·96	+0·34	+ 3
Central India	10·68	11·19	—0·51	— 5
Central Provinces	13·47	10·19	+3·28	+ 32
Hyderabad	6·67	7·10	—0·43	— 6
Mysore	6·73	5·42	+1·31	+ 24
Madras	7·59	6·23	+1·36	+ 22
Mean of India	10·56	9·85	+0·71	+ 7

Snowfall.

I.—AFGHANISTAN.

15. No information has arrived.

II.—NORTH-WEST FRONTIER PROVINCE.

No information has arrived.

III.—KASHMIR.

Reports from *Srinagar, Gulmarg, Kargil, Skardu* and *Leh* state that no snow has fallen during the month.

IV.—PUNJAB.

Kilba—No snow fell.

V.—UNITED PROVINCES.

Almora—The total fall of the month as reported by the patwaris amounted to about 5½ feet on Malla Darma, 2¾ feet on Malla Johar, 4 feet on Malla Danpur, 3¼ feet on Chaudas, and 5½ feet on Byans.

The snow line descended to a distance of half a mile below the perpetual snow.

SUMMARY.

16. There was no widespread heavy snowfall during the month and the previous accumulation was melting fast.

G. C. SIMPSON.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 18 stations in India, etc., in August, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

Tabl

Abstract of observations taken at 10 hrs. and 16 hrs. a

Number of subdivision.	Station.	Elevation of barometer cistern above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
5	Calcutta . .	21	29·615	29·517	·098	29·568	—·023	29·536	88·4	78·9	9·5	92·2	75·5	16·7	85·0	84·9	83·4	+1·0	77·3	80·8	80·7	79·[illegible]
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad . .	309	·310	·196	·114	·256	—·010	·515	90·1	78·3	11·8	95·0	75·8	19·2	85·8	88·1	83·2	0	77·0	79·7	80·5	79·1
	VI.—Punjab.																					
11	Lahore . .	702	28·894	28·793	·101	28·836	+·002	·483	95·5	79·6	15·9	102·1	73·7	28·4	87·9	93·2	86·6	— 0·5	76·5	80·1	81·7	79·4
	IX.—Rajputana.																					
18	Jaipur . .	1,431	·228	·136	·092	·182	+·003	·537	89·7	75·8	13·9	95·8	73·1	22·7	83·5	86·7	81·1	− 1·2	73·9	76·9	77·9	76·[illegible]
	X.—Bombay.																					
25	Bombay . .	37	29·754	29·680	·074	29·715	—·014	·692	84·5	77·4	7·1	87·0	75·4	11·6	81·4	81·7	79·8	+ 0·4	75·1	77·8	77·7	76·9
	XIV.—Mysore.																					
29	Bangalore . .	3,021	26·887	26·786	·101	26·846	+·002	·692	82·0	65·9	16·1	88·3	63·8	24·5	74·5	79·4	72·0	+ 0·2	64·9	68·4	69·9	67·[illegible]
	XV.—Madras.																					
[illegible]	Pudukkottai .	318	29·518	29·386	·132	29·452		·693	98·1	78·3	19·8	104·0	72·9	31·1	89·1	94·3	88·2			77·6	79·3	
	Madras . .	22	·771	·648	·123	·719	—·027	·671	95·9	77·7	18·2	102·1	72·1	30·0	87·4	90·4	85·7	+ 1·2	75·1	79·0	80·3	78·[illegible]
	Hill stations excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	23·040	22·986	·054	23·011	+·014	22·973	66·2	59·5	6·7	68·9	57·5	11·4	63·1	64·5	62·3	− 0·5	57·6	61·3	62·7	60·[illegible]
	[illegible]arain . .		·063	23·002	·061	·030		·992	70·5	57·7	12·8	76·0	54·0	22·0	66·1	67·0	63·6			61·7	62·5‡	
	K[illegible]bagh . .		20·116	20·070	·046	20·090		20·052	55·6	46·9	8·7	58·8	43·7	15·1	53·0	53·9	50·7			51·5	51·6	
	Mu[illegible]eswar . .	7,592	22·763	22·699	·064	22·729		22·687	68·0	55·6	12·4	72·8	52·0	20·8	62·6	64·3	61·3		54·7	61·0	62·3	59·3
	Kat[illegible]andu . .	4,388	25·549	25·457	·092	25·501	+·064†	25·455	83·1	68·6	14·5	87·6	66·9	20·7	78·0	78·6	75·3	+0·8†	66·6	71·6	72·1	70·1
	Oot[illegible]amund .	*7,327*	23·021	22·957	·064	22·988		22·924	62·3	51·5	10·8	68·2	47·7	20·5	58·5	57·8	56·4		50·5	55·7	55·4	53·9
	Kod[illegible]ikanal . .	7,688	22·797	·739	·058	·768		·703	63·5	52·5	11·0	69·2	49·5	19·7	60·7	59·1	58·0		49·5	56·3	56·4	54·1
	D[illegible]abetta . .	8,539?	·023	21·961	·062	21·991		21·928	56·2	47·5	8·7	61·8	44·5	17·3	52·9	52·8	51·4		45·2	51·7	51·7	49·5
	Extra India.																					
	Diego Garcia .																					
	Seychelles . .	15	30·005	29·922	·083	29·966	—·007†	29·905	81·0	76·4	4·6	82·9	73·7	9·2	79·0	80·2	77·2	+0·6†	69·7	73·5	73·9	72·4
	Mauritius . .	181				30·014	0	30·145									67·6	—0·3				62·[illegible]

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.

8 stations in India, etc., in August, 1912.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind direction.											Wind steadiness.		Wind velocity.		Rainfall.		Station.	Number of subdivision.
														Total number of 10 hrs. and 16 hrs. Number of 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.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·914	·963	·988	·967	0	93	83	83	87	− 1	8·6	8·9	8·7	0	2		3	9	14	13	16	3	2	S 10° E	S 2° E	50	56	83*	113	10·95	1·23	Calcutta.	5
																															V.—United Provinces of Agra and Oudh.	
·912	·937	·938	·941	−·005	94	76	71	83	− 1	8·4	7·0	7·7	−0·4	7	3	12	16	1	1	3	13	6	N 26° E	N 6° E	21	5	84	158	9·12	3·05	Allahabad.	9
																															VI.—Punjab.	
·872	·921	·929	·931	+·047	86	70	61	74	+ 3	3·1	3·5	3·3	−0·7	22	2	3	2	17	4	2	6	4	S 52° E	S 78° E	27	24	41	67	8·00	3·36	Lahore.	11
																															IX.—Rajputana.	
·819	·847	·847	·849	+·033	91	74	68	80	+ 2	7·4	7·5	7·5	−0·1	3	3	7	7	1	1	6	19	15	N 59° W	N 69° W	40	42	91*	113	13·00	4·10	Jaipur.	18
																															X.—Bombay.	
·837	·903	·895	·886	+·001	89	84	83	86	− 1	8·2	8·8	8·5	+0·1				1	1		22	33	5	S 76° W	S 81° W	84	79	212*	370	9·90	1·84	Bombay.	25
																															XIV.—Mysore.	
·605	·625	·619	·620	+·007	96	74	63	80	+ 1	9·2	8·2	8·7								17	37	8	S 83° W	S 81° W	89	88	177	199	5·86	1·71	Bangalore.	29
																															XV.—Madras.	
	·790	·799				57	50			5·6	8·3	6·9		6	3			3	2	10	20	18	N 83° W		61		184		3·28	2·30	Pudukkottai.	31
·830	·876	·898	·879	+·013	89	68	64	75	+ 2	6·8	6·5	6·7	−0·2	1			4	5	3	10	34	5	S 75° W	S 36° W	62	56	112*	166	5·53	1·69	Madras.	
																															Hill stations excluding Kashmir and Baluchistan.	
·456	·525	·551	·509	−·017	90	91	91	92	+ 1	8·6	8·8	8·7	−0·2																19·16	3·25	Simla.	
	·505	·520‡				79	78‡			8·5	7·7	8·1																	11·23	2·26	Sarain.	
	·368	·385				91	87			9·7	9·4	9·5		23	13	1		3	7	1	1	13	N 30° W		24		100		15·38	2·92	Kalabagh.	
·418	·520	·541	·493		95	92	90	93		8·4	8·6	8·5		27			3	6	1	1	22	2	S 75° W		27		112		11·65	1·63	Mukteswar.	
·27	·693	·708	·676	−·006	90	73	74	80	− 2	6·7	7·6	7·1	0	60			2						E	N 66° W	2	2	11*	18	12·38	1·75	Katmandu.	
·356	·413	·414	·389		93	85	87	88		9·0	9·3	9·1		3	1						38	20	N 75° W		87		123		4·30	0·78	Ootacamund.	
·327	·411	·430	·389		82	78	86	82		6·9	8·9	7·9			1	1	1	3	1		24	29	N 65° W		72		391*		5·39	1·38	Kodaikanal. (a)	
·279	·370	·372	·340		84	93	93	90		9·2	9·7	9·5		1	2		1			1	35	22	N 71° W		87		448		3·89	0·49	Dodabetta.	
																															Extra India.	
																															Diego Garcia.	
·838	·759	·757	·726	−·021	70	76	73	74	− 4	6·3	6·0	6·1	−0·3†				2	38	20	2			S 30° E	S 35° E	90	89	227*	316	0·81	0·19	Seychelles.	
			·502	−·001				75	+ 4			5·9	+0·8										S 63° E	S 67° E			279*	254	1·75		Mauritius.	

* Uncorrected for scale error. † Departure from old normal. ‡ Mean of 30 days. (a) 2 variable winds.

Table B.—Abstract of observations taken at 8 hrs. at 220 stations in India, etc., in August, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

	Pressure departure from normal.	Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
		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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	—·013	86·4	—0·3	75·7	+0·2	81·1	0	10·7	17·7	—0·9	— 8	90	+ 1	·869	—·003	8·1	0	17·25	16·37	+0·88
Assam	—·011	88·5	+0·3	77·2	0	82·8	+0·2	11·3	20·8	—0·1	+ 4	90	— 3	·937	—·002	7·2	—2·0	16·64	16·81	—0·17
Bengal	—·012	88·1	+0·7	78·4	+0·3	83·3	+0·5	9·7	17·2	—0·7	— 6	89	— 1	·964	+·006	7·8	—0·4	13·65	14·59	—0·94
Bihar and Orissa	—·017	88·3	+0·2	77·8	+0·2	83·1	+0·2	10·5	18·6	+0·4	— 6	87	— 1	·926	+·001	7·1	—0·5	12·80	12·23	+0·57
United Provinces of Agra and Oudh.	—·006	90·4	+0·4	78·0	+0·2	84·2	+0·3	12·4	20·9	—0·3	— 1	84	— 2	·930	—·002	6·2	—0·9	10·56	11·52	—0·96
Punjab	+·005	95·4	—0·9	79·1	+0·1	87·3	—0·4	16·2	27·0	—0·1	— 5	76	+ 1	·872	—·003	3·8	—0·5	6·59	5·59	+1·00
North-West Frontier Province	—·020	98·3	—1·8	79·7	+0·3	89·0	—0·8	18·7	31·1	—0·6	+ 1	77	+ 5	·920	+·023	2·3	—0·4	3·81	3·29	+0·52
Sind	—·008	96·1	+1·5	80·6	+1·6	88·4	+1·6	15·5	24·4	—2·0	—14	76	0	·897	+·036	4·2	—0·8	1·89	2·21	—0·32
Rajputana	+·004	90·6	—1·9	77·0	—1·5	83·8	—1·7	13·6	22·6	+0·3	—14	79	+ 4	·814	—·007	6·4	0	8·09	6·24	+1·85
Bombay	—·011	85·1	—0·5	74·4	+0·2	79·7	—0·1	10·8	17·7	—1·3	+ 1	87	+ 3	·834	+·024	7·9	+0·2	10·30	9·96	+0·34
Central India	—·004	84·7	—0·8	74·4	+0·3	79·5	—0·3	10·3	17·9	—0·8	— 7	91	+ 1	·839	+·015	8·3	+0·6	10·83	11·19	—0·36
Central Provinces	—·010	84·2	—0·9	73·3	+0·1	78·7	—0·4	10·9	19·5	+0·6	+ 5	86	— 1	·779	—·013	7·9	—0·1	13·47	10·19	+3·28
Hyderabad	—·010	85·3	—1·1	71·8	+0·1	78·5	—0·5	13·5	22·0	—1·0	0	81	+ 1	·718	—·009	7·5	—0·8	6·67	7·10	—0·43
Mysore	—·003	80·9	—0·6	66·7	+0·6	73·8	0	14·2	21·6	+0·7	+ 8	85	+ 3	·636	+·007	8·8	+0·4	6·73	5·42	+1·31
Madras	—·012	90·6	+0·5	76·4	+0·5	83·5	+0·5	14·3	23·5	+0·4	— 2	79	+ 1	·812	+·005	6·9	+0·1	7·39	6·23	+1·26

Table

(2) *Abstract of observations taken at 8 hrs. at 220*

Number of subdivisions.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·737		29·815	29·805	9th	29·669	5th	·136	78·4	83·4		74·3		78·8		9·1	86·1	4 days	72·2	8th, 16th & 25th.	13·9
	Mergui	65	29·807	—·010	29·803	29·885	8th	29·750	28th	·135	75·9	82·5	—1·7	72·5	—0·1	77·5	—0·9	10·0	88·0	4th	70·8	5th, 25th & 26th.	17·2
	Tavoy	19	29·845	—·019	29·797	29·935	8th	29·766	6th	·169	76·5	81·6	—1·2	75·0	+1·2	78·3	0	6·6	87·0	21st	72·8	16th	14·2
	Moulmein	94	29·741	+·003	29·773	29·866	8th	29·635	6th	·231	75·4	82·5	—0·5	74·2	+0·1	78·3	—0·2	8·3	87·0	18th	72·3	8th	14·7
	Rangoon	18	29·794	—·011	29·750	29·911	8th	29·673	6th	·238	78·5	85·0	—0·1	75·3	—0·4	80·1	—0·3	9·7	89·0	19th	73·0	8th	16·0
	Bassein	27?	29·763	—·011	29·727	29·867	9th	29·651	6th	·216	78·9	85·0	+0·5	76·4	+0·7	80·7	+0·6	8·6	88·7	11th, 12th & 17th.	74·4	8th & 31st.	14·3
	Diamond Island	41	29·748	—·024	29·724	29·856	9th	29·643	6th	·213	81·1	84·9	+0·6	77·4	+1·8	81·2	+1·2	7·5	86·4	8 days	73·2	7th	13·2
	Toungoo	164	29·627	—·008	29·734	29·724	9th	29·501	6th	·223	78·3	87·4	+0·7	75·4	+0·4	81·4	+0·5	12·0	91·5	18th	73·9	8th	17·6
	Kyaukpyu	18	29·727		29·685	29·857	9th	29·589	6th	·268	78·9	84·7		76·0		80·3		8·7	87·0	8 days	74·4	6 days	12·6
	Akyab	20	29·719	—·013	29·679	29·851	9th	29·596	6th	·255	79·4	85·4	+1·0	77·0	—0·3	81·2	+0·3	8·4	87·9	4 days	75·5	4th & 12th.	12·4
3	Thayetmyo	121	29·621	—·031	29·684	29·716	9th	29·510	6th	·206	79·5	88·0	—0·9	76·8	+0·7	82·4	—0·1	11·2	91·9	11th	73·9	2nd	18·0
	Minbu	*165*	29·568	—·014	29·676	29·667	9th	29·452	6th	·215	80·1	88·9	—1·7	76·4	—0·6	82·7	—1·1	12·5	93·3	11th	71·0	19th	22·3
	Yamethin	657	29·087	—·021	29·697	29·181	9th	28·967	6th	·214	77·3	89·0	—0·8	74·6	+0·3	81·8	—0·3	14·4	94·3	1st	72·5	8th	21·8
	Mandalay	250	29·491	—·004	29·688	29·583	9th	29·382	6th	·201	81·3	93·4	+0·1	77·5	—0·1	85·4	0	15·9	99·2	19th	74·1	23rd & 24th.	25·1
	Monywa	*280*	29·454		29·632	29·537	9th	29·360	6th	·177	80·7	91·8		78·8		85·3		13·0	97·3	6th	76·6	25th & 27th.	20·7
	Lashio	*2,820*	26·986	—·003	29·682	27·085	9th	26·905	14th	·180	72·9			70·4	+1·3						67·5	8th	
	Bhamo	*381*	29·357	+ ·012?	29·692?	29·445	8th	29·264	6th, 14th & 15th.	·181	78·0	88·1	0	74·8	—0·6	81·5	—0·3	13·3	91·9	7th	71·6	23rd	23·3
	Myitkyina	458	29·247		29·664	29·354	8th	29·139	14th	·215	77·0	87·8		75·2		81·5		12·6	95·2	7th	71·5	23rd	23·7
	II.—Assam.																						
4	Dibrugarh	353	29·331		29·644	29·403	9th	29·194	15th	·209	78·3	86·6		75·3		80·9		11·3	92·9	27th	71·1	23rd	21·8
	Sibsagar	333	29·267	—·016	29·656	29·439	23rd	29·235	15th	·204	81·3	89·7	+0·5	77·3	—0·4	83·5	+0·1	12·4	94·6		74·5	23rd, 24th & 25th.	20·1
	Tezpur	252	29·450		29·659	29·539	8th	29·308	15th	·231	80·2	89·1		77·7		83·5		11·4	93·6	1st	74·3	23rd	19·3
	Gauhati	195	29·501		29·651	29·605	8th	29·368	15th	·237	82·0	89·4		77·4		83·4		12·0	95·8	2nd & 8th.	74·1	23rd	21·7
	Dhubri	115	29·555	—·008	29·624	29·644	9th	29·429	15th	·215	81·2	85·7	—0·3	78·1	—0·2	81·9	—0·3	7·6	90·0	2nd & 15th.	73·1	23rd	16·9
	Silchar	104	29·608	—·010	29·665	29·732	9th	29·470	1st	·262	80·7	90·2	+0·7	77·4	+0·6	83·8	+0·7	12·8	98·3	2nd	73·3	23rd	25·0
	III.—Bengal.																						
5	Cox's Bazar	36	29·656		29·647	29·796	9th	29·535	15th	·261	79·8	85·9		76·4		81·2		9·5	90·2	8th	75·2	5 days	15·0
	Chittagong	87	29·611	—·016	29·643	29·734	9th	29·457	15th	·277	80·4	86·8	+1·3	76·8	+0·7	81·8	+1·0	10·0	91·0	29th	75·0	12th & 13th.	16·0
	Noakhali	43	29·650		29·640	29·758	21st	29·493	15th	·265	80·4	85·5		76·1		81·8		7·4	87·8	1st, 2nd & 25th.	75·9	28th	11·9
	Barisal	12	29·650	—·002	29·609	29·752	21st	29·502	15th	·250	81·8	86·9	+0·1	78·2	0	82·6	+0·1	8·7	90·3	23rd & 31st.	75·1	28th	15·2
	Narayanganj	26	29·631	—·016	29·606	29·727	21st	29·497	15th	·230	82·6	82·2	+0·7	79·1	+0·1	83·6	+0·4	9·1	91·5	1st, 2nd & 6th.	74·8	24th	16·7

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

B.

stations in India, etc., in August, 1912.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1912.	Heaviest rainfall during month.	Station.
5	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																																I.—Burma.
1			1	5	7	9	7	1	S 30° W		5·5*			59		89		·856		8·1		26			36·04			119·54			3·91	Victoria Point.
26		1	1		2	1			S 27° E	N 87° W	3·2	1·2	+2·0	7	−53	96	+ 4	·851	+·057	7·9	+0·3	24	25·00	−1·00	35·85	29·43	+ 6·42	132·38	107·91	+24·47	3·10	Mergui.
31									(a)	S 62° W	1·4*	1·2	+0·2			93	0	·859	−·006	7·0	−1·4	28	27·40	+0·60	51·41	46·14	+ 5·27	155·33	162·37	− 7·04	9·35	Tavoy.
8	1		3	6	11	1	1		S 20° E	S 4° W	2·8	2·8	0	53	− 2	97	+ 3	·857	−·013	9·8	+1·8	30	27·10	+2·90	48·32	42·83	+ 5·45	155·04	144·78	+10·26	4·60	Moulmein.
4				6	13	5	2	1	S 6° W	S 57° W	2·0	3·2	−1·2	66	+ 5	92	− 2	·909	−·002	9·6	+0·4	25	23·90	+1·10	20·03	19·67	+ 0·36	69·35	70·40	−1·05	2·31	Rangoon.
18				3	2	4	4		S 35° W	S 15° W	2·9	3·1	−0·2	30	−27	91	0	·928	+·013	7·8	−0·8	24	25·40	−1·40	18·87	22·93	− 4·06	74·64	80·96	− 6·32	3·60	Bassein.
				1	4	21	4	1	S 45° W	S 46° W	8·2	6·5	+1·7	89	+14	86	0	·915	+·025	8·3	−0·3	21	22·10	−1·10	25·39	23·21	+ 2·18	88·78	83·68	+ 5·10	5·40	Diamond Island.
11				8	11	1			S 16° E	S 34° E	1·5	3·1	−1·6	59	−16	91	− 1	·878	−·023	9·4	+0·1	26	24·30	+1·70	20·36	18·86	+1·50	60·51	57·79	+ 2·72	3·35	Toungoo.
2			2	21	4	2			S 38° E		3·7*			82		88		·884		7·9		26			21·33			125·61			1·66	Kyaukpyu.
10			6	8	6	1			S 42° E	S 39° E	2·6	2·5	+0·1	53	− 1	95	+ 1	·939	−·010	8·0	−1·0	31	26·60	+4·40	48·99	43·21	+ 5·78	190·18	152·66	+37·52	4·58	Akyab.
1				6	23	1			S 7° E	S 10° E	2·7*	4·7	−2·0	92	+10	87	+ 2	·880	+·007	9·7	+1·0	16	13·20	+2·80	9·85	6·25	+ 3·60	30·81	24·10	+ 6·71	1·40	Thayetmyo.
				11	20				S 16° E	S 39° E	2·8	8·9	−6·1	93	+ 4	85	0	·863	−·009	6·3	+0·1	13	8·60	+4·40	5·43	5·12	+ 0·31	22·22	19·86	+ 2·36	1·20	Minbu.
7				11	13				S 20° E	S 28° E	3·7	6·1	−2·4	72	−16	88	+ 1	·819	−·026	7·5	+2·5	12	11·50	+0·50	4·81	5·69	− 0·88	19·64	20·98	− 1·34	1·26	Yamethin.
5				16	9	1			S 26° E	S 1° W	4·3	5·8	−1·5	79	− 1	78	− 1	·810	−·048	3·9	−3·7	9	7·00	+2·00	3·66	4·11	− 0·45	22·85	18·40	+ 4·45	1·16	Mandalay.
	1		4	23	3				S 48° E		2·8			89		86		·902		9·3		9	7·70	+1·30	6·89	3·21	+ 3·68	20·39	15·48	+ 4·91	1·64	Monywa.
18		2	1		4	5	1		S 19° W		2·3*			20		92	+ 1	·734	−·008	9·4	+0·4	10			6·68	13·47	− 6·79	32·60	42·87	−10·27	1·23	Lashio.
29		1				1			(a)	N 89° W	0·7	1·2	−0·5			93	+ 1	·896	−·002	9·1	+0·9	23	19·60	+3·40	24·05	15·44	+ 8·61	53·13	52·93	+ 0·20	3·51	Bhamo.
23		1		2	4	1			S 15° E		0·9			17		83		·862		7·5		23			21·47	15·27	+ 6·20	60·73	53·95	+ 6·78	4·44	Myitkyina.
																																II.—Assam.
30			1						E		0·7			32		95		·914		7·1		18	18·40	−0·40	20·35	19·65	+ 0·70	72·43	68·07	+ 4·36	3·08	Dibrugarh.
14	4	4			4	4		1	N 45° W	S 1° W	1·8	2·0	−0·2	3	−13	87	− 7	·926	−·038	8·0	−1·1	13	17·70	−4·70	11·97	16·95	− 4·98	63·26	59·56	+ 3·70	3·31	Sibsagar.
8	2	2	9			5	5		S 87° E		1·5			61		91		·931		7·7		22	15·50	+6·50	20·66	15·33	+ 5·33	52·19	47·60	+ 4·59	4·16	Tezpur.
31									(a)		1·0					86		·939		7·7		17	13·30	+3·70	14·45	9·45	+ 5·00	53·36	43·76	+ 9·60	4·90	Gauhati.
4	1	9	10	2	3	2			N 85° E	S 69° E	3·2	3·2	0	53	+21	90	− 1	·966	+·025	7·8	−0·7	18	14·50	+3·50	25·26	13·07	+12·19	96·80	68·70	+28·10	6·36	Dhubri.
28	1		1	1					N 79° E	S 87° E	1·6	1·8	−0·2	5	+ 3	90	− 1	·913	+·006	5·1	−4·2	19	21·50	−2·50	14·65	20·37	− 5·72	74·29	76·98	− 2·69	2·09	Silchar.
																																III.—Bengal.
			2	22	6			1	S 38° E		5·4*			86		91		·925		7·4		23			17·15			89·00			3·83	Cox's Bazar.
10			12	9					S 71° E	S 41° E	2·0	4·6	−2·6	62	−10	87	− 2	·898	−·014	7·5	−0·7	16	17·94	−1·94	16·72	17·97	− 1·25	61·88	69·01	− 7·13	4·42	Chittagong.
2			3	20	5	1			S 39° E		4·6			81		90		·934		6·1		23	22·58	+0·42	15·39	27·39	−12·00	56·70	84·30	−27·60	1·80	Noakhali.
19			1	2	7	2			S 6° E	S 17° E	0·9	2·6	−1·7	33	− 3	89	0	·955	−·010	8·5	−0·1	22	18·74	+3·26	10·72	13·55	− 2·83	51·41	53·05	− 1·64	1·35	Barisal.
10			4	9	7	1			S 35° E	S 32° E	2·8	5·2	−2·4	56	−12	88	− 2	·977	+·005	9·1	+0·4	22	17·83	+4·17	13·31	12·17	+ 1·14	45·84	46·19	+ 0·05	1·63	Narayanganj.

* Uncorrected for scale error.

(a) Indeterminate.

Table

(2) Abstract of observations taken at 8 hrs. at 220

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal—*concld.*																						
5	Mymensingh	63	29·618	0	29·633	29·707	9th	29·192	15th	·215	81·5	88·0	+1·1	78·4	+0·3	83·2	+0·7	9·6	93·1	2nd	72·6	23rd	20·5
	Bogra	75	29·587	—·004	29·613	29·663	21st	29·462	15th	·201	82·0	89·5	+0·2	78·7	+0·3	83·6	+0·3	9·8	92·7	8th	73·2	23rd	19·5
	Dinajpur	125	29·516	—·012	29·593	29·587	9th	29·386	15th	·201	81·9	89·2	+0·4	78·8	+0·2	84·0	+0·3	10·4	95·3	2nd & 8th	74·5	24th	20·8
	Jalpaiguri	283	29·383	—·006	29·622	29·474	9th	29·262	15th	·212	81·0	91·2	+3·1	77·3	+0·6	84·3	+1·9	13·9	96·9	8th	73·4	20th	23·5
	Saugor Island	25	29·597	—·024	29·567†	29·725	21st	29·462	1st	·263	83·0	86·9	+—0·3	80·1	+0·3	83·5	0	6·8	89·7	25th	75·7	9th	14·0
	Midnapore	149	29·467†		29·562†	29·576	21st	29·366	15th	·210	82·4	89·8		78·8†		84·3†		11·0	92·8	12th&15th	75·7	9th	17·1
	Calcutta	21	29·606	—·018	29·574	29·720	21st	29·439	15th	·231	82·1	88·3	+1·2	78·9	+0·6	83·6	+0·9	9·4	92·1	17th	75·5	9th	16·6
	Jessore	33	29·617	—·008	29·597	29·729	21st	29·491	15th	·238	82·2	88·0	—0·6	78·7	0	83·3	—0·3	9·3	91·5	14th	75·2	24th	16·3
	Burdwan	99	29·528	—·017	29·575	29·634	21st	29·419	15th	·215	82·2	89·7	+0·5	79·2	+0·1	84·4	+0·3	10·5	93·4	12th	76·3	24th	17·1
	Berhampore	67	29·565	—·021	29·581	29·656	21st	29·446	15th	·210	81·8	88·8	+0·2	79·2	+0·5	84·0	+0·3	9·6	92·6	12th&16th	75·2	24th	17·4
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·570	—·013	29·565	29·691	21st	29·128	1st	·263	82·2	89·0	+1·1	78·6	+0·5	83·8	+0·9	10·4	92·4	13th	75·6	8th	16·8
	False Point	21	29·504	—·030	29·568	29·733	21st	29·402	1st	·331	83·0	87·4	+0·4	77·8	—0·4	82·6	0	9·6	92·2	13th	74·1	31st	18·1
	Cuttack	80	29·545	—·023	29·567	29·677	22nd	29·346	2nd	·331	82·3	89·1	0	78·7	+0·4	83·9	+0·2	10·4	93·4	12th&21th	76·7	5th	16·7
	Puri	21	29·604		29·567	29·731	22nd	29·333	2nd	·398	81·9	87·8		78·8		83·2		9·0	92·6	14th	75·6	15th&28th	17·0
	Angul	455	29·168		29·581	29·291	21st	28·978	2nd	·313	80·6	86·9		76·8		81·9		10·1	92·1	22nd	75·0	4 days	17·1
	Sambalpur	486	29·144	—·026	29·578	29·259	21st & 22nd.	28·965	3rd	·294	80·0	85·8	—1·4	77·6	+0·4	81·7	—0·5	8·2	90·1	21st&27th	74·6	5 days	15·5
7	Chaibasa	*733*	28·866	—·021	29·547	28·981	22nd	28·753	29th	·228	79·6	88·6	-0·3	77·1	—0·1	82·8	—0·2	11·5	94·1	23rd	75·3	29th	18·8
	Ranchi	2,128	27·517	—·002	29·551	27·624	22nd	27·426	15th	·198	75·7	83·4	+0·1	73·1	+0·5	78·2	+0·3	10·3	87·7	22nd	70·9	9th&10th	16·8
	Purulia	*816*	28·796†		29·558†	28·901	21st	28·706	15th	·195	79·9†	89·5		76·7		83·1		12·8	95·0	10th	74·1	30th	20·9
	Daltonganj	*730*	28·890		29·576	29·998	21st	28·781	4th	·217	80·0	88·3		77·5		82·9		10·8	93·6	7th&23rd	74·5	19th	19·1
8	Purnea	134	29·510	—·006	29·598	29·594	24th	9·404	15th	·190	82·3	88·9	—0·3	79·1	+0·7	84·0	+0·2	9·8	94·6	2nd	74·8	24th	19·8
	Monghyr	155	29·457		29·563	29·526	21st	29·351	15th	·175	82·7	89·8		78·7		84·2		11·1	94·7	8th	75·4	24th	19·3
	Darbhanga	165	29·454	—·020	29·575	29·524	25th	29·352	15th	·172	82·4	89·9	+1·4	78·4	—0·9	84·1	+0·3	11·5	95·6	2nd & 8th	70·7	24th	24·9
	Pusa	188	29·430		29·572	29·538	30th	29·315	15th	·223	82·7	90·7		77·9		84·3		12·8	96·7	2nd	75·0	24th	21·7
	Patna	183	29·420	—·024	29·563	29·510	21st	29·323	15th	·187	83·5	89·0	—0·1	79·5	0	84·3	—0·1	9·5	93·5	8th	76·2	20th & 24th.	17·3
	Bazar	239	29·359		29·553	29·447	24th	29·265	15th	·182	81·4	89·0		76·5		83·7		10·5	94·0	8th	73·1	24th	20·9
	Gaya	372	29·231	—·021	29·552	29·324	21st	29·142	4th	·182	82·3	90·0	0	78·7	+0·3	84·4	+0·1	11·3	94·4	2nd & 7th	76·2	25th	18·2
	Naya Dumka	489	29·143	—·002	29·583	29·240	21st	29·044	15th	·196	81·0	88·6	+0·9	77·6	+0·5	83·1	+0·7	11·0	92·4	3rd	74·0	24th	18·4
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·353	—·008	29·567	29·446	21st	29·256	15th	·190	82·0	89·6	—0·2	74·5	—4·3?	82·0	—2·3?	15·1	95·1	8th	70·3	24th	24·8
	Benares	267	29·339	—·007	29·558	29·428	21st	29·248	4th	·190	82·3	90·4	+0·9	78·4	—0·4	84·4	+0·3	12·0	95·6	7th & 8th	74·1	24th	21·5
	Allahabad	309	29·293	—·010	29·555	29·396	21st	29·214	4th	·182	82·7	89·9	+0·1	78·4	—0·2	84·1	—0·1	11·5	95·1	7th	76·0	30th	19·1
	Cawnpore	416	29·182	—·009	29·552	29·278	21st	29·116	30th	·162	82·6	90·7	+0·8	78·7	+0·4	84·7	+0·6	12·0	96·2	24th	75·4	19th	20·8

† Mean of 30 days.

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

B.—*continued.*

stations in India, etc., in August, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1912.	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	56	57
																																III.—Bengal.—*concld.*
9			10	9	3				S 60° E	S 56° E	1·9	2·6	−0·7	59	− 9	90	−1	·982	+ ·027	8·9	+0·9	19	13·90	+0·10	24·19	15·24	+ 8·95	70·72	63·69	+ 7·03	5·82	Mymensingh.
14		1	10	2	2	2			S 69° E	S 55° E	0·7	2·61	−1·9	40	−31	89	0	·979	+ ·011	8·0	+ 0·8	20	15·90	+4·10	13·06	12·26	+ 0·80	52·53	46·66	+ 5·87	3·24	Bogra.
6		3	13	5	4				S 74° E	S 68° E	1·9	2·8	−0·9	62	− 6	91	+1	·997	+ ·034	6·9	−1·1	19	15·71	+ 3·29	17·73	13·33	+ 4·40	76·04	47·42	+28·62	4·82	Dinajpur.
25		3		2		1			E	N 78° E	1·1			9	−48	90	−2	·957	+ ·011	5·8	−2·5	18	18·38	−0·38	20·47	25·74	− 5·27	81·87	92·40	−10·53	4·48	Jalpaiguri.
		2	2	4	8	11	3	1	S 17° W	S 10° W	10·6	9·8	+0·8	56	+ 9	89	0	1·003	+ ·013	8·0	−1·1	14	17·00	− 3·00	8·56	14·49	− 5·93	35·01	44·82	− 9·81	1·74	Saugor Island.
3	2	3	7	9	5	1	1		S 60° E		2·1			52		87		·961		7·5		17	16·00	+ 1·00	8·72	12·56	− 3·84	35·48	40·13	− 4·65	1·95	Midnapore.
		1	8	8	6	6		2	S 33° E	S 18° E	3·7*	3·4	+0·3	56	+ 9	89	0	·980	+ ·016	8·7	+0·2	19	18·88	+ 0·12	10·95	12·16	− 1·21	36·80	42·22	− 5·42	1·23	Calcutta.
10			3	11	7				S 36° E	S 25° E	4·1	2·7	+1·4	62	+12	88	−3	·973	−·025	7·9	−0·5	13	17·03	− 4·03	8·75	10·88	− 2·13	46·56	43·64	+ 2·92	1·33	Jessore.
2	1	2	7	4	2	10	2	1	S 10° E	S 32° E	2·4	2·5	−0·1	30	− 2	88	+1	·972	+ ·029	8·6	−0·1	16	16·48	− 0·48	8·66	11·53	− 2·87	35·06	40·39	− 5·33	1·83	Burdwan.
3		3	11	5	7	2			S 57° E	S 79° E	2·7	2·9	−0·2	59	+19	89	−3	·963	−·024	8·3	−0·6	16	16·39	− 0·39	5·95	11·74	− 5·79	32·10	37·11	− 5·01	1·48	Berhampore.
																																IV.—Bihar and Orissa.
3	1	3	3		6	14	1		S 24° W	S 41° W	3·1	3·1	0	46	+ 6	84	− 5	·910	−·064	7·0	−1·3	17	16·03	+ 0·97	16·95	11·22	− 0·27	22·54	36·73	−14·19	1·73	Balasore.
1	2	2	2	1	2	10	10	1	S 67° W	S 57° W	7·3	7·2	+0·1	49	−12	85	− 3	·919	−·009	7·9	−0·4	16	16·16	−0·16	15·29	13·13	+ 2·16	31·02	37·70	− 6·68	3·07	False Point.
5	1	3	1		2	12	6	1	S 61° W	S 66° W	2·2*	2·0	+0·2	43	− 4	83	0	·911	+ ·015	7·1	−0·5	16	16·19	− 0·19	13·65	14·06	− 0·41	32·82	39·53	− 6·71	2·63	Cuttack.
3	5	2			1	11	7	2	S 86° W		8·2			48		87		·941		6·3		19	12·85	+6·15	24·89	12·09	+12·80	45·49	31·35	+14·14	4·33	Puri.
6		2		2	2	3	5	11	N 72° W		6·2			42		86		·895		6·8		19			10·35	12·67	− 2·32	28·86	32·20	− 3·34	2·13	Angul.
1		6	2	1	2	11	7	1	S 57° W	S 30° W	3·6	3·2	+0·4	33	−27	90	+ 4	·922	+ ·036	9·2	+1·1	18	17·10	+0·90	20·99	18·60	+ 2·39	40·55	51·64	−11·09	5·54	Sambalpur.
9		4	2		3	9	4		S 41° W	S 54° W	2·2	1·3	+0·9	30	− 3	87	+ 2	·885	−·018	8·0	−0·3	18	16·94	+1·06	15·60	11·81	+ 3·79	38·96	35·85	+ 3·11	5·37	Chaibassa.
1	1	3	6	1	4	1	6	8	N 54° W	S 56° W	8·0	5·3	+2·7	20	+ 6	89	0	·792	−·007	8·3	+0·3	23	17·84	+5·16	15·91	12·88	+ 3·03	37·32	39·53	− 2·21	1·53	Ranchi.
12		2	6	1	2	2	4	2	S 45° E		2·2			3		89†		·908†		5·0		19	16·52	+2·48	16·01	11·25	+ 4·76	38·94	33·69	+ 5·25	3·05	Purulia.
9	1	3	7	3		4	4		S 63° E		2·7			13		88		·898		5·6		14	15·74	−1·74	12·46	12·27	+ 0·19	27·16	29·71	− 2·55	1·86	Daltonganj.
10		3	9	7		1		1	S 79° E	S 89° E	2·1	2·2	−0·1	49	− 5	91	+ 1	·997	+ ·017	6·3	−1·3	15	16·57	−1·57	23·34	13·60	+9·74	52·65	43·28	+ 9·37	5·25	Purnea.
5		1	12	8			5		S 69° E		4·9			45		86		·965		8·2		18			15·37			31·52			4·62	Monghyr.
13		1	16					1	N 85° E	S 74° E	2·3	3·2	−0·9	53	−11	88	− 1	·978	+ ·006	7·0	+0·2	11	14·07	−3·07	7·97	13·38	−5·41	28·74	36·32	− 7·58	1·68	Darbhanga.
3		5	13	6		2			S 81° E‡		3·4			61		88		·985		7·0		13			9·63			32·18			3·37	Pusa.
6	1	1	13	7		2	1		S 74° E	S 78° E	4·5	3·2	+1·3	53	− 1	86	− 1	·998	+ ·019	7·9	−1·0	14	13·52	+0·48	9·22	12·88	−3·66	27·31	34·62	− 7·31	3·08	Patna.
1	2		14	2		4	6	2	S 79° E		3·5			16		90		·956		7·5		18	13·35	+4·65	11·99	11·90	+0·09	27·50	29·06	− 1·56	3·10	Buxar.
4		8	1	3	1	3	10	1	N 75° W	S 52° E	2·1	2·7	−0·6	13	− 6	86	0	·948	+ ·017	5·8	−2·2	17	14·26	+2·74	5·81	12·88	−7·07	17·44	33·96	−16·52	0·88	Gaya.
9		1	3	3	3		1	1	S 48° E		1·6			20		85	− 6	·905		7·0		15	18·23	−3·23	11·19	12·95	−1·76	33·18	39·32	− 1·14	1·27	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
5		9	11	1	1	1	2	1	N 72° E	S 88° E	1·7	1·6	+0·1	53	+17	87	− 1	·949	−·006	3·4	−2·5	14	14·10	−0·10	21·17	13·86	+7·31	38·69	36·63	+ 2·06	11·20	Gorakhpur.
5	1	1	8	6	1	1	3	5	S 83° E	S 54° E	2·5	3·0	−0·5	20	+ 9	86	− 3	·949	−·014	7·8	−0·2	13	13·40	−0·40	15·21	11·51	+3·70	28·01	28·21	− 0·20	3·35	Benares.
1	1	4	9	1	1	1	10	3	N 5° W	N 79° W	3·8	4·8	−1·0	11	+ 7	83	− 4	·926	−·028	8·6	−0·1	14	11·80	+2·20	9·12	12·03	−2·91	21·28	28·97	− 7·69	3·05	Allahabad.
3	1	2	11	1	2	4	7		S 47° E	S 2° W	2·6	2·9	−0·3	13	+ 6	86	− 1	·958	+ ·004	4	−3·1	11	12·30	−1·30	12·67	11·81	+0·86	25·61	26·22	− 0·61	3·28	Cawnpore.

* Uncorrected for scale error. † Mean of 30 days. ‡ Wind observations of 29 days.

Table

(2) Abstract of observations taken at 8 hrs. at 220

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	V—United Provinces of Agra and Oudh.—*concld.*																						
	Lucknow	368	29·237	−·005	29·560	29·320	21st	29·167	14th	·153	83·1	90·9	+0·6	78·6	0	84·8	+0·3	12·3	96·0	23rd & 24th.	75·6	19th	20·4
	Bahraich	401	29·198	−·009	29·557	29·277	21st	29·115	14th	·162	82·6	90·1	+0·2	78·2	+0·2	84·2	+0·2	11·9	93·6	23rd & 24th.	75·0	27th	18·6
10	Jhansi	824	28·800	−·006	29·574	28·915	21st	28·718	5th	·197	80·9	89·0	+0·1	77·3	+0·2	83·2	+0·1	11·7	96·0	23rd	76·0	5th & 31st	20·0
	Agra	556	29·045	−·012	29·555	29·152	21st	28·983	11th	·169	84·3	93·2*	+2·1*	79·2	+0·4	85·2*	+1·3	14·0	99·5	23rd & 24th.	76·0	29th	23·5
	Mainpuri	516	29·074	−·008	29·545	29·172	21st	28·998	14th	·174	82·2	91·0	+0·2	78·5	+0·1	84·8	+0·1	12·5	95·8	24th	75·1	15th	20·7
	Bareilly	568	29·030	−·006	29·554	29·119	25th	28·944	16th	·175	82·3	90·5	+0·6	78·6	+0·6	84·5	+0·6	11·9	96·3	24th	75·0	19th	21·3
	Roorkee	899	28·720	+·009	29·577	28·827	25th	28·592	14th	·235	81·4	89·0	−1·7	77·4	+0·4	83·2	−0·7	11·6	93·5	27th	73·9	18th	19·6
	VI.—Punjab.																						
11	Delhi	718	28·893	+·009	29·569	29·010	25th	28·795	14th	·215	83·0	93·1	+1·3	79·4	+0·1	86·2	+0·7	13·7	99·5	24th	74·8	28th	24·7
	Sirsa	662	28·929	+·007	29·547	29·045	21st	28·809	14th	·236	84·9	97·2	−1·2	79·6	−0·6	88·4	−0·9	17·6	101·8	8th & 27th	75·5	28th	26·3
	Patiala	*818*	28·773		29·519	28·895	25th	28·627	14th	·268	81·7	91·2		78·4		84·7		12·8	96·0	24th	74·1	4th	21·9
	Ambala	892	28·708	+·014	29·557	28·847	25th	28·570	14th	·277	82·2	93·0	+0·2	77·4	−0·7	85·2	−0·3	15·6	98·5	21st & 31st.	73·9	1st	24·6
	Ludhiana	812	28·788	+·011	29·561	28·911	25th	28·645	14th	·266	81·5	93·6	−1·4	78·8	−0·2	86·2	−0·8	14·8	98·0	31st	74·0	1st	25·0
	Lahore	702	28·874	+·001	29·533	28·986	21st	28·732	14th	·254	83·9	95·4	−2·8	79·5	+1·7	87·5	−0·5	15·9	101·9	28th & 31st.	73·7	2nd & 18th	28·2
	Sialkot	830	28·753	0	29·548	28·885	25th	28·599	14th	·286	81·4	91·8	−2·9	77·0	−0·7	84·4	−1·8	14·8	97·0	24th, 28th & 31st.	70·5	28th	26·5
	Rawalpindi	1,674	27·932	+·001	29·538	28·051	25th	27·767	14th	·284	81·5	92·4	−1·5	74·8	−0·4	83·6	−0·9	17·6	98·9	31st	70·9	12th, 19th & 20th.	28·0
12	Khushab	612	28·560	+·017	29·535	29·072	25th	28·785	14th	·287	85·9	98·4	−1·8	81·6	+0·8	90·0	−0·5	16·8	104·4	5 days	72·4	6th	32·0
	Montgomery	558	28·995	−·006	29·512	29·111	21st	28·862	14th	·249	87·5	101·2	−0·8	81·7	+0·1	91·4	−0·3	19·5	106·4	28th	77·0	12th	29·4
	Multan	420	29·128	−·004	29·504	29·253	25th	28·991	14th	·262	88·2	102·3	+1·6	82·5	+0·4	92·4	+1·0	19·8	108·3	29th	78·0	7th	30·3
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·454	−·022	29·520	28·575	21st	28·282	14th	·293	84·3	98·9	−0·3	78·8	+1·0	88·8	+0·3	20·1	105·7	15th	73·9	4th & 5th	31·8
	D. I. Khan	590	28·960	−·018	29·513	29·092	21st	28·797	14th	·295	84·8	97·8	−3·3	80·5	−0·5	89·2	−1·9	17·3	103·4	1st	73·1	5th	30·3
	VIII.—Sind.																						
16	Jacobabad	186	29·357	−·009	29·499	29·493	21st	29·218	15th	·275	88·8	105·6	+1·8	33·2	+1·8	94·4	+1·8	22·4	111·1	29th & 30th.	79·3	25th	31·8
	Hyderabad	96	29·434	−·009	29·531	29·610	21st	29·349	15th	·261	83·0	95·5	0	79·2	+0·5	87·4	+0·3	16·3	104·5	30th	75·5	9th	29·0
	Karachi	13	29·618	−·007	29·582	29·745	21st	29·528	15th	·217	81·9	87·3	+2·8	79·5	+2·5	83·4	+2·7	7·8	89·5	8th & 11th.	77·0	31st	12·5
	IX.—Rajputana.																						
17	Bikaner	*771*	28·824	+·002	29·547	28·855	21st	28·731	15th	·224	84·0	98·0	+0·9	79·8	−0·8	88·9	+0·1	18·2	105·0	28th	77·0	24th & 31st.	28·0
	Jodhpur	780	28·863	+·013	29·598	29·007	21st	28·774	15th	·233	80·1	91·4	−3·3	76·1	−2·3	83·7	−2·8	15·3	98·5	28th	72·8	23rd	25·7
18	Jaipur	1,431	28·217	+·002	29·591	28·338	21st	28·151	31st	·187	79·4	89·6	−2·0	75·8	−0·3	82·7	−1·1	13·8	95·7	27th	73·1	17th, 18th & 19th.	22·6
	Ajmer	1,611	28·049	+·004	29·597	28·170	21st	27·984	5th	·186	77·5	85·7	−2·5	76·4	+1·1?	81·1	−0·7?	9·3	90·6	27th	74·7	12th & 15th.	15·9
	Kotah	819?	28·796	−·003	29·566	28·914	21st	28·701	9th	·213	81·2	88·3	−3·4	77·1	−2·4	82·7	−2·9	11·2	94·6	23rd	73·6	25th	21·0

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

* Mean of 30 days.

B—*continued.*

stations in India, etc., in August, 1912—continued.

Wind direction. Number of winds from Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1912.	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	56	57
19		1	5	4	2				S 64° E	S 88° E	1·5	2·1	−0·6	33	+ 7	86	− 2	·977	+·025	5·6	−2·3	12	14·29	−2·20	6·41	11·27	−4·86	19·51	28·65	−9·14	2·05	Lucknow.
3	1	2	10	8	2	2	2	1	S 65° E	S 70° E	2·2	2·0	+0·2	46	− 2	84	− 4	·926	−·029	5·4	−0·6	13	12·70	+0·30	11·44	14·29	−2·85	25·46	32·91	−7·45	2·36	Bahraich.
2	3	5				9	7	5	N 74° W	S 85° W	3·5	2·8	+0·7	46	+10	82	0	·859	−·011	9·5	+2·8	10	12·70	−2·70	6·83	11·63	−4·80	24·68	28·76	− 4·08	1·24	Jhansi.
9	1	2	6	1	3	4	3	2	S 19° E	S 40° W	3·3	3·6	−0·3	10	−19	77	− 5	·938	−·005	6·3	−0·3	10	10·00	0	8·72	8·26	+0·46	16·68	20·82	−4·14	3·14	Agra.
3	3	1	5	7		1	7	4	N 6° E	S 13° W	1·5	1·2	+0·3	3	− 3	86	+ 1	·943	+·010	4·3	−2·5	16	10·90	+5·10	13·58	9·05	+4·53	25·30	19·48	+5·82	2·86	Mainpuri.
28			2	1					S 75° E	S 71° E	0·4	1·9	−1·5	10	−12	85	−3	·912	+·015	6·7	−0·2	11	12·18	+1·82	10·61	13·20	−2·59	22·28	33·34	−11·06	1·70	Bareilly.
27				3				1	S 45° E	S 36° E	1·5	1·8	−0·3	3	−29	84	− 2	·896	+·012	5·9	−0·8	13	12·10	+0·90	8·28	12·63	−4·35	24·95	30·92	− 5·97	1·92	Roorkee.
																																VI.—Punjab.
2		6	4	3	1		13	2	N 58° W	S 27° W	3·1	2·8	+0·3	17	− 1	79	+ 1	·878	+·017	5·2	−1·5	8	9·30	−1·30	9·48	7·88	+1·60	18·13	19·67	− 1·54	3·73	Delhi.
10	1	1	5	2	3	6		1	S 6° E	S 42° W				27	−13	71	0	·845	−·010	3·4	−1·3	4	4·80	−0·80	2·86	3·62	−0·76	9·39	9·79	− 0·40	0·81	Sirsa.
4		1	5	11	1		4	5	S 50° E		3·4			26		83		·902		4·4		9			6·82	7·38	−0·56	16·15	16·64	− 0·49	2·20	Patiala.
10	1		2	9		2	4	3	S 10° E	S 51° E	2·2	0·9	+1·3	17	− 7	82	− 6	·892	−·049	6·0	+0·5	10	7·90	+2·10	11·14	7·90	+3·24	19·97	20·06	− 0·09	4·30	Ambala.
25	1	1		2		1	1		S 45° E	S 29° E	0·3	1·3	−1·0	1	−38	81	+ 2	·865	−·027	4·5	−1·8	8	7·30	+0·70	5·81	7·61	−1·80	16·98	19·11	− 2·13	1·44	Ludhiana.
9	1		7	6	4		2	2	S 53° E	S 41° E	1·5	2·0	−0·5	33	− 7	78	+ 3	·907	+·017	3·5	−0·3	6	5·20	+0·60	8·00	5·30	+2·70	10·39	13·30	− 2·91	3·36	Lahore.
11	1	4	9	5				1	N 86° E	N 83° E	1·0	1·8	−0·8	49	+ 2	87	+ 8	·928	+·036	3·5	−0·7	9	8·40	+0·60	6·45	9·38	−2·93	12·55	20·91	− 8·36	2·05	Sialkot.
17	2	2	3	3	4				S 67° E	S 82° E	1·3	1·2	+0·1	23	− 6	78	− 2	·840	+·001	4·8	+0·6	7	8·00	−1·00	6·54	8·82	−2·28	14·59	20·40	− 5·81	2·10	Rawalpindi.
3		7	14	4	1	1	1		N 89° E	N 68° E	5·1	4·5	+0·6	65	+ 8	71	+ 2	·867	+·008	2·8	0	5	2·80	+2·20	1·89	3·03	−1·14	6·56	8·99	− 2·43	1·14	Khushab.
5		1	3	4	8	8	2		S 4° W	S 12° W	6·2	6·0	+0·2	53	− 1	62	− 1	·799	−·032	2·1	−0·5	4	3·20	+0·80	2·06	3·21	−1·18	5·33	6·86	− 1·53	1·02	Montgomery.
9		1		9	6	6			S 10° E	S 14° E	0·9	2·1	−1·2	53	+10	67	− 1	·875	+·007	1·7	−0·4	2	2·30	−0·30	2·51	1·74	+0·77	5·03	4·66	+ 0·37	1·83	Multan.
																																VII.—North-West Frontier Province.
10	6	1	2					12	N 21° W	N 10° W	1·5	2·6	−1·1	53	+10	72	+ 1	·816	+·023	2·8	−0·5	4	2·30	+1·70	2·18	2·08	+ 0·10	3·86	4·75	− 0·89	0·77	Peshawar.
16	2	7		3	1	1		1	N 55° E	N 72° E	1·4	1·5	−0·1	27	− 9	83	+ 9	·994	+·075?	1·9	−0·3	1	2·40	−1·40	1·16	2·10	− 0·94	5·80	5·46	+ 0·34	1·02	D. I. Khan.
																																VIII.—Sind.
25		1		3	2				S 40° E	S 41° E	1·6	3·1	−1·5	13	−57	72†	+ 1	·936†	+·081	1·3	− 0·8	0	1·90	−1·90	0·02	1·01	−0·99	0·46	2·32	− 1·86	0·02	Jacobabad.
					16	15			S 22° W	S 43° W	7·9	11·9	−4·0	99	+13	74	+ 4	·831	+·057?	5·2	+0·1	3	2·40	+0·60	2·92	2·14	+0·78	4·73	5·76	− 1·03	1·99	Hyderabad.
	1					9	20	1	S 81° W	S 76° W	11·5	12·0	−0·5	89	+ 3	82	− 5	·893	−·009	6·2	−1·6	1	1·90	−0·90	0·38	1·59	−1·21	3·15	5·75	− 2·60	0·13	Karachi.
																																IX.—Rajputána.
2		1		2	4	12	8	2	S 53° W	S 36° W	5·6	5·6	0	66	−14	69	0	·793	−·037	3·5	−1·0	5	4·90	+0·10	2·46	3·57	−1·11	5·07	8·94	− 3·87	1·35	Bikaner.
1		1		1	7	15	5	1	S 41° W		3·3†			72		79	+ 6	·807		7·3		7	5·90	+1·10	8·22	4·31	+3·91	15·16	10·00	+ 5·16	4·01	Jodhpur.
2	3	3	3			1	10	9	N 48° W	N 88° W	3·7*	3·4	+0·3	53	− 4	83	+ 4	·834	+·021	7·5	+0·6	10	11·60	−1·60	13·00	8·31	+4·69	27·77	18·76	+9·01	4·10	Jaipur.
2		1	2			11	9	6	S 82° W	S 85° W	5·7	5·0	+0·7	59	−23	84	+ 2	·793	−·006	6·6	+0·3	9	8·90	+0·10	5·26	7·05	−1·79	12·21	16·81	− 4·60	1·60	Ajmer.
16		2				3	7	3	N 81° W		1·6			33		80	+ 8	·843		7·2		10	10·60	−0·60	9·15	8·20	+0·95	23·24	21·48	+ 1·76	1·84	Kotah.

† Mean of 31 days. * Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 220*

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay.																						
19	Deesa	466	29·212	+·001	29·632	29·337	21st	29·124	9th	·213	79·3	88·5	−0·4	75·3	−0·3	81·9	−0·3	13·2	93·8	28th	72·4	24th	21·4
	Bhuj	395	29·267	−·003	29·613	29·392	22nd	29·172	9th	·220	80·0	88·5	−0·2	76·4	+0·2	82·5	0	12·1	93·0	27th & 28th.	74·5	26th	18·5
	Jamnagar	61	29·623		29·629	29·752	22nd	29·519	9th	·233	82·6	88·1		76·1		82·1		12·0	91·4	19th	73·6	26th	17·8
	Dwarka	37?	29·652	−·018	29·635	29·768	22nd	29·548	9th	·220	81·1	86·0	+1·5	79·3	+1·2	82·6	+1·3	6·7	88·3	5 days	76·2	1st	12·1
	Rajkot	429	29·263	−·011	29·642	29·387	22nd	29·164	9th	·223	78·8	87·9	−1·0	74·1	−0·4	81·0	−0·7	13·8	92·1	24th	70·8	25th	21·3
	Veraval	*18*	29·701	−·023	29·662	29·808	22nd	29·580	9th	·228	80·0	82·7	0	78·2	+0·5	80·4	+0·3	4·5	86·1	26th	74·8	1st	11·3
	Bhavnagar Para	55	29·558	−·054?	29·659	29·771	22nd	29·551	9th	·220	80·9	89·6	−3·2	77·6	+0·5	83·6	−1·3	12·0	94·5	18th & 25th.	75·0	30th	19·5
	Surat	39	29·693	−·001	29·679	29·801	21st & 22nd.	29·586	9th	·215	79·9	85·4	−1·6	76·4	−0·1	80·9	−0·9	9·0	90·9	23rd	74·1	28th, 29th & 30th.	16·8
	Ahmadabad*	163	29·514	−·029?	29·627?	29·644	21st	29·411	8th	·233	79·3	87·7	−2·4	76·2	−0·9	82·0	−1·7	11·5	92·1	26th & 27th.	72·7	29th	19·4
25	Bombay	37	29·738	−·019	29·715	29·832	13th	29·609	8th	·223	79·8	84·5	+0·5	77·4	+0·4	80·9	+0·5	7·1	87·0	23rd	75·5	3rd, 25th & 29th.	11·5
	Ratnagiri	110	29·691	−·018	29·740	29·777	13th	29·579	8th	·198	79·7	83·7	0	75·5	+0·3	79·6	+0·1	8·2	85·8	14th	70·9	28th	14·9
	Goa†	199	?	?	?	?	?	?	?	?	77·9	82·3	+0·4	75·9	+0·1	79·1	+0·3	6·4	85·1	3rd	74·1	19th, 23rd & 25th.	12·0
	Marmagao	*60*	29·778	−·018	29·772	29·859	13th	29·678	8th	·181	79·0	83·7	+0·3	75·4	−0·4	79·5	−0·1	8·3	86·0	16th & 17th.	73·2	27th	12·8
	Karwar	44	29·808	−·011	29·787	29·886	13th	29·702	8th	·184	78·4	82·4	−0·1	75·0	+0·4	78·7	+0·1	7·4	84·2	11th, 14th & 16th.	73·0	25th & 27th.	11·2
26	Malegaon	1,430	28·303	−·009	29·674	28·395	21st	28·188	8th	·207	76·8	86·2	−0·4	71·6	+0·1	78·9	−0·1	14·6	93·4	23rd	68·1	20th	25·3
	Ahmadnagar	2,154	27·627	−·009	29·691	27·715	13th	27·522	8th	·193	74·5	84·6	−0·2	68·8	−0·2	76·7	−0·2	15·8	90·1	20th & 22nd.	65·5	13th, 25th & 26th.	24·6
	Poona	1,846	27·929	−·014	29·710	28·017	13th	27·826	8th	·191	73·1	81·5	−0·4	70·4	+0·9	75·9	+0·3	11·1	85·0	4 days	65·8	26th	19·2
	Sholapur	1,590	28·189	−·011	29·712	28·287	13th	28·086	8th	·201	75·6	87·4	−1·4	71·0	+0·4	79·2	−0·5	16·4	92·8	13th & 20th.	68·6	29th	24·2
	Bijapur	*1,948*	27·849	−·009	29·717	27·931	13th	27·741	8th	·190	74·9	86·6	+0·5	70·2	+0·3	78·4	+0·4	16·4	92·4	19th & 20th.	67·3	28th & 29th.	24·9
	Belgaum	2,535	27·283	−·009	29·730	27·368	13th	27·171	8th	·197	6 9	75·3	−0·8	66·6	+0·4	71·0	−0·2	8·7	79·3	21st & 22nd.	65·0	26th & 28th.	14·3
	XI.—Central India.																						
20	Neemuch	1,624	28·046	−·015	29·609	28·165	21st	27·944	9th	·221	75·0	83·7	−1·3	72·5	0	78·2	−0·7	11·2	89·9	22nd & 26th.	71·0	4 days	18·9
	Indore	1,823	27·878	+·001	29·641	27·994	21st	27·771	9th	·223	73·9	81·6	−1·3	71·4	+0·1	76·5	−0·6	10·2	88·6	22nd	69·6	1st & 18th.	19·0
21	Nowgong	754	28·873	0	29·579	28·983	21st	28·795	9th	·188	80·4	87·3	−0·6	77·3	+0·6	82·3	0	10·0	92·0	22nd & 23rd.	76·0	4 days	16·0
	Sutna	1,041	28·580	−·001	29·570	28·691	21st	28·477	4th	·214	78·9	86·0	+0·1	76·4	+0·5	21·2	+0·3	9·6	91·3	22nd	73·7	15th	17·6
	XII.—Central Provinces.																						
22	Buldana	2,132	27·608		29·661	27·701	21st	27·511	8th	·190	73·2	81·6		69·9		75·7		11·7	86·6	23rd	68·6	1st	18·0
	Akola	925	28·787	−·002	29·661	28·876	13th	28·669	8th	·207	77·3	85·8	−1·4	74·0	+0·7	79·9	−0·3	11·8	92·2	21st, 23rd & 24th.	72·0	6th, 16th & 28th.	20·2
	Amraoti	1,215	28·486	−·003	29·621?	28·591	21st	28·355	8th	·236	76·0	84·0	−2·1	73·0	+0·4	78·6	−0·9	11·0	92·8	21st	71·3	6 days	21·5
23	Khandwa	1,044	28·650	−·009	29·648	28·754	21st	28·540	9th	·214	76·5	85·3	−0·2	74·0	−0·1	79·7	−0·1	11·3	91·2	22nd & 24th.	71·1	31st	20·1
	Hoshangabad	1,006	28·670	−·008	29·627	28·781	21st	28·560	8th	·221	76·8	85·0	0	74·1	+0·3	79·6	+0·1	10·9	90·6	26th	71·4	31st	19·2
	Saugor	1,867	27·844	−·013	29·580	27·952	14th	27·742	5th	·210	75·5	83·8	+0·2	72·9	+0·1	78·3	+0·1	10·9	90·3	22nd & 23rd.	70·6	31st	19·7
	Jubbulpore	1,327	28·296	−·026	29·563	28·418	22nd	28·178	5th & 9th.	·240	77·2	84·6	−0·1	74·8	+0·9	79·7	+0·4	9·8	90·3	22nd & 23rd.	72·8	26th	17·5
	Seoni	2,033	27·648	−·004	29·600	27·757	22nd	27·541	8th	·216	75·3	82·0‡	−1·1	70·9	−0·7	76·4‡	−0·9	11·1	87·1	23rd	69·5	4 days	17·6
	Nagpur	1,017	28·656	−·008	29·619	28·767	11th	28·542	8th	·225	77·9	85·8	−1·2	74·5	−0·1	80·2	−0·7	11·3	93·6	23rd	71·8	5th	21·8
24	Pendra	2,123?	27·609		29·562	27·731	21st	27·473	3rd	·258	76·3	83·8		72·9		78·3		10·9	87·3	7th, 22nd & 23rd.	71·2	4 days	16·1

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

* Mean of 29 days.
† " " 30 "
‡ " " 28 "

B—*continued.*

tations in India, etc., in August, 1912—continued.

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs., in inches of mercury. (43)	Departure from normal, in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st May to 31st August, 1912. (53)	Normal rainfall for period, 1st May to 31st August. (54)	Departure from normal of period, 1st May to 31st August, 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																X.—Bombay.
3					2	15	8	3	S 63° W	S 71° W	6·6	8·8	−2·2	76	+ 1	87	+ 3	·868	+·028	8·4	+0·3	9	10·09	−1·09	8·79	8·01	+0·78	19·21	19·73	− 0·52	3·80	Deesa.
						12	13	6	S 81° W	S 76° W	9·0	11·5	−2·5	86	− 4	81	− 1	·822	−·015	7·9	+0·6	4	3·70	+0·30	1·80	2·95	−1·15	20·12	11·54	+ 8·58	0·83	Bhuj.
					2	22	7		S 52° W		17·9			92		79		·879		6·2		9			3·11	7·01	−3·90	27·84	16·82	+11·02	0·92	Jamnagar.
					2	16	12	1	S 62° W		10·5			86		88	+ 2	·929		6·5		4			2·67	3·56	−0·89	22·03	12·65	+9·38	1·18	Dwarka.
					1	23	6	1	S 54° W	S 77° W	9·0	9·1	−0·1	92	+ 2	87	+ 3	·843	+·005	8·9	+1·4	9	6·60	+2·40	6·51	5·91	+0·60	28·76	21·94	+ 6·82	1·52	Rajkot.
5						10	16		S 73° W	S 77° W	5·2	8·6	−3·4	79	− 3	91	+ 3	·932	+·052	7·6	−0·6	9	8·10	+0·90	7·10	4·08	+3·02	27·42	15·31	+12·11	4·43	Veraval.
						11	17		S 70° W	S 48° W	4·6	8·6	−4·0	92	+ 2	86	+ 5	·877	−·003?	8·0	+0·9	12	8·80	+3·20	9·38	5·96	+3·42	38·18	16·08	+22·10	2·12	Bhavnagar
	1				2	11	11	6	S 78° W	S 66° W	5·0	7·2	−2·2	76	− 4	95	+10	·969	+·080	8·7	+1·1	18	12·30	+5·70	6·30	7·67	−1·37	50·15	33·25	+16·90	1·27	Para. Surat.
4					5	14	5	1	S 48° W	S 63° W	4·0	3·6	+0·4	70	− 2	87	+ 4	·872	+·013	7·7	−0·6	17	10·90	+6·10	16·29	8·57	+7·72	36·80	25·23	+11·57	3·55	Ahmadabad.
		1	1	1	9	17	2		S 74° W	S 77° W	8·8*	11·2	−2·4	79	− 4	87	+ 1	·881	0	8·8	−0·1	17	19·50	−2·50	9·90	14·19	−4·29	46·52	58·55	−12·03	1·84	Bombay.
1	1	1	1		16	7	4		S 67° W	S 74° W	8·1	6·9	+1·2	69	+ 1	86	− 2	·859	−·016	7·9	−0·1	29	23·70	+5·30	15·54	20·02	−4·48	85·18	84·70	+ 0·48	2·65	Ratnagiri.
1	1				8	12	8		N 88° W	S 85° W	8·4	6·4	+2·0	76	+25	91	+ 2	·859	−·021	9·7	+1·2	28			17·02	17·44	−0·42	103·99	83·70	+20·29	2·20	Goa.
2					18	6	5		S 68° W	N 56° W	8·7*	8·2	+0·5	79	+ 2	93	+ 3	·913	+·015	8·7	+1·7	26			14·13	15·67	−1·54	87·88	79·32	+ 8·56	1·36	Marmagao.
4					15	1	1		S 51° W	N 81° W	3·0	3·1	−0·1	53	+ 6	88	0	·864	+·030	7·2	−0·1	29	21·00	+5·00	16·12	22·15	−6·03	91·77	102·46	−10·69	2·76	Karwar.
2					10	17	2		S 77° W	S 78° W	7·6	9·3	−1·7	86	0	92	+15	·859	+·139	5·5	−1·8	8	5·80	+2·20	3·75	3·40	+0·35	11·04	13·66	− 2·62	1·34	Malegaon.
					10	16	5		S 82° W	S 86° W	5·7	13·5	−7·8	89	+14	78	− 5	·678	+·046	6·7	−0·5	5	5·20	−0·20	2·54	2·78	−0·24	7·14	11·89	−4·75	1·07	Ahmadnagar.
4					1	26			S 89° W	S 83° W	5·9	10·8	−4·9	89	− 1	85	+ 2	·688	−·005	6·6	−1·8	7	8·60	−1·60	2·09	3·76	−1·67	12·95	16·88	−3·93	0·42	Poona.
					13	13	5		S 77° W	S 83° W	11·9	9·3	+2·6	89	+ 5	80	+ 5	·704	+·034	8·1	+0·4	5	8·00	−3·00	2·69	5·46	−2·77	10·06	15·47	−5·41	0·73	Sholapur.
8					2	10	10	1	S 65° W	S 82° W	10·7	7·8	+2·9	66	−19	80	− 2	·697	+·002	8·3	+0·8	1	5·60	−4·60	0·94	2·73	−1·79	6·10	9·26	−3·16	0·60	Bijapur.
						9	16	6	S 86° W	S 83° W	14·5	15·7	−1·2	89	− 2	94	+ 2	·688	+·020	9·6	+0·9	23	17·40	+5·60	13·83	9·23	+4·63	60·76	36·03	+24·73	1·96	Belgaum.
																																XI.—Central India.
2	1		2			7	18	1	S 81° W	S 75° W	8·1	8·0	+0·1	72	−12	93	− 2	·800	+·024	8·4	+1·6	15	10·50	+4·50	11·63	9·02	+2·66	22·84	22·26	+0·58	2·50	Neemuch.
3						4	11	13	N 74° W	S 85° W	4·9	4·2	+0·7	79	− 3	91	+ 2	·758	−·008	9·8	+0·9	13	10·60	+2·40	7·52	7·67	−0·15	23·93	23·62	+0·31	1·28	Indore.
2	4	1	3	1		1	17	2	N 72° W	S 89° W	2·1	2·3	−0·2	53	+ 2	87	0	·900	+·018	7·9	−0·1	15	14·10	+0·90	8·60	13·26	−4·66	32·99	33·71	−0·72	1·61	Nowgong.
7	2		5	1		3	11	2	N 86° W	S 89° W	1·9	5·6	−3·7	28	−13	91	+ 4	·898	+·027	7·3	−0·1	16	14·40	+1·60	10·28	12·26	−1·98	31·35	32·39	−1·04	3·56	Sutna.
																																XII.—Central Provinces.
					2	8	15	6	S 83° W		6·0	6·3	−0·3	81		83		·674		7·5		10			6·44	7·41	−0·97	19·75	23·38	−3·63	1·92	Buldana.
	1					5	13	7	N 85° W	N 78° W	6·9	6·3	+0·6	86	0	80	− 3	·746	−·022	6·3	−1·5	8	8·90	−0·90	5·23	7·03	−1·80	17·32	22·55	−5·23	1·31	Akola.
	1					2	19	9	N 78° W	N 89° W	8·5	5·7	+2·8	92	+ 6	86	− 3	·758	−·024	8·2	+0·3	9	10·00	−1·00	5·28	6·97	−1·69	16·20	23·55	−7·35	1·22	Amraoti.
						6	19	6	W	N 86° W	7·5	6·4	+1·1	88	− 5	85	0	·772	+·004	8·0	+0·3	10	10·70	−0·70	5·26	6·65	−1·40	13·00	21·10	−8·10	1·23	Khandwa.
						19	6	6	S 69° W	S 53° W	4·1	2·8	+1·3	79	0	89	− 2	·815	−·021	8·6	0	17	15·00	+2·00	11·40	14·63	−3·23	32·15	36·80	−4·65	2·23	Hoshangabad
3	1					1	17	8	N 69° W	S 87° W	6·1	3·9	+2·2	79	+14	89	− 1	·780	−·019	8·6	+1·0	14	15·40	−1·40	12·88	13·37	−0·49	26·50	35·32	−8·82	5·71	Saugor.
1				1	3	2	10	7	N 87° W	S 77° W	1·9	3·1	−1·2	53	−15	88	− 2	·816	−·012	9·3	+1·0	19	16·30	+2·70	13·90	16·54	−2·64	28·91	43·16	−14·25	3·10	Jubbulpore.
5	5				1	5	8	7	N 55° W	N 76° W	4·1	3·6	+0·5	53	+10	84	− 6	·732	−·054	8·6	+0·1	17	16·40	+0·60	16·36	12·75	+3·61	35·36	38·18	−2·82	3·22	Seoni.
2						3	9	17	N 62° W	S 89° W	4·4	5·3	−0·9	82	+21	82	− 3	·787	−·023	8·7	0	14	12·60	+1·40	20·53	11·76	+8·77	42·12	35·60	+6·52	5·66	Nagpur.
5	2			3	4	2	2	6	N 53° W		3·7			17		88		·796		6·3		17			14·96	13·65	+1·31	30·91	37·27	−6·36	2·97	Pendra.

† Mean of 30 days. * Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 22₀*

Number of sub-division.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XII.—Central Provinces —*concld.*																						
	Raipur	970	28·680	−·009	29·595	28·784	12th	28·546	3rd & 4th.	·238	77·4	85·0	−0·9	74·9	0	80·0	−0·5	10·1	91·7	23rd	71·6	5th	20·1
	Chanda	*634*	29·058	−·014	29·639	29·154	13th	28·924	8th	·230	78·2	85·2	−2·4	74·9	−0·1	80·1	−1·3	10·3	91·5	22nd	71·0	4th	20·5
	Jagdalpur	1,813	27·880		29·615	27·977	11th & 13th.	27·715	2nd	·262	75·4	82·4		71·5		77·0		10·9	89·7	22nd	69·1	3rd & 4th	20·6
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	27·865	−·016	29·702?	27·949	13th	27·763	8th	·186	73·6	83·6	−1·5	69·5	+0·2	76·5	−0·7	14·1	88·9	23rd	67·7	12th, 18th & 30th.	21·2
	Nizamabad	1,248	28·484		29·675	28·578	13th	28·363	8th	·215	75·4	84·7	−1·4	72·8	0	78·8	−0·7	11·9	92·4	21st	70·2	3rd	22·2
	Bidar	*2,165*									74·2	81·6		69·3		75·5		12·3	87·5	20th	67·4	4 days	20·1
28	Gulbarga	1,503	28·279	−·007	29·721	28·375	13th	28·178	8th	·197	74·5	86·6	−1·7	71·1	0	78·8	−0·9	15·5	93·0	20th	68·8	28th & 29th.	24·2
	Raichur	*1,311*	28·485	−·001	29·736	28·581	13th	28·384	8th	·197	76·4	89·0	+0·5	71·9	−0·6	80·4	−0·1	17·1	95·0	13th	69·6	28th	25·4
	Hyderabad (Deccan)	1,690	28·067	−·012	29·686	28·169	13th	27·972	8th	·197	75·0	84·9	−1·2	72·3	+1·2	78·6	0	12·6	90·8	23rd	69·7	2nd, 3rd & 26th.	21·1
	Hanamkonda	877	28·847	−·015	29·665	28·937	31st	28·738	8th	·199	79·2	86·5	−1·5	75·4	+0·1	81·0	−0·7	11·1	92·0	20th & 23rd.	72·2	2nd & 3rd	19·8
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·445	−·004	29·757	27·520	13th	27·368	8th	·152	72·0	81·6	−0·5	68·5	+0·5	75·1	0	13·1	86·6	13th	66·8	26th	19·8
	Hassan	3,149	26·769	+·004	29·789	26·842	13th	26·688	28th	·154	69·1	77·6	−0·7	65·3	+0·8	71·4	+0·1	12·3	82·4	13th	63·3	31st	19·1
	Bangalore	3,021	26·880	−·003	29·774	26·956	13th	26·814	28th	·142	69·3	81·9	+0·1	65·9	+0·3	73·9	+0·2	16·0	87·8	13th	63·8	16th & 29th	24·0
	Mysore	2,518	27·375	−·009	29·796	27·445	13th	27·304	28th	·141	71·6	82·6	−1·4	67·2	+0·7	74·9	−0·3	15·4	88·5	13th	65·0	4 days	23·5
	XV.—Madras.																						
30	Mangalore	65	29·819	−·014	29·816	29·894	13th	29·727	8th	·167	78·1	83·4	−0·1	74·4	+1·3	78·9	+0·6	9·0	86·3	5 days	71·4	25th	14·9
	Calicut	27	29·868	−·012	29·825	29·938	13th	29·791	28th	·147	75·7	81·2	−1·6	74·1†	0†	77·6†	−0·8	7·1	85·3	1st & 13th.	72·1	26th	13·2
	Cochin	9	29·903	−·005	29·840	29·944	13th	29·849	28th	·095	77·7	83·3	−0·4	74·2	−0·1	78·8	−0·3	9·1	87·2	14th	71·7	18th	15·5
	Trivandrum	198	29·709	+·003	29·838	29·755	13th	29·656	8th	·099	77·3	82·8	+0·5	75·1	+2·1	78·9	+1·3	7·7	85·0	4th & 7th	72·0	25th	13·0
31	Pamban	37	29·798	−·015	29·763	29·872	13th	29·750	24th & 28th.	·122	82·7	91·3	+2·3	77·7	−0·9	84·5	+0·7	13·6	93·2	21st, 22nd & 23rd.	76·0	30th	17·2
	Madura	447	29·388	−·003	29·764	29·462	13th	29·327	8th	·135	83·0	96·6	0	76·8	+1·0	86·7	+0·5	19·8	102·5	6th	68·6	13th	33·9
	Pudukkottai	318	29·513		29·759	29·582	31st	29·445	24th	·137	84·0	98·1		78·2		88·2		19·9	104·0	6th	72·9	13th	31·1
	Negapatam	31	29·788	−·018	29·748	29·858	13th	29·727	28th	·131	82·9	94·9	+1·2	78·3	+1·0	86·6	+1·1	16·6	100·2	7th	74·2	20th & 25th.	26·0
	Trichinopoly	255	29·582	−·005	29·769	29·646	13th	29·512	28th	·134	82·9	98·1	+1·5	77·7	+1·0	87·9	+1·3	20·4	102·6	6th	72·8	13th	29·8
	Coimbatore	1,341	28·494	−·022?	29·766?	28·557	13th	28·423	28th	·134	75·9	87·8	−1·4	71·1	+0·5	79·2	−0·5	16·2	90·0	13th	68·8	28th	21·2
	Salem	940	28·934	0	29·809?	29·006	13th	28·871	28th	·135	78·3	93·9	+1·7	73·7	+1·2	83·8	+1·5	20·2	100·0	1st	70·8	26th & 30th.	29·2
	Cuddalore	37	29·777	−·007	29·745	29·857	13th	29·704	24th	·153	81·8	94·7	+1·0	77·3	+1·0	86·0	+1·0	17·4	102·3	1st	73·2	13th	29·1
	Vellore	707	29·095		29·732	29·171	13th	29·024	27th	·147	81·5	95·1		77·2		86·2		17·9	100·7	6th & 11th.	72·0	21st	28·7
	Madras	22	29·767	−·023	29·721	29·865	13th	29·681	24th	·184	82·5	96·0	+2·2	77·8	+0·5	86·9	+1·3	18·2	102·0	1st & 6th	71·5	21st & 25th.	30·5
32	Cuddapah	433	29·369	−·012	29·738	29·455	13th	29·282	8th	·173	81·9	95·6	+1·9	78·0	+1·2	86·8	+1·5	17·6	101·9	12th	73·6	25th	28·3

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

* Mean of 28 days.
" " 30 "

—continued.

tations in India, etc., in August, 1912—continued.

Wind direction. Number of winds from N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs., in inches of mercury. (43)	Departure from normal, in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st May to 31st August, 1912. (53)	Normal rainfall for period, 1st May to 31st August. (54)	Departure from normal of period, 1st May to 31st August, 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
1	1				1	19	9	S 59° W	S 56° W	5·3	6·1	—0·8	82	+10	91	+ 2	·819	+·007	8·3	—0·4	15	14·20	+0·80	20·52	13·07	+7·45	36·18	37·33	—1·15	5·20	Raipur.
1				1	7	22		S 78° W	S 76° W	5·7	4·1	+1·6	92	+11	85	+ 4	·832	+·031	7·0	—1·4	16	13·60	+2·40	13·22	13·47	—0·25	35·94	38·48	—2·54	2·83	Chanda.
1				6	14	8	2	S 55° W					76		88		·772		7·0		21			14·68			36·78			2·20	Jagdalpur.
																															XIII.—Hyderabad.
				6	15	9		N 85° W		11·4			82		86	+ 3	·705		8·9		7	9·50	—2·50	3·59	5·35	—1·76	14·39	17·87	—3·48	0·95	Aurangabad.
			1	16	10	1		S 62° W		5·5			79		84	+ 3	·741		6·9		12	14·50	—2·50	11·04	10·82	+0·22	28·06	26·26	+1·80	2·30	Nizamabad.
1	1			16	2	9		S 81° W		8·3			61		85		·725		8·5		12	12·50	—0·50	8·41	7·33	+1·08	23·00	21·12	+1·88	1·64	Bidar.
1				6	16	8		N 85° W	N 75° W	8·0	10·0	—2·0	86	+ 5	80	0	·689	—·015	5·9	—1·7	12	8·10	+3·90	9·13	6·45	+2·68	20·54	18·98	+1·56	2·05	Gulbarga.
				14	13	4		S 75° W	S 81° W	10·3	9·5	+0·8	89	+ 8	77	— 1	·706	—·027	6·9	—0·7	10	8·70	+1·30	7·38	5·74	+1·64	12·71	15·44	—2·73	2·12	Raichur.
					25			W	N 83° W	4·4	6·1	—1·7	81	—12	82	0	·712	—·004	7·6	0	11			6·69	6·80	—0·11	15·32	17·96	—2·64	2·51	Hyderabad (Deccan).
1			1	2	19	4		N 87° W		6·7			76		76	+ 1	·751		7·6		13	12·00	+1·00	6·55	6·94	—0·39	17·25	22·83	—5·58	1·18	Hanamkonda.
																															XIV.—Mysore.
				13	16	2		S 71° W	S 78° W	6·2	7·8	—1·6	92	+ 4	83	+ 1	·650	+·003	7·9	—1·0	6	7·80	—1·80	3·96	3·26	+0·70	14·88	12·84	+2·04	1·13	Chitaldrug.
				9	16	6		S 86° W	N 87° W	7·4	3·2	+4·2	87	—1	88	+ 5	·627	+·013	9·1	+0·4	6	9·60	—3·60	2·64	4·21	—1·57	15·01	18·73	—3·72	0·99	Hassan.
				10	20	1		S 77° W	S 73° W	7·1	6·1	+1·0	96	+28	87	+ 2	·626	+·010	9·5	+1·3	9	10·40	—1·40	5·86	5·49	+0·37	15·23	16·87	—1·64	1·71	Bangalore.
				19	11	1		S 63° W	S 72° W	8·2	9·1	—0·9	89	+ 1	83	+ 2	·612	0	8·2	+0·9	5	6·40	—1·40	2·63	3·53	—0·90	13·03	14·01	—0·98	1·44	Mysore.
																															XV.—Madras.
2	1	3			5	12	3	N 85° W	N 72° W	4·4	1·8	+2·6	46	+21	89	— 3	·859	+·004	8·4	—0·1	29	24·40	+4·60	40·76	22·79	+17·97	122·02	104·45	+17·57	8·08	Mangalore.
	1	4	1		3	2	5	N 37° W	N 22° W	2·7	5·6	—2·9	23	—17	94	+ 3	·837	+·003	9·4	+2·1	28	18·80	+9·20	27·40	16·05	+11·35	114·59	89·23	+25·36	5·04	Calicut.
6	5	2		2	2	4	4	N 18° W	N 13° W	5·1†	4·2	+0·9	30	—17	88	+ 2	·829	—·012	8·3	+1·2	21	18·60	+2·40	15·59	13·09	+2·50	99·28	75·49	+23·79	2·84	Cochin.
17						3	7	N 21° W	N 13° W	6·1*	6·6	—0·5	79	— 4	86	0	·805	—·001	8·1	+0·7	10	9·30	+0·70	7·91	4·09	+3·82	50·16	32·89	+17·27	3·63	Trivandrum.
				6	3	4	1	S 43° W	S 43° W	4·5	7·3	—2·8	33	—32	77	+ 1	·849		3·4		1	0·60	+0·40	0·20	0·92	—0·72	1·09	2·16	—1·07	0·20	Pamban.
1						14	14	N 65° W	N 41° W	4·9	2·3	+2·6	86	+ 7	70	+ 4	·785	+·051	7·1	+1·8	6	6·20	—0·20	7·24	4·13	+ 3·11	12·48	10·33	+ 2·15	3·32	Madura.
2				1	1	6	18	N 56° W		7·7			74		68		·783		6·4		3			3·28	6·77	—3·49	8·27	14·17	— 5·90	2·30	Pudukkottai.
					13	13	4	S 75° W	S 72° W	7·2	4·5	+2·7	86	+ 3	75	+ 4	·844	+·048	5·8	+0·1	6	5·70	+0·30	3·11	3·68	—0·57	4·54	8·81	— 4·27	1·15	Negapatam.
					7	23	1	S 82° W	S 85° W	5·8*	5·8	0	96	+ 8	63	— 4	·706	—·020	5·0	—1·9	1	5·40	—4·40	0·75	4·28	—3·53	7·28	10·27	—2·99	0·66	Trichinopoly.
				5	23	2		S 39° W	S 36° W	8·9	4·7	+4·2	69	—10	82	— 2	·738	—·005	4·6	—1·2	0	3·00	—3·00	0·12	1·22	—1·10	5·26	6·63	—1·37	0·05	Coimbatore.
1				8	7	11		S 53° W	S 37° W	3·8	2·9	+0·9	66	— 6	80	+ 1	·771	0	7·8	+1·4	11	9·50	+1·50	4·67	7·25	—2·58	11·13	19·15	—8·02	1·33	Salem.
				4	17	3	1	S 48° W	S 73° W	4·8	1·7	+3·1	72	0	77	— 3	·826	—·054†	6·6	—0·1	14	8·00	+6·00	8·25	4·84	+3·41	11·98	10·57	+1·41	2·14	Cuddalore.
						30		W		3·7			97		70		·744		5·8		5	7·90	—2·90	4·63	7·77	—3·14	8·34	18·49	—10·15	2·72	Vellore.
				6	10	13	1	S 59° W	S 66° W	4·5*	5·0	—0·5	79	0	77	+ 2	·852	+·026	7·1	—0·2	8	12·60	—4·60	5·53	4·94	+0·59	9·39	12·01	— 2·62	1·69	Madras.
5					2	11	13	N 59° W	N 82° W				79	— 4	69	— 4	·754	—·019	6·1	—1·7	10	8·00	+2·00	3·37	6·31	—2·94	7·42	14·85	— 7·43	1·25	Cuddapah

* Uncorrected for scale error.
† Mean of 30 days.

Table

(2) Abstract of observations taken at 8 hrs. at 220

Number of sub-division.	Station.	Elevation of barometer 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras— *concld.*																						
32	Bellary	1,475	28·323	−·018	29·729	28·416	13th	28·228	8th	·188	77·5	90·3	−0·5	74·0	+0·4	82·2	−0·1	16·3	98·0	13th	71·3	24th	26·7
	Kurnool	923	28·854	−·024	29·718	28·955	13th	28·757	8th	·198	77·0	90·4	+0·6	173·9	+0·2	82·1	+0·4	16·5	94·7	13th	71·6	28th	23·1
33	Nellore	66	29·694	−·018	29·695	29·789	13th	29·621	8th	·168	84·7	96·2	+0·6	79·1	+0·4	87·7	+0·5	17·1	101·1	9th	71·1	21st	30·0
	Masulipatam	15	29·722	−·012	29·672	29·814	31st	29·637	28th	·177	81·7	91·8	+0·5	77·8	+0·2	84·8	+0·3	14·0	98·8	20th	73·2	24th	25·6
	Cocanada	26	29·685	−·008	29·618	29·783	10th	29·589	1st	·194	81·4	89·2	−0·5	77·5	−0·6	83·6	−0.5	11·3	96·7	20th	73·1	3rd	23·6
	Waltair (Vizagapatam).	*226*	29·452	−·018	29·618	29·559	22nd	29·281	1st	·278	80·6	86·4		77·6		82·1		8·8	92·6	18th	71·9	1st	20·7
	Calingapatam	19	29·643		29·690	29·754	11th & 31st.	29·458	1st	·296	81·3	88·3		77·7		83·0		10·6	93·8	20th & 21st.	72·3	1st	21·5
	Gopalpur	72	29·605	−·012	29·579	29·723	22nd	29·391	1st	·332	80·9	86·9	−0·5	78·5	−0·3	82·7	−0·4	8·4	90·2	7th & 13th.	75·5	1st	14·7
	Bay Islands.																						
1	P. V. Fraser	8	29·643*		29·568*	29·792	22nd	29·480	1st	·312	83·4												
	Port Blair	58	29·772	−·017	29·760	29·867	9th	29·697	1st	·170	80·1	84·3	−1·0	76·9	−0·3	80·6	−0·7	7·4	87·2	11th	73·0	26th	14·2
	Sipper Island	90	29·701		29·725	29·809	9th	29·609	6th	·200	81·2	84·2		77·7		81·0		6·5	86·1	4 days	75·1	5 days	11·0
	Kashmir.																						
13	Muzaffarabad	2,475	27·204		29·584	27·294	25th	27·056	15th	·238	77·0	91·4		71·3		81·3		20·1	96·5	18th	67·3	19th, 21st & 28th.	29·2
	Srinagar	5,204	24·704	−·003	24·675	24·809	26th	24·575	15th	·234	69·4	85·2	+1·3	63·2	+0·3	74·2	+0·8	22·0	90·1	11th & 12th.	57·6	29th	32·5
	Gulmarg	*8,569*	21·787	−·008	21·755	21·868	26th	21·698	14th	·170	60·9	68·2	−0·2	49·9	−0·8	59·0	−0·5	18·3	74·2	31st	45·3	28th & 31st.	28·9
	Dras	*10,059*	20·729	+·001	20·697	20·819	29th	20·638	1st	·181	58·3	73·0		46·6		59·8		26·4	79·5	11th	39·0	29th	40·5
	Leh	*11,503*	19·664	0	19·632	19·750	29th	19·577	1st	·173	59·0	75·8	−1·6	49·6	−0·2	62·7	−0·9	26·2	83·4	1st	43·0	29th	40·4
	Skardu	*7,505*	22·697	−·006	22·667	22·807	26th	22·553	1st	·254	70·0	86·9	+0·2	62·6	+1·7	74·7	+0·9	24·3	97·0	1st	54·6	26th & 27th.	42·4
	Gilgit	4,890	24·923		24·896	25·081	29th	24·791	15th	·340	76·5	96·8	+2·6	70·0	−2·1	83·4	+0·3	26·8	107·2	1st	62·2	4 days	45·0
	Baluchistan.																						
15	Fort Sandeman		25·230		25·199	25·334	25th	25·134	14th	·200	79·4	97·6		71·7		84·7		25·9	102·9	15th	65·1	26th	37·8
	Quetta	5,502	24·487	+·008	24·447	24·571	21st	24·409	1st	·162	74·4	91·7	+1·2	60·8	−0·3	76·3	+0·5	30·9	95·1	12th	51·2	28th	43·9
	Chaman	4,311	25·496	+·009	25·458	25·586	21st	25·382	1st	·204	82·9	97·3	−0·5	70·8	−1·8	84·0	−1·1	26·5	101·8	10th	64·8	27th	37·0
	Kalat	6,630	23·572		23·534	23·666	21st	23·517	1st	·149	62·1	88·9		48·5		68·7		40·4	92·5	12th & 13th.	41·2	28th	51·3
	Dalbandin	2,779	26·860		29·445	26·946	22nd	26·760	1st	·186	86·7	105·2		72·7		88·9		32·5	109·3	23rd	61·8	21st	47·5
	Pasni		29·612		29·572	29·747	22nd	29·527	1st	·220	81·1	88·5		79·4		3·9		9·1	91·0	7th	77·0	27th, 29th & 31st.	14·0
	Panjgur		26·522		26·480	26·615	21st	26·429	1st	·186	76·4	98·3		72·6		85·4		25·7	104·8	1st	66·0	26th & 28th.	38·8
	Robat		26·599		26·557	26·694	26th	26·393	3rd	·291	81·8	104·7		73·7		89·2		31·0	109·5	29th	70·3	18th	39·2
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*																					
	Para Chinar	6,000	24·309		24·285	24·401	29th	24·206	14th	·195	72·7	82·5		64·2		73·3		18·3	90·2	1st	59·1	21st & 26th.	31·1
	Cherat	*4,256*	25·539	+·017	25·507	25·644	25th	25·407	14th	·237	73·5	83·4	−3·5	69·1	−1·1	76·3	−2·3	14·3	92·2	15th	62·9	9th	29·3
	Drosh *				?	?	?	?	?	?	78·9	96·8		72·6		84·7		24·2	101·2	15th	65·1	21st	36·1
	Murree	6,333	23·743	0	23·711	23·833	25th	23·642	14th	·191	63·9	71·3	−2·1	60·8	−0·2	66·1	−1·7	10·5	76·6	31st	51·7	28th	24·9

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

† Mean of 30 days.

NOTE.—The barometric readings are not reduced to sea-level in the case

* Mean of 26 days

B—*continued.*

stations in India, etc., in August, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period 1st May to 31st, August, 1912.	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	56	57
																																XV.—Madras—*concld.*
1						4	21	5	N 89° W	N 85° W	7·2	8·2	−1·0	89	+ 3	72	+ 4	·669	+·021	7·5	−0·4	5	4·10	+0·90	4·35	2·36	+1·99	6·89	8·15	− 1·26	2·23	Bellary.
					1	13	11	6	S 76° W	N 89° W	9·4§			82	+17	78	+ 3	·720	+·005	7·3	−0·2	8	9·20	−1·20	5·22	5·56	−0·34	11·02	14·57	− 3·55	0·96	Kurnool.
2					1	4	9	15	N 73° W	N 68° W	6·0§	6·9	−0·9	76	+ 1	64	− 8	·760	−·056	7·2	−0·5	5	5·40	−0·40	5·85	3·48	+2·37	10·54	8·18	+ 2·36	2·90	Nellore.
1						3	14	13	N 74° W	N 72° W	6·5	5·6	+0·9	86	+ 3	82	− 1	·870	−·021	7·3	−0·5	15	9·80	+5·20	13·27	6·83	+6·44	24·33	18·68	+ 5·65	3·10	Masulipatam.
7						10	14		S 72° W	S 74° W	4·3	5·6	−1·3	72	− 7	83	+ 2	·902	+·052	7·7	+0·1	11	9·70	+1·30	5·65	5·55	+ 0·10	16·00	17·16	− 1·16	1·42	Cocanada.
1		1		1	2	21	5		S 48° W	S 84° W	6·1			79	− 2	84	+ 5	·873	+·012	8·5	+0·7	9	8·40	+0·60	8·65	5·58	+ 3·07	17·19	16·48	+ 0·71	2·52	Waltair (Vizagapatam).
1	2				3	12	8	5	S 73° W		6·9			69		88		·933		6·5		15			32·10	8·75	+23·35	44·72	20·15	+24·57	7·58	Calingapatam.
3	3	1			10	12		2	S 35° W	S 63° W	6·8	8·0	−1·2	53	− 5	90	+ 5	·935	+·010	7·3	−0·2	14	10·60	+3·40	11·50	7·53	+ 3·97	20·14	22·60	− 2·46	2·13	Gopalpur.
																																Bay Islands.
1			4	1	7	13	5		S 28° W					61		86		·988		7·5		5			1·94			21·62			0·80	P. V. Fraser.
2	1				1	13	11	3	S 72° W	S 62° W	6·6	7·9	−1·3	76	− 3	86	− 3	·887	−·033	8·8	+0·4	19			14·58	11·79	−0·21	59·20	66·63	− 7·43	2·28	Port Blair.
					4	16	9	2	S 57° W		14·3			86		93		·986		6·3		14			8·75	12·87	−4·12	55·36	52·02	+ 3·34	2·40	Slipper Island.
																																Kashmir.
		3		1	9	14	1	3	S 30° W		5·3			65		77		·710		3·8		12			7·87			34·15			2·00	Muzaffarabad.
11			1	11	3	2		3	S 28° E	S 48° E.	1·6	2·6	−1·0	37	+ 5	80	− 6	·573	−·052	3·7	−0·9	4	4·70	−0·70	2·09	2·41	−0·32	7·12	9·64	−2·52	0·70	Srinagar.
18		4	7	2					N 83° E		2·3			37		79	− 1	·424		4·3		7			3·06	4·91	−1·85	13·54	12·96‡	+0·58	1·14	Gulmarg.
25						1	4	1	W		5·6			17		64	+ 3	·313		3·4		1	1·40	−0·40	0·38	0·48	−0·10	5·59	5·09	+0·50	0·18	Dras.
31									(*a*)	N 85° W	1·8	1·3	+0·5			57	− 2	·281	+·002	4·9	+0·7	4	1·70	+2·30	0·64	0·52	+0·12	1·24	1·37	−0·13	0·23	Leh.
17			3	1	1	8	1		S 22° W		3·3			27		42	−12	·302		3·0		0	1·10	−1·10	0·06	0·41	−0·35	3·93	2·59	+1·34	0·04	Skardu.
28			1		1	1			S 11° E		0·8			5		50		·451	−·043	2·8	†−1·4	2	1·80	+0·20	0·40	0·45	−0·05	1·73	2·38	−0·65	0·20	Gilgit.
																																Baluchistan.
9	4	7	2			5	4		N 7° W		3·3			17		65		·650		1·4		3			1·24			4·07			0·43	Fort Sandeman.
24				1	2	3	1		S 27° W	S 22° W	1·5	2·0	−0·5	20	+14	55	− 5	·454	−·025	1·3	+0·2	1	0·70	+0·30	0·36	0·45	−0·09	1·00	1·74	−0·74	0·36	Quetta.
12			1		5	10	3		S 37° W	S 61° W	4·0	6·1	−2·1	49	− 2	33	+ 3	·370	+·001	0	−0·6	0	0	0	0·01	0·02	−0·01	0·41	0·22	+ 0·18	0·01	Chaman.
23	1			3	4				S 23° E	S 16° W	4·0†			20	−18	62		·356		0·5		1	0·50	+0·50	0·31	0·19	+0·12	1·28	1·37	− 0·09	0·23	Kalat.
7		2	9	3	1	5	3	1	S 50° E		4·3			27		42		·531		0·9		1			0·42			0·46			0·42	Dalbandin.
17		1	1	1		4	6	1	S 73° W		4·2			23		89		·952		7·4		11			0·37			1·25			0·30	Pasni.
10		5	4	2	1	6	2	1	S 41° E		3·5			10		70		·637		1·3		2			0·33			1·92			0·17	Panjgur.
9	1	2	6	3		3	7		S 14° E		2·4			6		43		·478		0·3		0			0			0			0	Robat.
																																Hill Stations excluding Kashmir and Baluchistan
																										0·32			3·27			Chitral.
22				3	3	2		1	S		1·4			19		68		·537		1·9		9	6·40	+2·60	9·70	2·83	+ 6·87	14·37	11·37	+ 3·00	1·72	Para Chinar.
19		1		2	5	2	2		S 10° W	S 31° E	4·9	5·9	−1·0	23	− 5	82	+ 9	·668	+·080	5·0	+1·1	6			4·37	4·50	− 0·13	8·90	11·14	− 2·24	2·07	Cherat.
20						2	4		S 75° W		¶ 2·2§			22		53		·521		0·3		0			0·06			0·06‖			0·04	Drosh.
15	5			3	1			7	N 24° W	N 46° W	3·5	3·9	−0·4	27	+ 5	90	+ 8	·533	+·019	6·8	+2·0	11	15·60	−4·60	10·94	14·12	− 3·18	30·89	32·24	− 1·35	3·23	Murree.

of hill or plateau stations, the elevations of which exceed 3,200 feet.

¶ Mean of 9 days.

† „ „ 30 „.

§ Uncorrected for scale error.

‖ Rainfall since 6th August, 1912.

(*a*) Indeterminate.

‡ Normal rainfall since June.

Table

(2) Abstract of observations taken at 8 hrs. at 220

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 hrs. in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Hill stations, excluding Kashmir and Baluchistan —*concld.*																						
	Simla	7,232	23·022	+·020	22·983	23·105	25th	22·915	14th	·190	61·7	66·3	−0·8	59·5	0	62·9	−0·4	6·8	68·9	27th	56·9	19th	12·0
	Sarain		23·049		23·011	23·139	25th	22·951	14th	·188	63·8	70·6		57·7		64·2		12·9	76·0	7th	54·0	20th	22·0
	Kalabagh		20·093		20·055	20·168	20th	20·006	14th	·160	51·7	55·8		46·9		51·4		8·9	58·8	7th	43·7	19th	15·1
	Chakrata	7,022	23·189	+·011	23·149	23·275	25th	23·087	14th	·188	63·0	69·2	+0·4	58·9	−0·6	64·1	−0·1	10·3	72·7	10th & 11th.	56·7	31st	16·0
	Mukteswar	7,592	22·747	−·009	22·706	22·822	25th	22·653	14th	·169	60·7	67·9	−1·3	55·6	−2·4	61·7	−1·9	12·3	73·0	10th	52·0	31st	21·0
	Darjiling	7,376	22·928	−·023	22·883	22·991	25th	22·842	15th	·149	61·1	67·0	+1·5	57·9	+0·7	62·5	+1·1	9·1	71·8	27th	55·2	3rd	16·6
	Shillong	4,920	25·017		24·969	25·073	8th	24·918	15th	·155	68·6	75·0		63·8		69·4		11·2	79·4	2nd	59·7	31st	19·7
	Cherrapunji	4,309	25·569		25·520	25·661	9th	25·463	15th	·198	67·6	72·8		65·0		68·9		7·8	80·7	2nd	55·6	9th	25·1
	Maymyo	3,545	26·313	−·021	26·258	26·384	8th & 9th.	26·226	6th	·158	69·4	76·4	−0·1	66·6	+1·3	71·5	+0·6	9·8	81·0	1st	64·6	23rd & 27th.	16·4
	Pachmarhi	3,528	26·266	−·010	26·213	26·393	21st	26·152	8th	·241	68·8	74·2	−0·5	67·0	−0·1	70·6	−0·3	7·2	79·5	20th & 21st.	61·6	7th	17·9
	Mount Abu	3,945	25·869	+·003	25·819	25·989	21st	25·796	9th	·193	66·9	72·2	+0·2	65·0	+0·8	68·6	+0·5	7·2	76·2	28th	62·4	23rd & 24th.	13·8
	Mercara	3,781	26·174	−·007	26·107	26·234	13th	26·111	28th	·123	64·0	69·1	−0·6	62·0	0	65·5	−0·3	7·1	76·0	13th	60·0	26th	16·0
	Ootacamund	*7,327*	23·016		22·952	23·074	13th	22·952	28th	·122	55·6	62·1		51·8		56·9		10·3	68·0	12th & 14th.	47·7	20th	20·3
	Kodaikanal	7,688	22·784	−·010	22·719	22·844	13th	22·730	27th	·114	56·9	63·4	+0·1	52·5	+0·1	58·0	+0·1	10·9	69·0	9th	49·5	1st	19·5
	Extra India.																						
	Singapore (*a*)	10	29·927		29·858	29·973	9th	29·880	5th	·093	83·3	87·7		75·8		81·7		11·9	90·0	4th & 12th.	73·0	28th	17·0
	Penang (*a*)	20	29·840		29·785	29·938	8th	29·786	3rd	·152	82·3	88·1		74·2		81·1		13·9	91·5	9th	72·0	5th & 25th.	19·5
	Trincomalee	99	29·728	?	29·756	29·788	3rd	29·658	24th	·130	77·8	94·1†	+2·0†	75·3†	−1·7†	84·7§	+0·1	18·8	99·0	6th	71·0	20th	28·0
	Colombo	24	29·870	−·031	29·820	29·918	14th	29·819	20th	·099	78·5	86·7	+1·1	76·8	−0·7	81·7	+0·2	9·9	88·5	17th & 31st.	74·0	31st	14·5
	Minicoy	7	29·931			29·981	13th	29·861	28th	·120													
	Amini Divi	*13*	29·882	−·009	29·823	29·950	13th	29·803	28th	·147	81·1	86·5	+1·2	78·0	+0·6	82·3	+0·9	8·5	90·4	7th	74·6	14th	15·8
	Gyantse	13,120	17·096		17·057	17·166	29th	17·007	3rd	·159	51·5	71·6		39·4		55·5		32·2	79·3	1st, 2nd & 13th.	31·4	19th	47·9
	Pharijong	14,400									48·5	57·0		37·3		47·1		19·7	74·4	5th	28·0	30th	46·4
	Gangtok	5,6609									66·4	74·1		63·0		68·6		11·1	78·9	27th & 31st.	60·2	3rd	18·7
	Gartok (*b*)	15,1009	17·553			17·570	4 days	17·510	14th	·060	54·8	74·3		35·2		54·7		39·1	79·6	9th	29·9	28th	49·7
	Kashgar (*b*)	4,255																					
	Kabul										74·1	97·8	+5·4?	72·2	+12·7?	85·0	+9·1?	25·6	105·0	7th	66·6	29th	38·4
	Meshed	3,104	26·693		29·691	26·826	22nd	26·513	1st	·313	72·5	89·2		55·0	−5·4	72·3		34·2	94·2	16th	47·5	13th	46·7
	Jask	13	29·583	−·025	29·549	29·729	22nd	29·449	1st	·280	86·0	94·8	+0·3	84·5	+0·5	89·6	+0·4	10·3	105·3	18th	81·8	4 days	23·5
	Muscat	20	29·579	−·014	29·548	29·732	22nd	29·454	1st	·278	86·2	91·4	+3·5	83·8	−0·5	87·6	+1·5	7·6	100·8	9th	80·1	23rd	20·7
	Bahrein	18	29·570		29·541	29·671	23rd	29·458	1st	·213	90·5	95·8		84·5		90·2		11·3	103·3	21st	78·7	31st	24·6
	Bushire	14	29·538	−·006	29·514	29·662	22nd	29·368	1st	·294	87·5	94·1	−2·9	82·3	−1·7	88·2	−2·3	11·8	97·8	17th	77·0	31st	20·8
	Busrah	25	29·550		29·544	29·665	23rd	29·435	1st	·230	86·9	103·1		82·6		95·4		25·5	116·9	18th	76·3	31st	40·6
	Kerman		24·081			24·770	7th, 13th & 20th	24·540	1st	·230	75·3	98·8		53·3		76·2		45·2	103·6	24th & 26th.	44·5	20th	59·1
	Ispahan (*c*)	*5,817*	24·207			24·290	13th & 17th.	24·060	1st	·230	76·8	95·3	−0·2	63·8	+2·3	79·6	+1·1	31·5	97·4	7 days	59·2	31st	38·2
	Tehran (*c*)	*4,002*	25·635			25·750	31st	25·495	1st	·255	81·3	97·6	+0·9	72·1	+1·4	84·8	+1·1	25·5	102·1	3rd	64·3	30th	37·8
	Baghdad	127	29·460	−·028	29·580	29·635	23rd	29·340	1st	·295	85·5	110·5	+2·1	76·9	−1·9	93·7	+0·1	33·6	117·2	14th	69·0	23rd	48·2
	Beirut (*d*)				29·759						81·0	85·5		72·8		79·1		12·7	87·3	22nd	70·9	27th	16·4
	Aden	94	29·645	−·005	29·671	29·720	15th	29·564	1st	·156	83·2	91·9	+0·4	79·6	0	85·8	+0·2	12·3	97·6	20th	75·9	3rd, 6th & 8th.	21·7
	Zanzibar	72	30·097	+·010	30·096	30·153	8th	30·032	29th	·121	74·9	81·7	+0·9	73·1	+0·4	77·4	+0·7	8·6	85·2	20th	69·3	13th	15·9

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.

(*a*) 9 hrs. observations
(*b*) Aneroid corrected.
(*c*) " uncorrected.
(*d*) 8½ hrs. observations.

§ Mean of 29 days.
† " 30 "

B—*concluded.*

stations in India, etc., in August, 1912—concluded.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall for period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1912.	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	56	57
																																Hill stations, excluding Kashmir and Baluchistan—*concld.*
																92	+ 1	·510	+·004	7·9	—0·1	21	18·90	+2·10	19·16	18·16	+1·00	37·56	44·70	— 7·14	3·25	Simla.
																83		·489		8·1		20			11·23	12·06	—0·83	26·61	30·85	— 4·24	2·26	Saraiu.
16	5			2	3	1		4	N 34° W		3·7			13		92		·354		9·5		27			15·38	19·02	—3·64	35·48	42·40	— 6·92	2·92	Kalabagh.
14	1			8	9				S 24° E	S 39° E	1·6	3·9	—2·3	46	+38	94	+ 1	·545	+·014	9·2	+3·3	23	20·10	+2·90	23·74	19·98	+3·76	55·31	50·45	+ 4·86	3·03	Chakrata.
15			7	1			7	1	(a)		4·8					94	0	·505		8·0		18			11·65	12·67	—1·02	30·04	34·14	— 4·10	1·63	Mukteswar.
24		1	1	1		1	2	1	W	N 88° E	0·5	2·7	—2·2	3	—37	96	0	·516	+·002	8·9	—0·1	26	24·13	+1·87	23·31	23·60	—3·29	81·30	90·48	— 9·18	3·78	Darjiling.
25			2	3		1			S 50° E		1·3			13		85		·590		7·4		13	18·50	—5·50	9·24	16·35	—7·11	50·28	57·99	— 7·71	1·80	Shillong.
16	2	3	2	1	4	3			S 45° E		3·0			13		95		·637		9·1		26	25·70	+0·30	69·06	84·81	—15·75	257·34	312·62	—55·28	9·66	Cherrapunji.
7		4		3		16	1		S 35° W		2·0			43		92	+ 3	·656		7·3		15	16·20	—1·20	9·58	8·29	+1·29	32·41	32·18	+ 0·23	3·06	Maymyo.
1	1					4	4	21	N 59° W	S 87° W	6·9	6·8	+0·1	79	+ 3	95	+ 3	·675	+·024	9·5	+0·4	22	21·80	+0·20	38·10	21·78	+16·32	65·07	55·64	+ 9·43	7·50	Pachmarhi.
	3				4	15	4	5	S 66° W	S 59° W	4·3	8·2	—3·9	66	—12	96	0	·639	+·030	8·5	—0·2	18	17·20	+0·80	12·64	21·06	—8·42	34·95	49·99	—15·04	1·51	Mount Abu.
5						3	14	9	N 79° W	N 76° W	5·6	6·1	—0·5	72	—18	100	+ 5	·587	+·010	10·0	+1·4	28	26·70	+1·30	23·28	26·39	+1·89	106·39	100·20	+ 6·19	3·10	Mercara.
3						2	14	12	N 74° W		5·2			82		90		·399		8·7		14	11·30	+2·70	4·30	6·67	—2·37	24·35	29·63	— 5·28	0·78	Cotacamund.
1	1		1	1		1	16	10	N 73° W		13·0			76		82	+ 2	·380		6·8		9	11·30	—2·30	5·39	7·49	—2·10	18·39	22·22	— 3·83	1·38	Kodaikanal.
																																Extra India.
7				15	3	5		1	S 21° E					56						6·7		10			11·01	7·47	+3·54	32·17	27·14	+ 5·03	3·98	Singapore (a).
		12		9		4		6	N 65° E		8·8			27								8			18·56	11·33	+7·23	45·94	33·95	+11·99	6·61	Penang (a).
						31			S 45° W	S 45° W	7·6*	10·2	—2·6	100	+ 3	83	+ 5	·789	—·080	6·4	+3·5	5			4·28	4·45	—0·17	10·47	10·11	+ 0·36	2·26	Trincomalee.
4						9	10	8	S 88° W	S 61° W	5·0*	6·7	—1·7	71	—17	86	+ 9	·846	0	7·4	+1·3	4			1·83	3·61	—1·78	45·52	26·98	+18·54	0·75	Colombo.
	1					1	14	15	N 66° W	N 79° W	7·5	10·9	—3·4	87	— 3					6·3	+1·1	13			6·00	7·46	—1·46	35·70	31·66	+4·04	1·09	Minicoy.
	1				4	18	3	5	S 70° W		12·5			71		81	— 2	·862	—·037	7·2	+0·5	15			4·53	6·86	—2·33	‖ 26·17	35·50	— 9·33	1·00	Amini Divi.
27			1	2			1		S 45° E		0·8			3		81		·306		2·0		11			2·27			6·42			0·47	Gyantse.
17		2		12					S 55° E		7·2†			39		77		·262		5·5		4			1·81			15·93			0·50	Pharijong.
29	1				1				(a)		0·6					95		·613		5·6		27			22·26	22·39	—0·13	96·09	87·66	+ 8·43	2·26	Gangtok.
26						5			S 45° W		5·7					13				3·4		3			0·42			0·80			0·17	Gartok.
										N 48° W		3·1														0·64			1·93			Kashgar.
	3	3	5	3	2	3	7	5	N 56° W	S 88° E				10	—4	71		·606				0			0	0·15	—0·15	0	1·47	— 1·47	0	Kabul.
27	1	1		2					N 82° E		1·0			6		37		·298		0·2	P	0			0	0·03	—0·03	1·60	1·82	— 0·22	0	Meshed.
2	1	1	24	1	1			1	N 88° E	S 74° E	7·5	10·5	—3·0	82	+6	77	+ 2	·955	—·066	3·9	+1·8	0			0	0	0	0	0·06	— 0·06	0	Jask.
5	3		19	1			1	2	N 78° E	S 76° E	4·5	3·2	+1·3	56	—4	76	— 6	·959	—·043	3·2	+1·0	1			0·26	0	+0·26	0·26	0·17	+ 0·09	0·26	Muscat.
	4		1	2		1	8	15	N 53° W		5·0			68		65		·932		0·6		0			0	0	0	0	0·10	— 0·10	0	Bahrein.
12	2	2	3	1			1	10	N 17° W	N 59° E	5·8	5·3	+0·5	33	+11	77	+10	1·001	+·012	0·4		0			0	0·01	—0·01	0	0·03	— 0·03	0	Bushire.
1				1	2	5	15	7	S 88° W		3·5			74		47		·601		0·2		0			0	0	0	0	0·46	— 0·46	0	Busrah.
28	2	1							N 18° E		2·3			10		31		·274		0		0			0			0			0	Kerman.
22			2	1		1	5		N 72° W	N 34° W	2·3	2·4	—0·1	10	— 9	43	— 6	·399	—·062	0·5	—0·1	0			0	0·01	—0·01	0·22	0·30	— 0·08	0	Ispahan.
18		1	1	3	3	4	1		W	S 14° W	3·1†	1·6	+1·5	23	+12	32	0	·338	—·021			0			0	0·05	—0·05	0·88	0·80	+0·08	0	Tehran.
	8							23	N 34° W	N 4° W	6·7	2·8	+3·9	94	+33	35	—10	·423	—·191	0	—0·2	0			0	0·05	—0·05	0	0·23	— 0·28	0	Baghdad.
9		1			11	7	3		S 25° W					57		68		·717		2·5		0			0			‡ 1·36			0	Beirut.
8	1	3	5	4	2	8			S 31° E	S 12° W	7·4	7·8	—0·4	30	—24	73	+ 1	·825	—·013	3·2	—0·5	0			0	0·13	—0·13	0·02	0·36	— 0·34	0	Aden.
1				1	14	14	1		S 22° W	S 1° W	4·9	5·0	—0·1	90	+ 4	85	0	·728	0	6·5	+0·3	3			1·04	1·72	—0·68	4·93	17·71	—12·72	0·29	Zanzibar.

(a) Indeterminate. * Uncorrected for scale error. † Mean of 20 days. ‡ Rainfall for June wanting. ¶ Normal ,, ,, 1st June. ‖ Rainfall since 6th August 1912.

Table C.—Abstract of observations taken at 8 hrs. at 62 fourth and fifth class stations in India, etc., in August, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs. at 62 fourth

Number of sub-division.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Balak	...	87·7†	...	74·6†	...	81·1	...	13·1	98·1	31st	71·2	23rd	26·9	...	...	...	...	...	...	...	...	...	...	...
	Bishnath	80·2	90·6	...	76·7	...	83·7	...	13·9	95·3	8th	73·7	2nd	21·6	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	80·1	90·3	...	75·7	...	83·0	...	14·6	95·6	26th	71·0	2nd	24·6	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	81·4	93·3	...	75·7	...	84·5	...	17·6	100·1	2nd	71·9	6th	28·2	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	79·3	90·6	...	76·1	...	83·3	...	14·5	98·5	30th	73·2	23rd	25·3	...	...	...	...	...	...	...	...	...	...	...
	Dikom	79·1	90·0	...	76·1	...	83·1	...	13·9	96·8	27th	71·4	29th	25·4	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	80·1	?	...	76·7	..	?	...	?	?	?	73·6	27th	?	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi*	79·9	89·1	...	?	...	?	...	?	96·4	26th	?	?		...	...	...	...	...	...	...	...	...	...	...
	Jorehat	81·2	90·1	...	76·5	...	83·3	..	13·6	95·9	8th	73·3	23rd	22·6	...	...	...	...	...	...	...	...	...	...	...
	Lumding	79·9	90·4	...	76·3		83·3	...	14·1	94·7	26th	74·0	24th & 26th.	20·7	...	...	...	...	...	...	...	...	...	...	...
	Messa	85·2	93·2	...	75·5	...	84·3	...	17·7	99·7	8th	70·9	8th	28·8	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	77·1	90·0	...	74·1	...	82·1	...	15·9	95·8	27th	68·7	29th	27·1	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	81·3	91·6	...	76·5	...	84·0	...	15·1	94·9	29th	72·2	23rd	22·7	...	...	...	..	...	...	...	...	..	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	83·0	88·7	..	77·8	...	83·3	...	10·9	92·8	1st	71·7	23rd	21·1	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	84·8	89·4	...	78·2	...	83·8	...	11·2	93·4	12th	73·1	2nd & 24th.	20·3	...	...	...	...	...	...	...	..	...	...	...
	Pabna	82·9	89·0	...	77·6	...	83·3	...	11·4	92·9	12th	74·9	9th & 24th.	18·0	...	..	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	79·5‡	91·9	...	76·1†	...	84·0	...	15·8	96·9	8th	73·0	8th	23·9	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	82·2	89·4	...	73·0	...	81·2	...	16·4	95·1	8th	70·4	24th	24·7	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	80·7	89·0	...	74·3†	...	81·7	...	14·7	94·1	2nd & 26th	69·0	28th	25·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

‡ Mean of 30 days † Mean of 28 days. * Observations of 11 days.

C.

and fifth class stations in India, etc., in August, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall of period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	..	...	...	...	...	...	...	...	...	16	...	...	40·75	...	...	...	...	...	7·57	Balak.
...	...	...	...	...	99	...	·919	...	...	...	18	...	...	18·40	19·65	—1·25	62·65§	59·43	+3·22	5·75	Bishnath.
...	...	...	...	...	90	...	·929	...	...	...	20	...	...	17·45	13·71	+3·74	62·88	54·67	+8·21	2·87	Borjuli.
...	...	...	...	...	88	...	·94[illegible]	...	...	...	20	...	...	13·61	13·85	—0·24	55·55	68·74	—13·19	2·47	Chandkhira.
...	...	...	...	...	98	..	·980	...	...	...	15	...	...	17·61	15·45	+2·16	71·16	61·50	+9·66	2·26	Doom Dooma.
...	...	...	...	...	93	...	·914	...	...	...	17	...	...	22·61	18·28	+4·33	71·56	65·38	+6·18	4·40	Dikom.
...	...	...	...	...	91	...	·935	...	...	...	14	...	...	11·41	12·56	—1·15	50·60	43·48	+7·12	2·12	Golaghat.
...	...	...	...	.	94	...	·956	...	...	...	7	...	...	7·62	18·89	—11·27	(a)7·62	74·92	—67·30	2·63	Hailakandi.
...	...	...	...	...	89	...	·947	...	...	...	17	...	...	9·66	16·83	—7·17	58·86	50·00	+8·86	1·37	Jorehat.
...	...	...	...	...	89	...	·896	...	...	...	13	...	...	9·69	...	...	28·53	...	...	4·15	Lumding.
...	...	...	...	...	81	...	·978	.	...	...	19	...	...	15·79	18·51	—2·72	50·87	60·99	—10·12	2·00	Messa.
...	...	...	...	...	93	...	·860	...	...	...	15	...	...	14·71	11·17	+3·54	51·0[illegible]	50·32	+0·70	4·06	Panerihat.
...	...	...	...	...	88	...	·941	...	...	...	19	...	...	12·33	12·84	—0·51	53·09	58·32	—5·23	2·26	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	20	17·14	+2·86	16·08	15·96	+0·92	63·04	59·45	+3·59	2·33	Comilla.
...	...	...	...	...	83	...	·933	...	...	...	17	...	...	9·22	14·10	—4·88	46·12	51·95	—5·83	2·50	Brahmanbaria.
...	...	...	...	...	...	...	...	...	..	...	19	16·22	+2·78	11·83	11·78	+0·05	47·03	46·26	+0·77	2·05	Faridpur.
...	...	...	...	...	84	...	1·006	...	...	...	16	...	...	10·82	10·58	+0·24	41·57	41·85	—0·28	2·42	Goalundo.
...	...	...	...	...	87	...	·987	...	...	...	19	...	...	10·24	8·69	+1·55	43·88	39·99	+3·89	2·85	Pabna.
...	...	...	...	...	...	...	...	...	...	...	19	13·87	+5·13	13·07	11·14	+1·93	38·30	42·99	—4·69	4·10	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	11	14·68	—3·68	6·07	9·74	—3·67	30·08	36·17	—6·09	1·08	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	16	14·48	+1·52	13·53	10·74	+2·79	40·87	34·53	+6·34	3·55	Malda.
...	...	...	...	...	...	...	...	...	...	...	15	13·35	+1·65	20·00	13·32	+6·68	70·63	55·07	+15·56	4·74	Rangpur.
...	...	...	...	...	94‖	...	·948‖	...	...	...	24	...	...	28·05	35·03	—6·98	107·90	119·14	—11·24	4·35	Dam Dim.
...	...	...	...	...	83	...	·924	...	...	...	21	...	...	30·16	37·92	—7·76	71·47¶	117·59	—46·12	7·19	Kalchini.
...	...	...	...	...	87	...	·912	...	...	...	21	...	...	34·25	34·96	—0·71	103·81	120·93	—17·12	6·08	Nagrakata.
...	...	..	...	...	...	...	...	...	...	...	17	16·72	+0·28	25·61	25·73	—0·12	93·09	103·97	—10·88	3·55	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	16	14·26	+1·74	8·67	10·09	—1·42	47·81	37·42	+10·39	2·60	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	20	16·66	+3·34	16·56	10·57	+5·99	48·47	37·99	+10·48	3·23	Bankura.
...	...	...	...	...	...	...	...	...	...	...	18	16·00	+2·00	11·20	11·78	—0·58	32·14	37·16	—5·02	2·50	Raniganj.

‖ Mean of 29 days. § Rainfall from 8th to 14th May not included. ¶ Rainfall, 17th to 30th July, not included. (a) Rainfall for August only.

Table

Abstract of observations taken at 8 hrs. at 62 fourth and

Number of sub-division.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	..	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	82·7	90·4	...	78·8	...	84·6	...	11·6	97·0	8th	74·1	24th	22·9	...	...	...	...	...	...	..	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	.	...	...	...
	XII.—Central Provinces																								
23	Chhindwara	74·1	81·4	...	70·9	...	76·2	...	10·5	86·0	26th	68·9	17th	17·1	...	1	...	...	...	...	6	13	11	N 79° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...
33	Anantapur	78·1	91·4	...	73·8	...	82·6	...	17·6	97·8	13th	71·1	21st	26·7	...	...	...	...	...	...	...	...	...	...	...
34	Guntur	82·8	92·5	...	77·7	...	85·1	...	14·8	98·8	20th	73·0	9th	25·8	..	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	82·8	90·7	...	71·7	...	81·2	...	19·0	96·1	31st	64·0	8th	32·1	...	14	9	3	1	4	..	...	...	N 32° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...	...	...	...
	Kargil	68·8	90·1	...	60·1	...	75·1	...	30·0	104·9	23rd	54·6	29th	50·3	...	14	1	7	7	...	..	...	2	N 45° E	...

C—*continued.*

fifth class stations in India, etc., in August, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall of period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	19	17·77	+1·23	15·14	12·74	+ 2·40	37·31	36·52	+0·79	3·06	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	17	13·32	+3·68	11·96	10·90	+1·06	36·61	34·23	+2·38	2·95	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	16	13·03	+2·97	12·59	13·51	−0·92	33·95	36·56	−2·61	2·80	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	12	12·97	−0·97	14·40	13·63	+0·77	32·77	41·32	−8·55	7·75	Motihari.
...	...	...	...	...	...	...	...	...	...	...	18	12·61	+5·39	12·06	10·93	+1·13	29·79	30·29	−0·50	2·60	Chapra.
...	...	...	...	...	...	...	...	...	...	...	15	12·87	+2·13	9·31	11·25	−1·94	29·69	32·21	−2·52	2·10	Arrah.
...	...	...	...	...	...	...	...	...	...	...	17	14·44	+2·56	14·23	12·64	+1·59	25·20	30·50	−5·30	4·67	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	89	...	·988	...	...	...	...	No	rain	gauge	...	...	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	12	9·40	+2·60	9·26	9·29	−0·03	19·85	22·40	−2·55	3·12	Meerut.
...	...	...	...	...	...	...	...	...	...	...	18	21·30	−3·30	28·89	30·55	−1·66	47·12	67·45	−20·33	10·37	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	9	8·70	+0·30	7·80	6·95	+0·85	23·20	18·30	+4·90	1·55	Udaipur.
																					XII.—Central Provinces.
3·8	...	...	81	...	86	...	·728	...	6·6	...	17	...	...	13·18	...	...	28·93	...	...	2·96	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	1	1·00	0	0·25	0·63	−0·38	3·38	3·07	+0·31	0·16	Tinnevelly.
...	...	...	...	...	75	...	·718	...	9·3	...	6	...	...	5·44	...	...	9·96	...	...	3·28	Anantapur.
...	...	...	...	...	82	...	·908	...	7·7	...	10	...	...	4·21	...	...	13·88	...	...	1·00	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	13	...	...	10·62	11·06	−0·44	71·58	43·95	+27·63	2·14	Car Nicobar.
																					Kashmir.
...	...	...	61	...	80	...	·892	...	4·8	...	12	...	...	9·73	...	...	21·51	...	...	2·65	Jammu.
...	...	...	...	...	...	...	...	...	...	...	8	...	...	2·63	3·38	−0·75	12·89	16·37	−3·48	0·66	Sonamarg.
...	...	...	48	...	42	...	·290	...	3·7	...	1	...	...	0·14	...	...	4·27	...	...	0·10	Kargil.

Table

Abstract of observations taken at 8 hrs. at 62 fourth and

Number of sub-division.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	78·5	80·0	...	73·7	...	80·9	...	14·3	94·0	8th	71·0	27th	23·0	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	68·6	73·6	...	64·9	...	69·3	...	8·7	79·3	7th	62·9	9th, 18th & 20th.	16·4	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	80·7	...	60·2	...	70·4	...	20·5	84·5	12th	55·2	26th	29·3	5	...	...	...	...	...	3	3	20	S 77° W	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pishin	...	93·4	...	63·8	...	78·6	...	29·6	97·4	9th & 10th	56·1	28th	41·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	110·5	...	93·7	...	102·1	...	16·8	115·5	21st	91·1	10th	24·4	...	...	...	...	...	...	...	...	...	...	...
	Birjand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	...	...	...	...	...	...	...	...	...		...		...	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	77·0	96·4	...	57·7	...	77·1	...	38·7	101·6	12th & 13th.	50·0	23rd	51·6	...	...	...	...	...	...	...	...		...	...
	Koweit	...	103·8	...	85·8	...	94·8	...	18·0	112·8	13th	81·2	17th	31·6	4	...	...	1	...	1	3	9	13	N 72° W	...
	Maidan	...	112·9	...	84·1	...	98·5	...	28·8	117·2	14th & 20th.	77·7	30th	39·5	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	101·1	...	81·7	...	91·4	...	19·4	106·2	15th	77·4	29th	28·8	...	1	...	...	2	2	2	...	21	N 54° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	98·0	...	74·9	...	86·4	...	23·1	102·1	2nd	60·4	21st	41·7	...	7	...	...	...	...	...	1	23	N 36° W	...

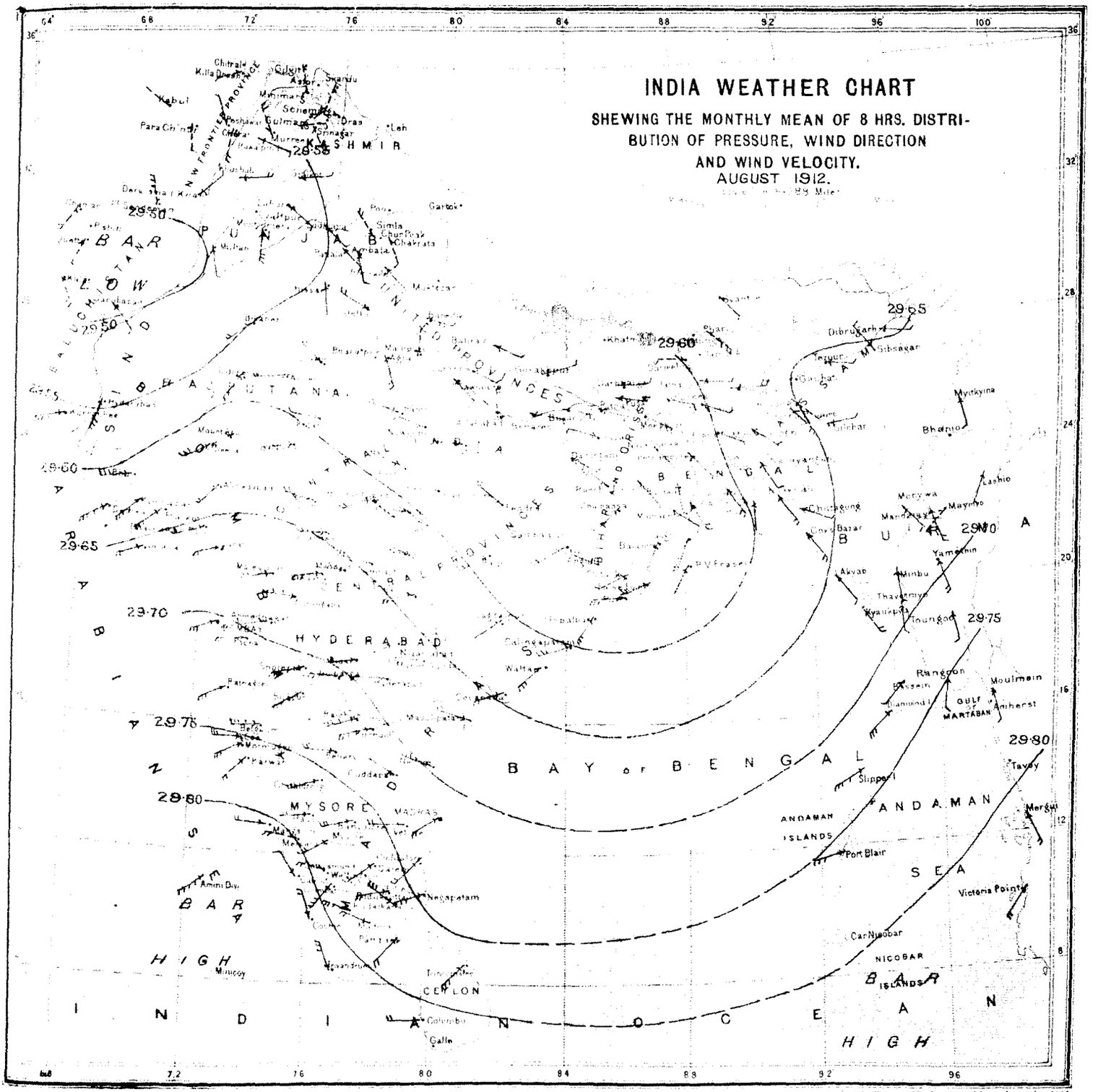
C—*concluded.*

fifth class stations in India, etc., in August, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st August, 1912.	Normal rainfall of period, 1st May to 31st August.	Departure from normal of period, 1st May to 31st August, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill stations, exclusive of Kashmir.
...	...	...	...	...	87	...	·844	...	...	...	25	...	...	34·09	32·39	+1·70	100·43	103·17	—2·74	7·77	Panighatta.
...	...	...	...	...	91	...	·636	...	...	...	26	...	...	41·37	33·96	+7·41	122·55	115·81	+6·74	6·92	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	28	...	...	22·65	...	...	98·48	...	...	2·17	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...*	...	...	...	Lachung.
...	...	...	...	...	...	...	...	...	...	...	28	...	...	28·21	...	...	114·96	...	...	2·35	Ringim.
...	...	...	71	...	...	...	...	...	6·0	...	0	...	...	0·05	0·74	—0·69	1·21	2·78	—1·57	0·02	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·47	...	...	6·58	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	21	...	...	30·21	...	...	63·64	...	...	5·00	Bakloh.
...	...	...	...	...	...	...	...	...	0·3	...	1	...	...	0·73	0·13	+0·60	1·81	0·43	+1·38	0·73	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Ahwaz.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Birjand.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Chumbi.
...	...	...	...	...	30	...	·281	...	...	...	0	...	...	0	...	...	0·20	...	...	0	Kirmanshah.
...	...	...	65	...	...	...	...	...	0·3	...	0	...	...	0	...	...	0	...	...	0	Koweit.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Maidan.
...	...	...	58	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Muhammerah.†
...	...	...	...	...	...	...	...	...	...	...	2	...	...	0·49	1·73	—1·24	8·05	28·95	—20·90	0·12	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·07	...	...	20·05	...	...	Prison Island.
21·1	...	...	90	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Seistan.

* Total rainfall since 1st June.

† Wind variable=3.

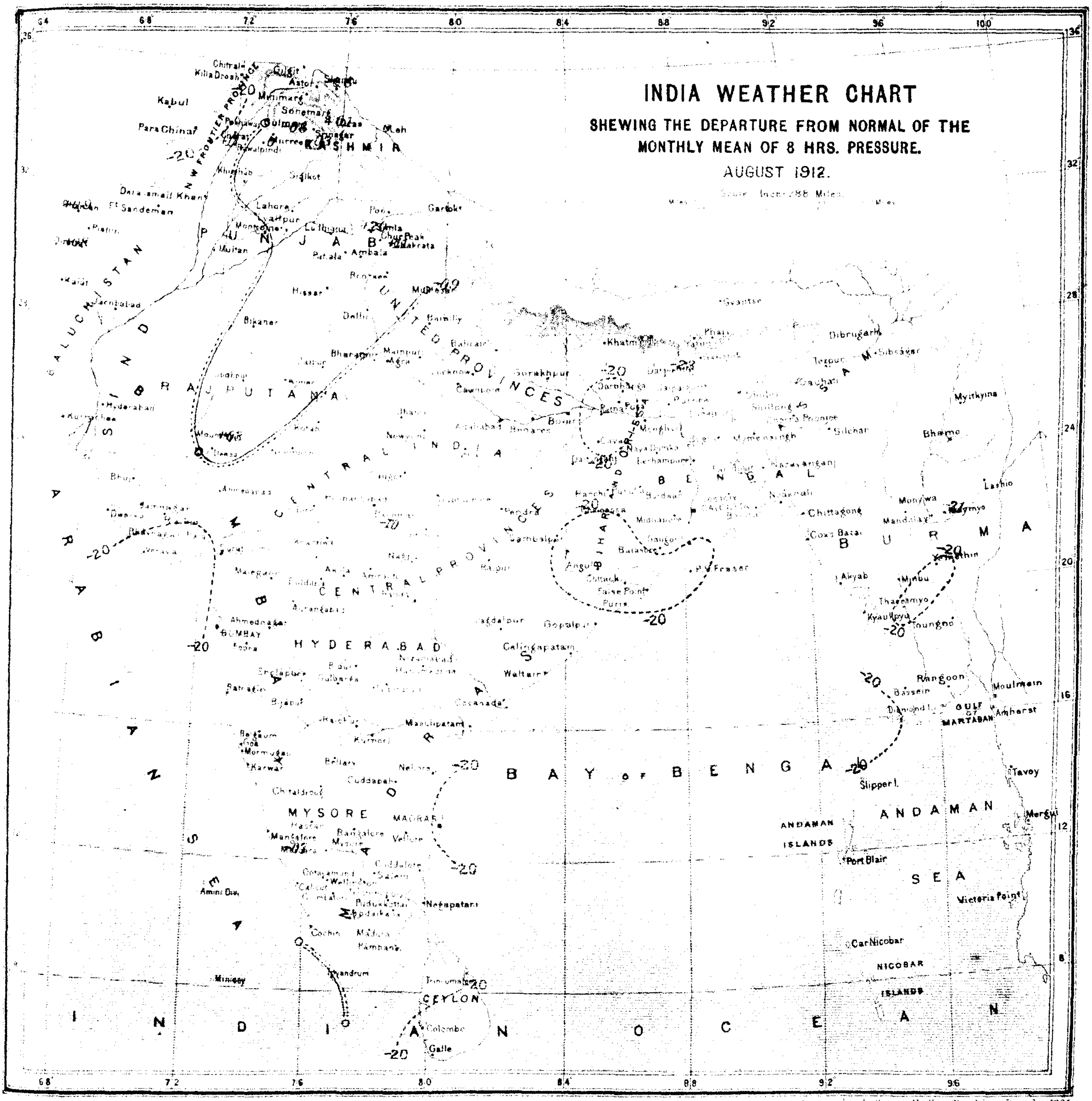


The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.



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

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

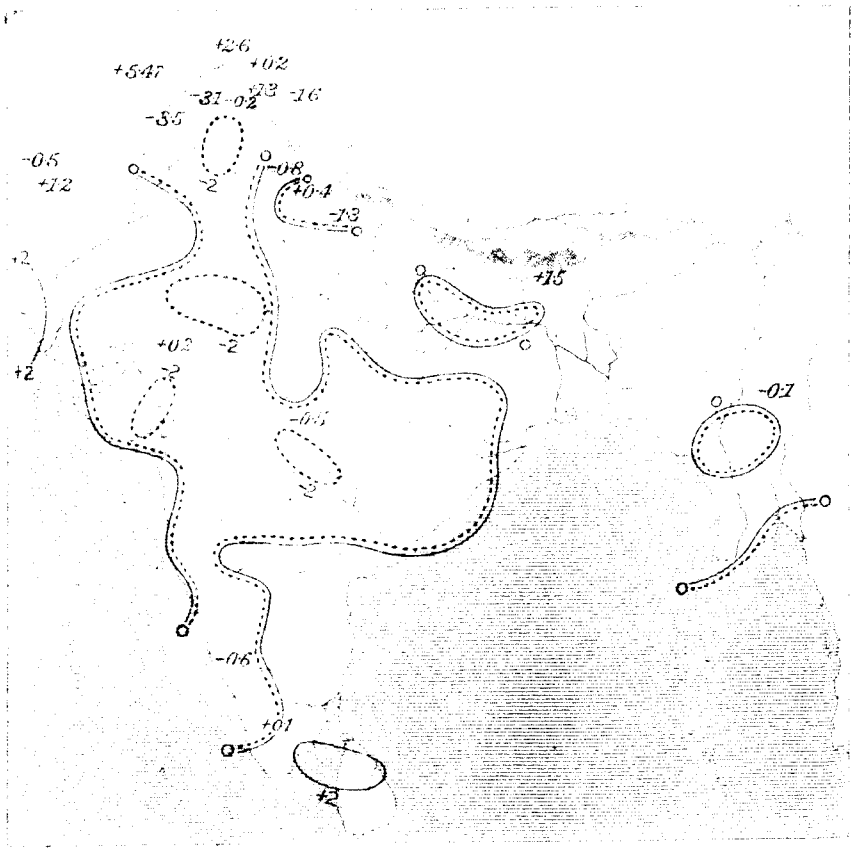


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.

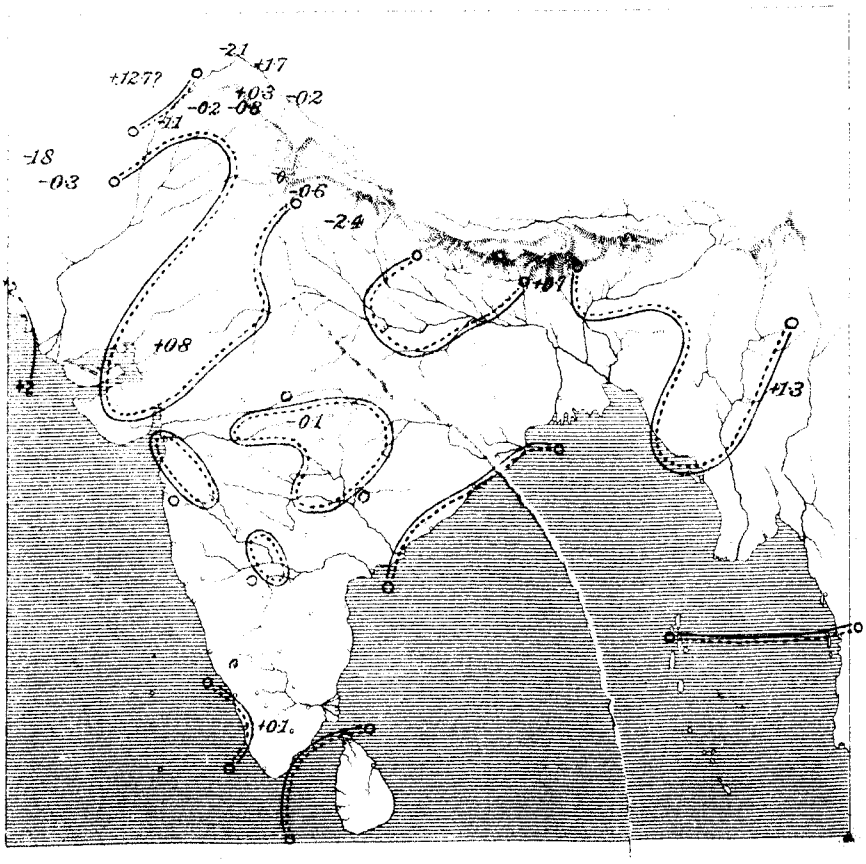
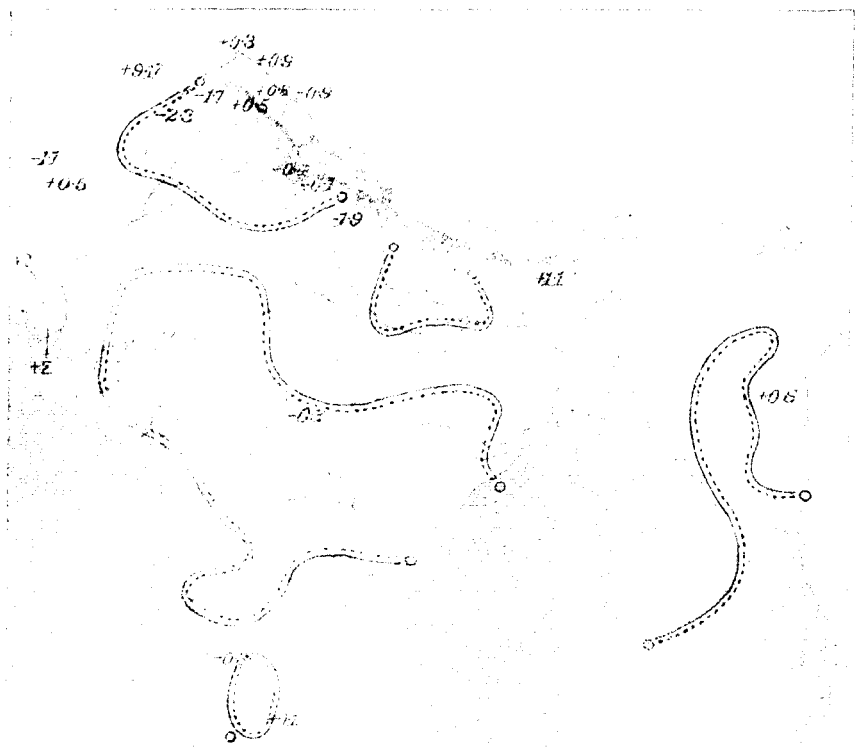


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF DAILY
MEAN TEMPERATURE.



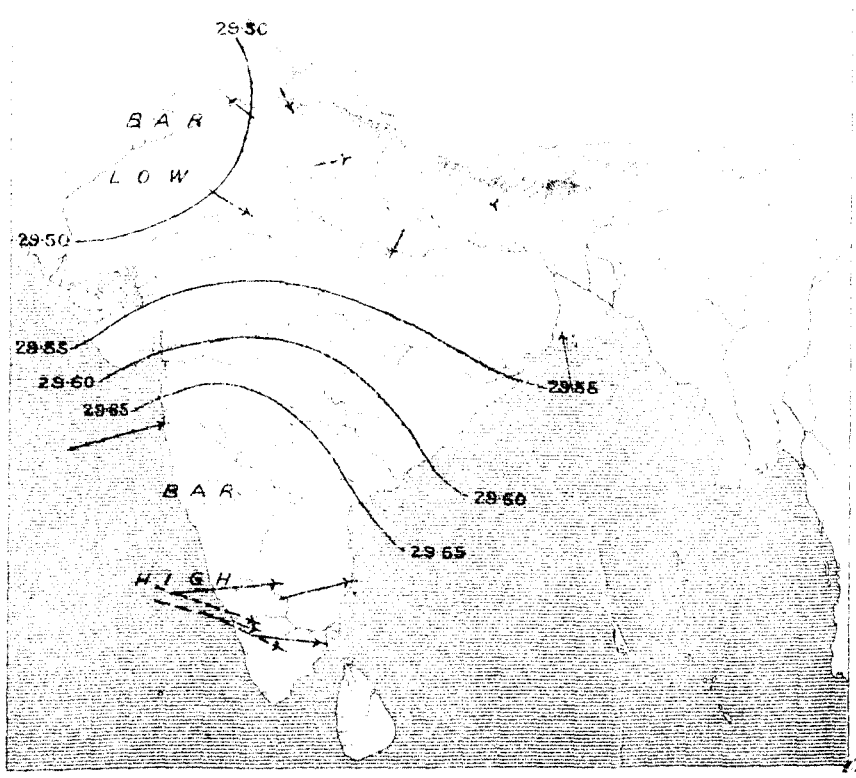


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

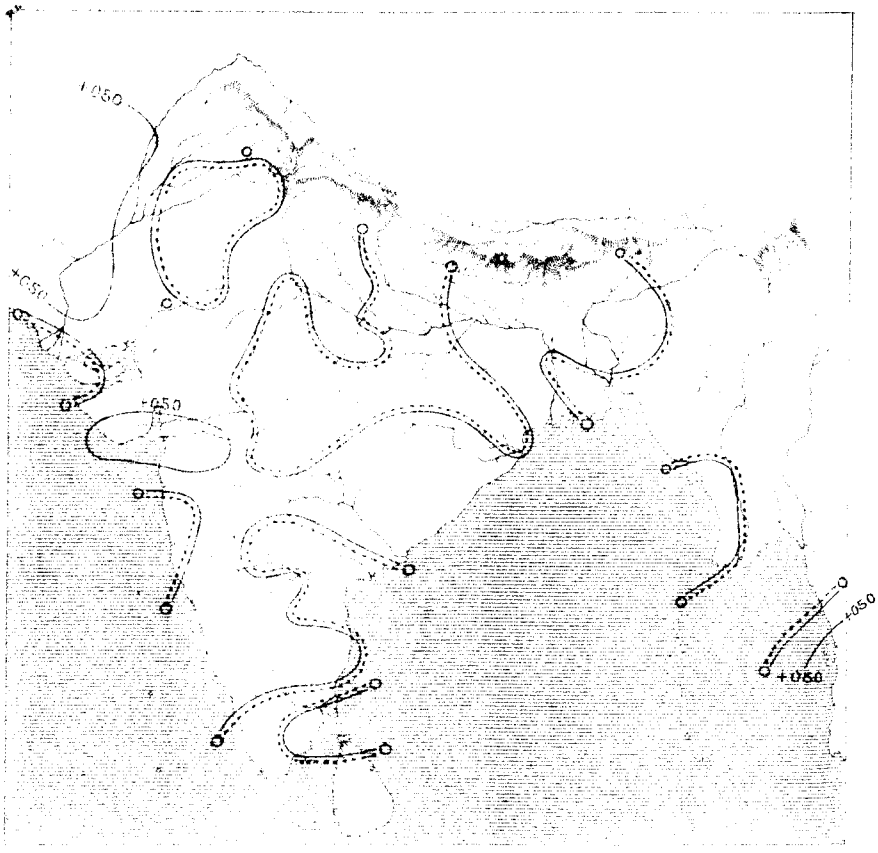
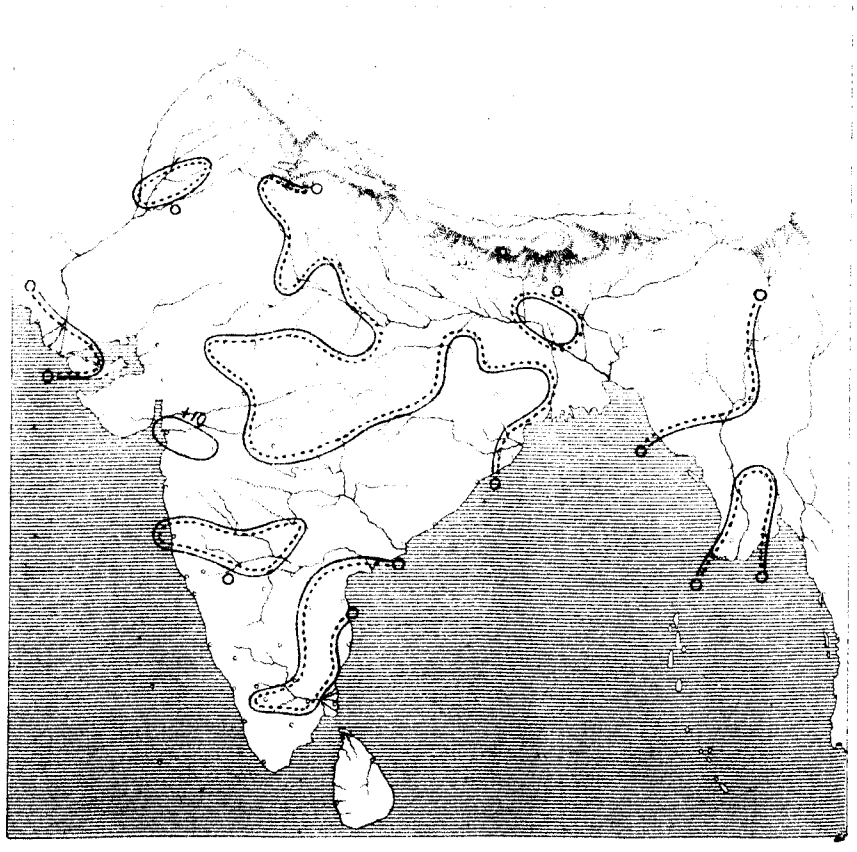


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.



LITHO. BY S.B.M.

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

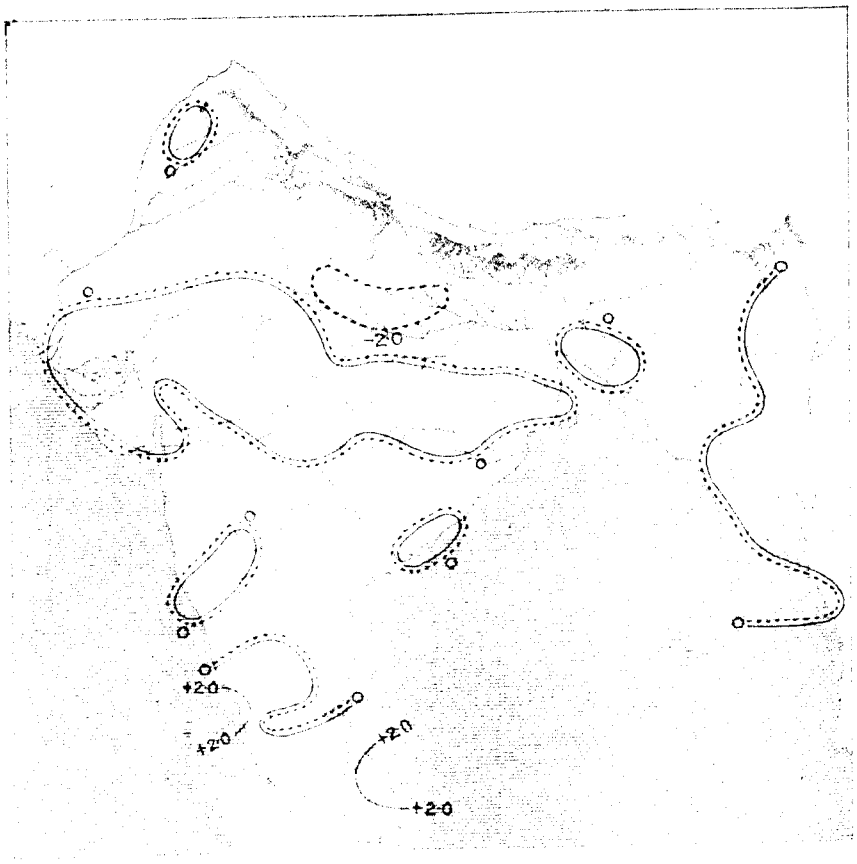
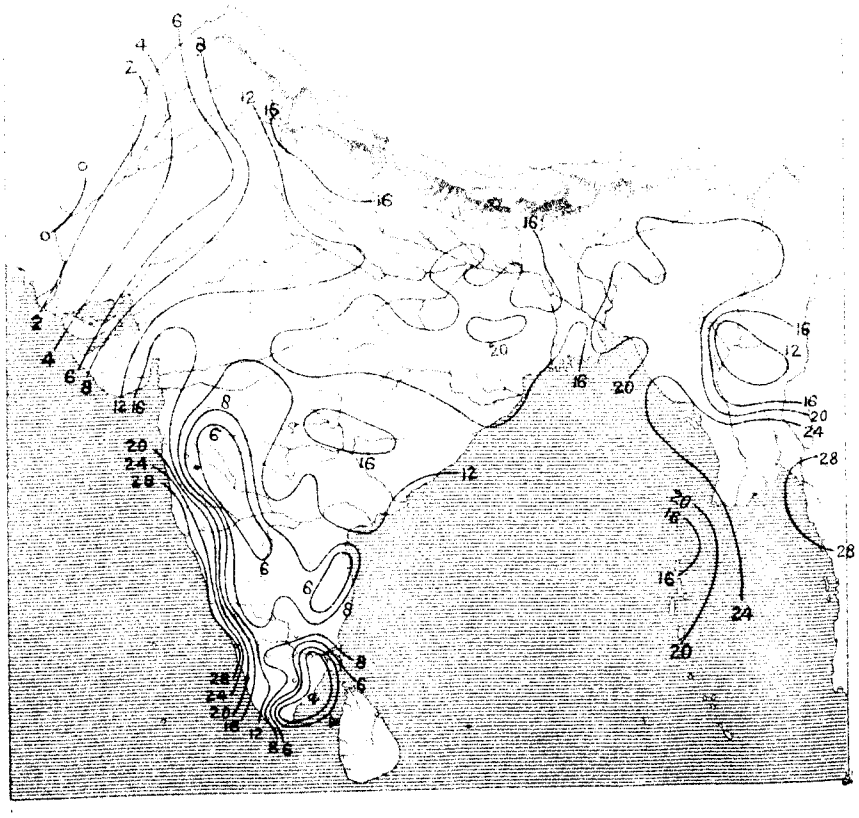
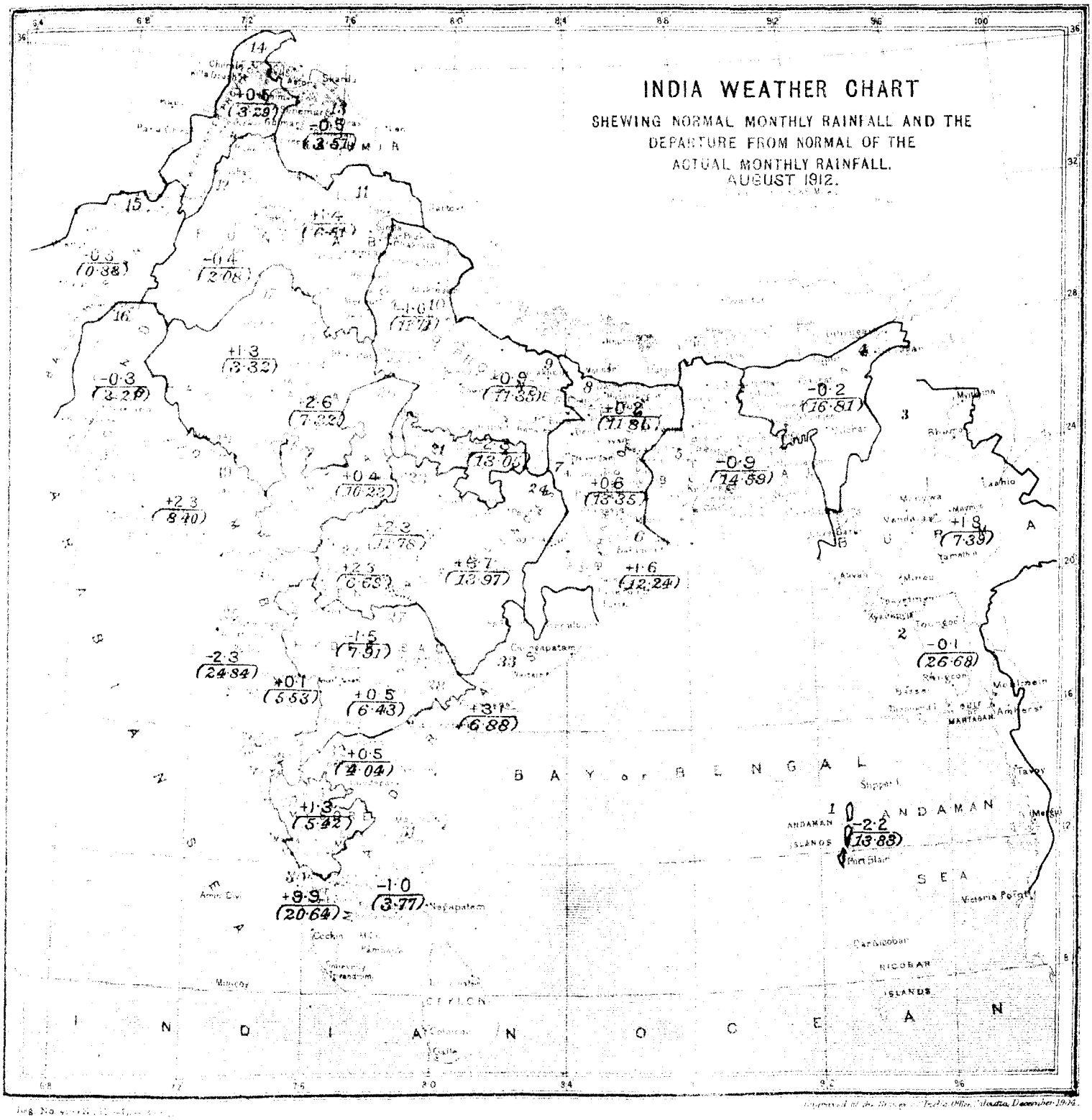


CHART SHEWING THE TOTAL NUMBER OF [illegible] IN THE
MONTH [illegible] RAINFALL EQUALLED OR
EXCEEDED 0·10 INCH.
(BASED ON THE RETURNS OF TABLE [illegible])



LITHO BY S. B. MONDLE.



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 monthly 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
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

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GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW.

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, SEPTEMBER, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of September, 1912, is based on observations taken daily at 8 hrs. at 220 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 17 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. (*a*) The monsoon was on the whole much less active than usual and withdrew nearly a fortnight before its normal date from the greater part of north-west India.

(*b*) Most of the rainfall of the month occurred in connection with four disturbances. The first of these lay near Delhi on the 1st, on which day nearly general, and in places heavy, rain was reported from Gujarat and Rajputana, the west of the United Provinces, the Punjab and the North-West Frontier Province. Its disappearance on the 3rd marked the termination of the monsoon rains of 1912 over practically the whole of north-west India. The second disturbance was formed over the north of the Bay on the 4th and travelled along a north-westerly track to the Simla—Chakrata hills where it was dissipated on the 7th. It was fairly well marked throughout and gave moderate to heavy rain along its path. The passing away of this disturbance was succeeded by a period of light and restricted rainfall up to the 23rd, when the third disturbance of the month appeared off the north Madras coast. This crossed inland on the 24th and advancing by a curved path disappeared in the hills near Naini Tal during the 27th. Although feeble barometrically it gave very opportune rain to the Central Provinces, Central India and the United Provinces. The fourth or last depression was even more diffuse but caused much rain in Bundelkhand and in the United Provinces from Jhansi northwards to Bareilly.

(*c*) The only areas where the month's rainfall equalled or exceeded the normal were the United Provinces West, Baluchistan, Mysore, the Madras Deccan and the Madras Coast, North. In the region including Bihar, Sind, Rajputana West, Gujarat, Hyderabad North and Kashmir the month's aggregate did not exceed 40 per cent. of the normal quantity. The deficit was large also in Chota Nagpur (45 per cent.), the North-West Frontier Province (49 per cent.), the Konkan (59 per cent.), Berar (55 per cent.), the Bombay Deccan (57 per cent.), and Hyderabad South (49 per cent).

(*d*) As usually happens during periods of scanty precipitation, the air was drier and the sky less cloudy than usual in almost all parts of the country. Temperature differed to no important extent from the normal except in the North-West Frontier Province and Baluchistan, where it was respectively 3° and 7° lower than usual. The lowness persisted nearly through the whole month and was on the whole shown much more largely in the night than in the day temperature.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—Solar observations were made on all the days during the month except on the 17th and on two other days prominences could not be observed.

Sunspots.—There were 5 spot groups observed and they were all small. The daily average number was 0·7 and the average life of a spot was 4·0 days. The visible disc of the sun was free from spots on only 11 days. The spots all occurred in the same zone of south latitude, approximately between −5° and −10.°

Prominences.—Thirty-four large prominences were observed during the month, also one eruptive and one metallic prominence. A prominence photographed on the 30th at latitude —33° east attained a height of 240″ the highest record for the month.

Magnetic disturbances.—Moderate disturbances were recorded from the 17th to 18th and from the 22nd to 25th. The latter belongs to the series of moderate disturbances which have occurred at intervals of a synodic rotation period of the sun since May 12th last.

Seismological records.

TABLE 1.

No.	Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Maximum amplitude.	Duration.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	mm.	h. m.	
61	Sept. 1	0 03·3	...	...	0 39·2		0 35·9	Widening of line.
62	„ 11	0 52·3	0 58·5	1 00·8	1 53·6	3·8=1·6	1 01·3	
63	„ 13-14	23 48·5	0 01·3	0 09·8	0 50·5	0·9=0·4	1 02·0	
64	„ 26	19 32·0	...	...	19 56·7		0 24·7	Widening of line.
65	„ 29	21 01·0	21 09·1	21 31·5	...	2·6=1·0	3 16·0	Beginning lost in end of 65.
66	„ 29-30	...	23 41·5	23 47·5	0 17·0	0·5=0·2		

J. EVERSHED,
Director,
Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of September, 1912, the traces showed 10 calm days, 18 days of small and 2 days of moderate disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 3rd, 7th, 15th, 16th and 29th.

The following table represents the magnetic character of each day during the month :—

TABLE 2.

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

C = calm ; S = small ; M = moderate ; G = great ; V. G. = very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follow :—

Easterly declination	0° 50′ 27″
Horizontal force	0·36869 C.G.S. unit.
Vertical force	0·16388 „ „
Inclination	23° 57′·9
Inclination (observed)	23° 56′·1
Horizontal force range	0·00028 „ „
Horizontal force summed range	0·00171 „ „
Declination range	4′·2
Declination summed range	16′·0

(NOTE.—Summed range means sum without regard to sign of the 24 ordinates of the diurnal inequality.)

Seismic disturbances.

TABLE 3.

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	h. m.	h. m.	h. m.	mm.	h. m.
Sept. 11	0 58·8	1 5·5	1 47·1	2·5	0 48·3
„ 13	Mixed with tremors.	23 58·7	Mixed with tremors.	1·0	.....
„ 26	19 42·5	19 44·4	19 51·2	0·5	0 8·7
„ 29	21 2·9	21 34·6	22 47·8	1·5	1 44·9
„ 29-30	23 21·7	23 41·0	0 2·4	0·5	0 40·7

All times given above denote G. M. T. Sensibility to tilt 1 mm.=0″·37.

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

CALCUTTA OBSERVATORY.

5. *List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maximum. G. M. T.	End. G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
Sept. 10	23 51·5	11-9-12 0 56·0	11-9-12 1 6·7	11-9-12 3 20·9	3 29·4	5·50	Begins and ends in morning air tremor.
" 13	23 38·7	14-9-12 0 6·2	14-9-12 0 10·2	14-9-12 2 57·0	3 18·3	1·25	Do.
" 26	19 27·5	...	19 43·3	19 58·6	0 31·1	0·50	
" 29	20 59·8	21 6·9	21 22·6	30-9-12 3 12·5	6 12·7	7·00	Ends in morning air tremor.

Sensibility 1 mm.=0·38″ of tilt.

C. W. PEAKE,

Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. *List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 5.

Date.	Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Maximum amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
Sept. 11th A	0 59·4	1 4·0	1 8·0	1 8·8	2 29	1 30	1·0	
" B	0 59·3	1 3·9	1 6·9	1 11·1	2 19	1 20	1·6	
" 14th A	23 39·6	23 48·4	23 56·6	23 57·2	1 29	1 50	0·8	
" B	23 44·3?	23 48·3	23 53·3	23 57·3	1 29	1 45	1·1	
" 19th A	22 27·3	P	22 27·7	22 27·7	22 30·5	0 3·2	Small	Not shown on B.
" 29th A	21 1·7	21 9·7	21 20·8	21 14·6	22 46	1 45	5·1	
Sept. 29th B	21 1·5	21 9·6	21 21·1	21 27·4	23 59	2 58	2·8	
" 30th A	5 37·5	5 39·3	5 41·6	5 41·0	6 16	0 39	0·8	
" B	5 37·5	5 39·4	5 41·9	5 42·3	5 58	0 21	0·5	

August 31st B. Disturbance from about 22 hrs. 57 mins. to about 23 hr., 47 mins. maximum 0·3 at 23 hrs. 5·3 mins.
September 1st A. Disturbance from about 22 hrs. 48 mins. to about 0 hr. 5 mins. maximum 0·4 mins. at 23 hrs. 2·8 mins.
" 6th A. Slight local disturbance from 16 hrs. 37·3 mins. to 16 hrs. 44·6 mins.
" 6th B. Slight local disturbance from 16 hrs. 37·6 mins. to 16 hrs. 41·2 mins.
" 9th A. Slight local disturbance from 19 hrs. 11·6 mins. to 19 hrs. 23·7 mins.
" 9th B. Slight local disturbance from 19 hrs. 12·3 mins. to 19 hrs. 20·2 mins.
" 22nd A. Slight disturbance from about 5 hrs. 11 mins. to about 5 hrs. 39 mins. maximum at 5 hrs. 19·4 mins.
" 22nd B. Slight disturbance from about 5 hrs. 12 mins. to about 5 hrs. 34 mins. maximum at 5 hrs. 18·3 mins.
" 26th A. Slight disturbance from about 19 hrs. 26 mins. to about 20 hrs. 2 mins. maximum at 19 hrs. 46·9 mins.
" 26th B. Slight disturbance from about 19 hrs. 29 mins. to about 20 hrs. 13 mins. maximum at 19 hrs. 48·6 mins.

All times are given in G. M. T.
A=E—W component.
B=N—S component.
Magnification of both instruments was 15.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity. Rossi-Forel scale.	No. of shocks.	REMARKS.
	Sept.	h. m.	sec.			
Drosh . .	9th	23 30	5	6	3	
Gulmarg . .	12th	20 11	30	6	4	
Drosh . .	12th	20 20	5	6	3	
Darjiling . .	13th	16 38	5	...	...	Slight.
Drosh . .	27th	19 55	3	6	1	

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·35
Minimum	1·24
Mean	1·31
Number of days of observation .	7

W. A. HARWOOD,

Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. In the equatorial belt pressure and air movement were below the normal. Rainfall differed but little from the average at Seychelles, but was in large excess at Zanzibar.

TABLE 7.

	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	—·024	—·021	—·021
Actual mean wind direction	S 80° E	S 1 W	S 31 E
Normal mean wind direction	S 71 E	S 5 E	S 40 E
Actual mean wind velocity (miles per diem).	267	79	186
Normal mean wind velocity (miles per diem).	255	98	288
Rainfall departure from normal	+ 0·19	+ 4·49	+ 0·22

Depressions and cyclonic storms.

9. The depression which passed from Orissa to north-west India at the end of the previous month, moved into the Chakrata hills during the 1st and 2nd of September and gave moderate to heavy rain in its neighbourhood. On the 4th of the month, a deficiency of pressure appeared in the neighbourhood of Akyab and the eight o'clock observations on the 5th showed a well-formed depression over the Sandheads. This moved somewhat rapidly up the Gangetic Plain and on the morning of the 7th, its centre was near to Agra. The next day it passed into the hills near Chakrata and there dissipated. This disturbance gave good rain over Bengal, Central India, the United Provinces and the east of the Punjab.

The third depression of the month appeared as a low pressure area off the north Madras coast on the 23rd September; it crossed the coast near Waltair on the afternoon of the 24th, moved across the Central Provinces and Central India into the west of the United Provinces during the next three days, and disappeared in the hills near Naini Tal during the 27th. The pressure deficiency connected with the depression was only small, but good rains resulted along the greater part of the path.

On the morning of the 27th, a shallow depression was shown near Gopalpur which passed inland as a diffuse area of low pressure, and had entirely dissipated by the morning of the 30th. Although this disturbance had even less pressure deficiency than the previous one, it caused much rain in Bundelkhand, and in the United Provinces from Jhansi northward to Bareilly.

Pressure.

10. With the exception of Madras every division experienced a greater or less excess of pressure during September. The excess was greatest in the central parts of the country, the departure from normal over the Central Provinces and Central India being + ·040 inch. Plate I showing the mean 8 hrs. distribution of pressure indicates that the trough of low pressure was moved, by the pressure excess over the central parts of the country, towards the hills, thus preventing the Bay monsoon current from entering northern India to the north of the trough.

The vertical pressure gradient was very irregular, but on the whole the gradient was greater than usual, indicating that some of the excess of pressure shown by the plains stations was caused by abnormally heavy air in the lower atmosphere.

TABLE 8.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
Burma	+ ·002
Assam	+ ·010
Bengal	+ ·021
Bihar and Orissa	+ ·031
United Provinces	+ ·021
Punjab	+ ·022

Division.	Departure from normal of mean 8 hrs. pressure.
	"
North-West Frontier Province	+·009
Sind	+·029
Rajputana	+·025
Bombay	+·014
Central India	+·040
Central Provinces	+·041
Hyderabad	+·015
Mysore	+·004
Madras	0

TABLE 9.

Hill station.	Departure from normal pressure. A	Plain station.	Departure from normal pressure. B	Departure of pressure difference. B—A.
	"		"	"
Quetta	+·034	Jacobabad	+·026	—·008
Leh	—·006	Lahore	+·021	+·027
Murree	+·012	Peshawar	+·007	—·005
Simla	+·010	Ludhiana	+·021	+·011
Chakrata	+·014	Roorkee	+·021	+·007
Darjiling	—·026	Jalpaiguri	+·009	+·035
Mount Abu	+·027	Deesa	+·024	—·003
Pachmarhi	+·032	Khandwa	+·037	+·005
Kodaikanal	—·011	Madura	+·011	+·022

Temperature.

11. The mean temperature of the month was within two degrees of the normal in all the political divisions except the North-West Frontier Province; but there were two areas in which the mean temperature showed a larger abnormality. An area with the mean temperature between two and four degrees above the normal occurred over the north-west of the Peninsula, while an area with the mean temperature below the normal by about the same amount occurred in north-west India. These two areas owed their existence to different causes; for in the former it was the maximum temperature only which was in excess, while in the latter only the minimum temperature was in defect.

TABLE 10.

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	84·3	76·5	80·4	7·9	14·1	—0·8	—0·8	0
2. Lower Burma	86·0	75·7	80·8	10·3	17·3	+0·7	+0·6	+0·1
3. Upper Burma	90·4	75·8	83·1	14·6	24·1	—0·5	—0·1	—0·4
4. Assam	88·5	75·9	82·2	12·5	21·0	+0·7	—0·2	+0·9
5. Bengal	89·5	78·0	83·7	11·5	18·1	+1·5	+0·3	+1·2
6. Orissa	89·3	77·5	83·5	11·8	18·2	+0·4	—0·3	+0·7
7. Chota Nagpur	88·9	73·9	81·4	15·0	23·5	+0·2	—0·3	+0·5
8. Bihar	91·1	76·9	84·0	14·2	23·1	+1·6	—0·8	+2·4
9. United Provinces, East	92·0	74·5	83·3	17·5	31·2	+0·5	—1·7	+2·2
10. Do. do., West	89·6	72·8	81·2	16·8	30·9	—2·4	—2·7	+0·3
11. Punjab, East and North	94·8	70·4	82·6	24·4	36·6	—0·3	—3·5	+3·2
12. Do., South-west	100·7	72·6	86·7	28·1	39·9	+0·2	—3·9	+4·1
13. Kashmir	75·9	47·9	61·9	28·1	43·6	—0·3	—3·0	+2·7
14. North-West Frontier Province	97·3	67·7	82·5	29·7	42·8	—0·9	—4·9	+4·0

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
15. Baluchistan	87·6	54·5	71·1	33·1	47·7	—5·9	—8·7	+2·8
16. Sind	96·1	74·1	85·1	22·0	34·3	+0·6	—1·8	+2·4
17. Rajputana, West	96·3	73·7	85·0	22·7	35·1	+0·6	—2·9	+3·5
18. Do., East	90·9	73·2	82·1	17·6	29·8	—1·7	—2·7	+1·0
19. Gujarat	90·4	73·7	82·1	16·7	28·7	+1·0	—1·3	+2·3
20. Central India, West	86·7	68·1	77·4	18·5	30·2	0	—2·4	+2·4
21. Do., East	87·1	72·4	79·7	14·7	28·1	—2·1	—2·4	+0·3
22. Berar	89·9	71·3	80·6	18·6	28·4	+2·7	—0·1	+2·8
23. Central Provinces, West	87·5	71·0	79·3	16·4	28·5	—0·1	—1·5	+1·4
24. Do., East	86·7	72·5	79·6	14·2	22·6	—0·2	—0·5	+0·3
25. Konkan	84·4	75·5	79·9	8·9	14·2	+0·9	+0·4	+0·5
26. Bombay Deccan	89·9	68·7	79·3	21·2	31·1	+4·8	0	+4·8
27. Hyderabad, North	88·5	70·8	79·7	17·7	26·2	+3·5	+0·3	+3·2
28. Do., South	89·8	73·0	81·4	16·8	26·5	+2·3	+0·9	+1·4
29. Mysore	82·8	66·6	74·7	16·2	23·9	+0·3	+0·7	—0·4
30. Malabar	84·7	75·1	79·9	9·7	14·1	+0·8	+1·1	—0·3
31. Madras, South-east	93·1	76·0	84·5	17·0	26·3	+0·5	+0·9	—0·4
32. Do., Deccan	92·8	74·6	83·5	18·2	28·2	+2·0	+0·7	+1·3
33. Do. Coast, North	90·1	77·7	83·9	12·5	21·5	—0·1	—0·1	0

TABLE 11.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·2	+0·3	+0·3
Assam	+0·7	—0·2	+0·3
Bengal	+1·5	+0·3	+0·9
Bihar and Orissa	+0·9	—0·5	+0·2
United Provinces	—0·9	—2·2	—1·5
Punjab	—0·2	—3·6	—1·9
North-West Frontier Province	—0·9	—4·9	—2·9

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Sind	+0·6	—1·8	—0·6
Rajputana	—1·0	—2·8	—1·8
Bombay	+2·2	—0·4	+0·9
Central India	—1·0	—2·4	—1·7
Central Provinces	+0·5	—1·0	—0·3
Hyderabad	+2·7	+0·7	+1·7
Mysore	+0·3	+0·7	+0·5
Madras	+0·7	+0·7	+0·7

Winds.

12. The position of the trough of low pressure and the excess of pressure over the central parts of the country had a marked influence on the force and direction of the wind. in Bengal, Hyderabad, Bombay, the North-West Frontier Province, Assam and Burma the wind strength was much below normal, and in north-east India, the United Provinces and the Punjab the wind directions departed locally by large amounts from the usual directions.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	—0·6	—18
Assam	—0·4	+ 3
Bengal	—1·3	—19
Bihar and Orissa	—0·2	—11
United Provinces	—0·2	+ 8
Punjab	—0·2	0
North-West Frontier Province	—0·6	—15
Sind	—1·7	—12
Rajputana	+0·1	+ 6
Bombay	—1·4	— 9
Central India	—0·5	+ 3
Central Provinces	—0·1	— 4
Hyderabad	—2·0	—16
Mysore	—0·8	— 7
Madras	0	— 3

Humidity and cloud.

13. Humidity, both relative and absolute, was below normal over the geater part of the country; but especially in the north-west of the Peninsula and in the Punjab and Rajputana. This was evidently the result of the absence of rain. Cloud also was in nearly general defect, the defect being largest in the north-west of the Peninsula, where humidity and rain were also decidedly below normal.

TABLE 13.

Division.	Hygrometry; 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	89	— 1	·872	—·009	6·5	—0·4
Assam	89	— 4	·898	—·014	5·9	—2·3
Bengal	87	— 2	·953	0	5·5	—1·6
Bihar and Orissa	82	— 3	·874	—·024	4·3	—1·4
United Provinces	77	— 3	·790	—·067	3·3	—0·9
Punjab	62	— 7	·611	—·120	1·2	—0·7
North-West Frontier Province.	61	— 4	·571	—·111	0·6	—0·3
Sind	68	— 4	·729	—·055	1·2	—1·2
Rajputana	63	— 6	·638	—·110	2·4	—0·5
Bombay	79	— 3	·767	—·024	4·2	—1·9
Central India	79	— 2	·716	—·065	4·4	—0·7
Central Provinces	76	— 7	·705	—·086	4·3	—1·3
Hyderabad	73	— 7	·699	—·039	4·9	—2·1
Mysore	85	+ 2	·640	+·011	7·8	—0·1
Madras	79	0	·828	+·019	5·5	—0·9

Rainfall.

14. The monsoon was very weak during the month, and rainfall was below the normal everywhere except in the United Provinces west, Baluchistan, Mysore, the Madras Deccan and the Madras Coast, North.

TABLE 14.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	15·0	18·4	12·21	15·19	−2·98	−20
2. Lower Burma	16·0	18·7	14·37	17·27	−2·90	−17
3. Upper Burma	8·3	10·2	5·98	7·45	−1·47	−20
4. Assam	11·9	13·6	9·52	12·02	−2·50	−21
5 Bengal	9·2	12·4	7·71	11·49	−3·78	−33
6. Orissa	11·0	11·9	8·12	9·79	−1·67	−17
7. Chota Nagpur	7·0	10·4	4·50	8·24	−3·74	−45
8. Bihar	5·0	9·4	3·79	9·42	−5·63	−60
9. United Provinces, East	4·9	7·3	5·40	6·79	−1·39	−20
10. Do., West	6·8	5·9	9·81	5·86	+3·95	+67
11. Punjab, East and North	2·1	3·2	2·50	3·08	−0·58	−19
12. Do., South-west	0·8	1·1	0·69	0·80	−0·11	−14
13. Kashmir	0·4	2·7	0·12	1·54	−1·42	−92
14. North-West Frontier Province	1·2	1·8	0·59	1·15	−0·56	−49
15. Baluchistan	0·2	0·3	0·15	0·14	+0·01	+7
16. Sind	0·1	0·7	0·12	0·47	−0·35	−74
17. Rajputana, West	0·6	2·3	0·73	2·08	−1·35	−65
18. Do., East	3·5	4·9	3·17	3·96	−0·79	−20
19. Gujarat	2·9	6·3	1·50	5·60	−4·01	−73
20. Central India, West	3·5	7·5	3·29	5·75	−2·46	−43
21. Do., East	5·4	8·1	5·40	6·97	−1·57	−23
22. Berar	3·1	7·9	2·58	5·79	−3·21	−55
23. Central Provinces, West	6·4	9·5	5·50	7·96	−2·45	−31
24. Do., East	8·4	10·3	7·54	8·40	−0·86	−10
25. Konkan	8·9	16·0	5·59	13·50	−7·91	−59
26. Bombay Deccan	4·2	8·6	2·55	5·94	−3·39	−57
27. Hyderabad, North	3·4	10·5	2·62	8·24	−5·62	−68
28. Do., South	5·3	10·3	3·47	6·80	−3·33	−49
29. Mysore	9·5	8·0	7·16	5·20	+1·96	+38
30. Malabar	9·8	13·7	5·61	9·49	−3·88	−41
31. Madras, South-east	5·6	6·1	4·35	4·50	−0·15	−3
32. Do. Deccan	8·1	7·6	6·59	5·40	1·19	+22
33. Do. Coast, North	10·3	9·1	7·74	6·84	+0·90	+13

TABLE 15.

Division.	Rainfall. Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	9·89	12·02	−2·13	− 18
Assam	9·52	12·02	−2·50	− 21
Bengal	7·71	11·49	−3·78	− 33
Bihar and Orissa	4·92	9·28	−4·36	− 47
United Provinces	7·45	6·35	+1·10	+ 17
Punjab	2·13	2·61	−0·48	− 18
North-West Frontier Province	0·59	1·15	−0·56	− 49
Sind	0·12	0·47	−0·35	− 74
Rajputana	2·41	3·45	−1·04	− 30
Bombay	2·76	7·21	−4·45	− 62
Central India	3·57	6·16	−2·59	− 42
Central Provinces	4·76	7·17	−2·41	− 34
Hyderabad	3·08	7·45	−4·37	− 59
Mysore	7·16	5·20	+1·96	+ 38
Madras	5·72	5·74	−0·02	0
Mean of India	5·00	6·94	−1·94	− 28

Snowfall.

I, II AND III.—AFGHANISTAN, THE NORTH-WEST FRONTIER PROVINCE AND KASHMIR.

15. No information is available respecting these areas.

IV.—PUNJAB.

Kilba (Simla hills).—There were three light falls during the month on the higher peaks, but none below 11,000 feet.

V.—UNITED PROVINCES.

Almora.—The total fall of snow during September is reported as 17¾ feet on the Malla Darma, 5 feet on the Malla Johar, 1 foot on the Malla Danpur, 4 feet on Chaudas and 6 feet on Biyans. The snow line descended to about a quarter of a mile below the perpetual snow.

The statement below gives the reported and normal depths of snow accumulation on the well-known peaks and passes.

Table 16.

Peak or pass.	Reported.	Normal.
Nuwe pass	29 feet	20 feet
Untadhura	5 "	9 "
Ralamdhura	2 "	6 "
Binkaru pass	6 "	12½ "
Lipulekh "	7 "	4½ "
Lampia "	9 "	5 "

SUMMARY.

16. The very limited information available would indicate that the snowfall of the month and the snow accumulation were approximately normal.

G. C. SIMPSON.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 18 stations in India, etc., in September, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3 0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs.

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
5	Calcutta . .	21	29·771	29·667	·104	29·720	+·028	29·688	90·2	78·8	11·4	94·1	76·3	17·8	86·6	86·7	84·2	+1·6	76·8	80·5	80·0	79·1
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad . .	309	·468	·361	·107	·416	+·036	·676	92·1	74·7	17·4	96·2	65·5	30·7	86·4	89·9	82·2	−0·8	72·6	76·7	76·6	75·3
	VI.—Punjab.																					
11	Lahore . . .	702	·045	28·957	·088	28·993	+·021	·645	100·2	71·0	29·2	103·3	62·5	40·8	89·5	98·2	84·6	−0·2	65·9	73·1	74·5	71·2
	IX.—Rajputana.																					
18	Jaipur . . .	1,431	28·379	·291	·088	·332	+·028	·685	93·0	71·5	21·5	101·2	66·1	35·1	85·4	90·6	80·7	−1·7	67·3	72·2	73·2	70·9
	X.—Bombay.																					
25	Bombay . .	37	29·851	29·760	·091	29·803	+·012	·780	86·7	77·3	9·4	90·2	74·6	15·6	82·1	84·1	80·9	+1·5	74·5	77·8	77·5	76·6
	XIV.—Mysore.																					
29	Bangalore . .	3,021	26·927	26·812	·115	26·877	+·003	·726	82·7	66·2	16·5	86·3	62·8	23·5	75·5	79·2	72·7	+0·9	65·1	69·8	70·5	68·5
	XV.—Madras.																					
31	Pudukkottai .	318	29·564	29·403	·161	29·483		·726	96·2	76·6	19·6	101·6	71·9	29·7	87·9	92·3	86·4			77·2	78·2	
	Madras . .	22	·823	·700	·123	·771	−·006	·724	94·5	78·4	16·1	99·7	71·1	28·6	88·8	87·9	85·4	+1·5	75·4	79·8	80·4	78·8
	Hill stations, excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	23·121	23·081	·040	23·093	+·013	23·055	65·3	55·6	9·7	69·2	52·3	16·9	60·7	62·8	60·1	−0·8	50·5	54·5	56·2	53·7
	Sarain . . .		·158	·110	·048	·127		·090	67·2	51·1	16·1	72·4	45·7	26·7	62·5	64·1	58·8			55·6	57·4	
	Kalabagh . .		20·154	20·123	·031	20·132		20·093	53·7	41·5	12·2	58·8	38·7	20·1	50·5	51·1	47·2			46·0	47·6	
	Mukteswar . .	7,592	22·844	22·790	·054	22·809		22·767	66·7	52·4	14·3	72·7	46·8	25·9	61·2	63·2	59·2		47·9	57·2	59·6	54·9
	Katmandu . .	4,388	25·620	25·529	·091	25·572	+·049†	25·525	83·3	65·2	18·1	87·4	56·4	31·0	76·1	79·6	73·9	+0·7†	63·2	69·2	70·6	67·7
	Ootacamund .	*7,327*	23·051	22·973	·078	23·009		22·945	66·1	51·2	14·9	69·2	46·6	22·6	61·7	60·4	58·2		50·1	56·7	57·1	54·6
	Kodaikanal . .	7,688	22·826	22·760	·066	22·792		22·729	66·2	52·2	14·0	70·6	50·0	20·6	62·9	60·1	57·8		49·2	56·6	57·1	54·3
	Dodabetta . .	8,539?	22·068	21·995	·073	22·029		21·968	60·1	49·0	11·1	64·2	45·7	18·5	56·3	55·6	54·1		45·6	53·3	53·5	50·8
	Extra India.																					
	Minicoy . .	7																				
	Diego Garcia .																					
	Seychelles . .	15	29·996	29·906	·090	29·959	−·021†	29·898	82·6	77·1	5·5	85·1	72·5	12·6	80·4	81·3	78·5	+0·8†	70·7	74·8	75·3	73·6
	Mauritius . .	181				29·975	−·024	30·105				82·0	57·1	24·9			69·8	+0·4				69·9

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 18 stations in India, etc., in September, 1912.

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.	Number of subdivision.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·893	·956	·934	·934	—·018	91	76	71	81	− 5	6·1	7·6	6·9	—1·0	5	2	4	10	6	8	17	4	4	S 6° W	S 9° W	28	6	62*	98	5·11	1·23	Calcutta	5
																															V.—United Provinces of Agra and Oudh.	
·782	·791	·714	·790	—·091	90	63	54	73	− 8	4·8	4·7	4·7	−0·8	10	1	4	5	1	3	4	22	10	N 79° W	N 15° W	79	13	74	142	5·21	3·31	Allahabad	9
																															VI.—Punjab.	
·578	·598	·535	·581	—·137	75	43	30	53	− 8	0·7	1·2	0·9	—1·0	22	4			7	7	1	12	7	S 74° W	N 46° E	22	59	29	50	0	0	Lahore	11
																															IX.—Rajputana.	
·622	·630	·606	·637	—·055	80	53	43	64	− 5	3·6	5·8	4·7	+0·2	2	2	7	5	1	1	3	16	23	N 50° W	N 42° W	50	43	81*	101	1·28	0·90	Jaipur	18
																															X.—Bombay.	
·815	·893	·848	·859	—·013	87	81	73	81	− 5	5·4	4·9	5·1	—1·8			1	5	10	5	7	20	12	S 70° W	N 34° W	37	52	128*	259	3·26	1·04	Bombay	25
																															XIV.—Mysore.	
·606	·661	·643	·649	+·026	94	75	66	81	+ 1	7·1	8·0	7·5		4	4				1	9	23	19	N 77° W	S 84° W	73	83	103	168	18·75	4·91	Bangalore	29
																															XV.—Madras.	
	·785	·753				60	53			4·8	6·4	5·6		7		2	3	8	6	12	8	14	S 62° W		32		120		4·20	2·47	Pudukkottai	31
·866	·894	935	·909	+·061	89	66	71	78	+ 1	4·4	5·6	5·0	−1·3		2	3	4	18	1	9	16	7	S 38° W	S 36° W	29	53	94*	144	1·36	0·86	Madras.	
																															Hill stations, excluding Kashmir and Baluchistan.	
·316	·334	·385	·357	—·077	71	68	68	71	− 9	3·3	4·5	3·9	—1·9																10·06	3·66	Simla.	
	·372	·405				66	68			4·7	5·2	4·9																	13·61	5·22	Sarain.	
	·275	·300				75	80			5·3	6·8	6·1		16	1			14	22	3		4	S 9° E		52		97		19·45	7·78	Kalabagh.	
·261	·427	·475	·400		74	80	83	81		6·3	7·0	6·7		20		1	8	4	1	2	22	2	S 77° W		23		134		13·39	3·23	Mukteswar.	
·560	·630	·642	·613	—·020	90	70	64	77	− 4	5·5	5·3	5·4	—0·9	59			1						E	N 87° W	2	11	9*	17	2·72	0·63	Katmandu.	
·351	·408	·432	·389		93	75	83	84		8·2	8·5	8·5		22	2	2	5	4	1	2	14	8	N 73° W		20		36		6·33	1·59	Ootacamund.	
·324	·400	·438	·388		83	69	84	81		6·2	8·8	7·5			4	4	6	16	8	1	9	12	S 22° E		8		169		7·04	1·42	Kodaikanal.	
·273	·376	·388	·346		78	83	88	83		8·5	9·4	9·1		13	3	3	2	7	6	2	11	13	N 81° W		27		207		11·54	3·01	Dodabetta.	
																															Extra India.	
																															Minicoy.	
																															Diego Garcia.	
·670	·789	797	·759	—·008	72	76	74	76	− 4	5·5	6·2	5·9	+0·3†	3	1	1	3	31	19	2			S 31° E	S 40° E	78	87	186*	288	5·08	2·60	Seychelles.	
			·585	+·022				74	+ 2			6·0	+0·9										S 80° E	S 71° E			195*	191	1·56	0·41	Mauritius.	

* Uncorrected for scale error.

† Departure from old normal.

Table B.—Abstract of observations taken at 8 hrs. at 220 stations in India, etc., in September, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

	Pressure departure from normal.	Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
		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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·002	87·8	+0·2	75·7	+0·3	81·8	+0·3	12·1	20·1	—0·6	—18	89	— 1	·872	—·009	6·5	—0·4	9·89	12·02	—2·13
Assam	+·010	88·5	+0·7	75·9	—0·2	82·2	+0·3	12·5	21·0	—0·4	+ 3	89	— 4	·898	—·014	5·9	—2·3	9·52	12·02	—2·50
Bengal	+·021	89·5	+1·5	78·0	+0·3	83·7	+0·9	11·5	18·1	—1·3	—19	87	— 2	·953	0	5·5	—1·6	7·71	11·49	—3·78
Bihar and Orissa	+·031	90·0	+0·9	76·5	—0·5	83·2	+0·2	13·6	21·5	—0·2	—11	82	— 3	·874	—·024	4·3	—1·4	4·92	9·28	—4·36
United Provinces of Agra and Oudh	+·021	90·9	—0·9	73·7	—2·2	82·3	—1·5	17·1	31·1	—0·2	+ 8	77	— 3	·790	—·067	3·3	—0·9	7·45	6·35	+1·10
Punjab	+·022	96·4	—0·2	71·0	—3·6	83·7	—1·9	25·4	37·5	—0·2	0	62	— 7	·611	—·120	1·2	—0·7	2·13	2·61	—0·48
North-West Frontier Province	+·009	97·3	—0·9	67·7	—4·9	82·5	—2·9	29·7	42·8	—0·6	—15	61	— 4	·571	—·111	0·6	—0·3	0·59	1·15	—0·56
Sind	+·029	96·1	+0·6	74·1	—1·8	85·1	—0·6	22·0	34·3	—1·7	—12	68	— 4	·729	—·055	1·2	—1·2	0·12	0·47	—0·35
Rajputana	+·025	93·1	—1·0	73·4	—2·8	83·2	—1·8	19·7	31·9	+0·1	+ 6	63	— 6	·638	—·110	2·4	—0·5	2·41	3·45	—1·04
Bombay	+·014	88·7	+2·2	72·6	—0·4	80·6	+0·9	16·0	25·6	—1·4	— 9	79	— 3	·767	—·024	4·2	—1·9	2·76	7·21	—4·45
Central India	+·040	86·9	—1·0	70·3	—2·4	78·6	—1·7	16·7	29·1	—0·5	+ 3	79	— 2	·716	—·065	4·4	—0·7	3·57	6·16	—2·59
Central Provinces	+·041	87·8	+0·5	71·6	—1·0	79·7	—0·3	16·2	26·7	—0·1	— 4	76	— 7	·705	—·086	4·3	—1·3	4·76	7·17	—2·41
Hyderabad	+·015	89·3	+2·7	72·1	+0·7	80·7	+1·7	17·2	26·4	—2·0	—16	73	— 7	·699	—·039	4·9	—2·1	3·08	7·45	—4·37
Mysore	+·004	82·8	+0·3	66·6	+0·7	74·7	+0·5	16·2	23·9	—0·8	— 7	85	+ 2	·640	+·011	7·8	—0·1	7·16	5·20	+1·96
Madras	0	90·8	+0·7	76·1	+0·7	83·4	+0·7	14·7	23·2	0	— 3	79	0	·828	+·019	5·5	—0·9	5·72	5·74	—0·02

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·773		29·851	29·855	28th	29·676	1st	·179	77·6	83·1		73·8		78·4		9·3	87·6	11th	71·2	14th & 20th.	16·4
	Mergui	65	29·835	—·005	29·830	29·902	28th	29·724	20th	·178	77·1	84·1	—0·3	72·2	0	78·2	—0·1	11·9	89·0	9th	70·8	7th & 21st	18·2
	Tavoy	19	29·877	—·017	29·829	29·954	28th	29·747	1st	·207	77·3	85·0	+1·0	76·3	+2·6	80·6	+1·8	8·7	88·5	23rd	72·3	4th	16·2
	Moulmein	94	29·791	+·012	29·823	29·885	27th	29·639	1st	·246	77·5	86·0	+1·2	75·1	+0·6	80·5	+0·9	10·9	90·5	23rd	72·8	23rd	17·7
	Rangoon	18	29·849	+·003	29·805	29·953	28th	29·680	1st	·273	79·1	87·2	+1·5	76·0	+0·1	81·6	+0·8	11·2	91·0	25th	73·5	9th	17·5
	Bassein	27?	29·824	+·008	29·787	29·939	26th	29·641	2nd	·298	79·6	86·4	+0·9	76·3	+0·5	81·3	+0·7	10·1	89·2	11th, 14th & 23rd.	73·9	21st	15·3
	Diamond Island	41	29·814	+·002	29·790	29·906	28th	29·639	2nd	·267	81·5	85·1	+0·3	78·0†	+2·2†	81·6†	+1·3	7·1	87·4	30th	74·2	23rd	13·2
	Toungoo	164	29·692	+·010	29·799	29·806	26th	29·509	2nd	·297	79·3	89·0	0	75·5	—0·1	82·2	—0·1	13·5	92·5	23rd & 30th.	72·9	15th & 22nd.	19·6
	Kyaukpyu	18	29·813		29·771	29·834	28th	29·610	2nd	·324	80·3	86·1		76·3		81·2		9·9	90·0	18th & 27th.	71·4	9th	18·6
	Akyab	20	29·811	+·013	29·772	29·947	28th	29·583	4th	·364	80·5	87·7	+1·1	77·2	—0·8	82·5	+0·1	10·5	90·9	26th & 27th.	71·0	12th	19·9
	Thayetmyo	121	29·698	—·012	29·761	29·844	26th	29·516	2nd	·328	81·0	89·9	0	76·5	+0·5	83·2	+0·3	13·4	92·9	26th	74·4	29th	18·5
3	Minbu	*165*	29·656	—·010	29·764	29·797	26th	29·473	2nd	·324	80·9	91·2	+0·3	76·8	—0·1	84·0	+0·1	14·4	98·3	26th.	72·0	27th	26·3
	Yamethin	657	29·162	—·023?	29·771	29·297	24th	28·981	2nd	·316	78·2	90·5	—1·2	74·5	—0·3	82·5	—0·7	16·0	94·8	23rd & 26th.	72·0	14th, 15th & 26th,	22·8
	Mandalay	250	29·575	+·001	29·773	29·721	26th	29·386	2nd	·335	81·2	93·2	+0·4	76·9	0	85·2	+0·2	16·3	98·7	15th	72·1	20th	26·6
	Monywa	*280*	29·550		29·779	29·714	26th	29·353	2nd	·361	80·6	92·3		77·9		85·1		14·4	97·8	14th	72·1	10th	25·7
	Lashio	*2,820*	27·079	+·003	29·787	27·216	25th	26·877	2nd	·339	72·3			68·7	+0·9						62·0	26th	
	Bhamo	*381*	29·449	+·013	29·785	29·605	26th	29·252	2nd	·353	77·4	88·1	—2·0	73·7†	—0·8†	81·0†	—1·4	14·4	92·9	3rd & 17th	66·1	26th.	26·8
	Myitkyina	458	29·341		29·760	29·489	24th	29·145	2nd	·344	76·1	87·6		74·2		80·9		13·4	93·2	17th	71·0	26th	22·2
	II.—Assam.																						
4	Dibrugarh	353	29·445		29·761	29·598	24th & 25th.	29·274	2nd	·324	77·3	86·1		74·4		80·2		11·7	91·4	6th & 18th	71·1	13th	20·3
	Sibsagar	333	29·487	+·007	29·779	29·630	25th	29·307	3rd	·323	79·4	87·8	—0·3	75·9	—0·3	81·8	—0·3	11·9	93·6	7th	72·5	13th	21·1
	Tezpur	252	29·558		29·767	29·716	24th	29·366	2nd	·350	79·3	89·2		76·6		83·0		12·6	94·1	6th	72·8	25th	21·3
	Gauhati	195	29·617		29·768	29·774	24th	29·417	2nd	·357	81·6	90·3		75·5		82·9		14·8	94·3	4th	70·6	24th	23·7
	Dhubri	115	29·549‡	—·078‡	29·619‡	29·668	8th	29·490	2nd	·178	81·0	87·5	+2·4	77·1	+0·1	82·3	+1·3	10·4	91·5	4th	73·6	20th	17·9
	Silchar	104	29·716	+·013	29·773	29·858	28th	29·505	2nd	·353	79·6	89·9	+0·1	75·9	—0·5	82·9	—0·2	14·0	95·8	6th	73·3	12th, 13th & 14th.	22·5
	III.—Bengal.																						
5	Cox's Bazar	36	29·780		29·761	29·922	28th	29·572	5th	·350	80·9	87·2		75·9		81·5		11·3	90·7	26th	73·2	9th	17·5
	Chittagong	87	29·729	+·014	29·761	29·865	28th	29·512	5th	·353	80·5	87·6	+0·8	76·0	—0·3	81·8	+0·3	11·6	91·0	27th	73·0	10th	18·0
	Noakhali	43	29·775		29·765	29·926	28th	29·558	5th	·368	81·0	86·5		77·4		81·9		9·1	89·3	19th	73·9	13th	15·4
	Barisal	12	29·783	+·015	29·742	29·924	28th	29·538	5th	·386	83·0	88·8	+0·3	78·0	—0·3	83·4	0	10·8	93·3	27th	75·1	10th & 13th.	18·2
	Narayanganj	26	29·766	+·015	29·741	29·921	28th	29·545	5th	·376	82·7	89·5	+1·0	78·5	—0·4	84·0	+0·3	11·0	93·5	27th	71·8	18th	21·7
	Mymensingh	63	29·743	+·020	29·758	29·897	28th	29·552	2nd	·345	81·4	89·1	+2·0	78·7	+1·2	83·9	+1·6	10·4	92·1	4 days	76·1	11th & 12th.	16·0
	Bogra	75	29·719	+·019	29·745	29·874	28th	29·517	5th	·357	83·0	90·0	+1·6	78·1	+0·6	82·0	+1·1	11·9	92·7	22nd	74·2	20th	18·5
	Dinajpur	123	29·649	+·008	29·726	29·809	28th	29·465	4th	·344	81·8	90·6	+2·4	77·7	+0·3	84·2	+1·3	12·9	94·3	4th	72·5	22nd	21·8
	Jalpaiguri	283	29·503	+·009	29·743	29·659	24th	29·328	2nd	·331	79·7	90·5	+3·3	75·7	+0·4	83·1	+1·9	14·8	94·9	4th	72·9	14th, 23rd & 24th.	22·0
	Saugor Island	25	29·756	+·034	29·726	29·881	28th	29·410	5th	·471	83·3	88·4	+0·2	79·6	—0·1	84·0	+0·1	8·8	92·2	18th	76·7	14th 22nd & 28th.	15·5
	Midnapore	149	29·635†		29·731†	29·772	25th	29·403	6th	·369	82·7	90·9		78·1		84·5		12·8	93·8	22nd	75·2	11th	18·6
	Calcutta	21	29·764	+·030	29·732	29·906	28th	29·436	5th	·470	82·9	90·3	+2·6	78·9	+0·9	84·6	+1·7	11·4	94·1	14th	76·5	28th	17·6

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

† Mean of 29 days.

‡ " " 8 "

B.

in India, etc., in September, 1912.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Sept. 1912.	Normal rainfall for period, 1st May to 30th Sept.	Departure from normal of period, 1st May to 30th Sept. 1912.	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	56	57
																																I.—Burma.
	2	2	4	10	3	4	5		S 26° E		5·0*			33		91		·861		7·3		23			34·47			154·01			4·36	Victoria Point.
29						1			S 45° W	N 76° W	2·1	1·2	+0·9	3	−55	93	+ 1	·850	+·002	6·1	−1·0	11	23·5	−9·5	17·77	27·22	− 9·45	159·15	135·13	+15·02	4·40	Mergui.
30									(a)	S 64° W	1·2*	0·9	+0·3			93	0	·868	+·002	4·4	−3·1	18	23·2	−5·2	21·88	34·81	−12·93	177·21	197·18	−19·97	4·39	Tavoy.
8		4	8	3	5	1	1		S 66° E	S 12° E	2·4	2·3	+0·1	40	+ 3	93	+ 1	·876	−·004	7·5	+0·3	22	22·2	−0·2	16·07	28·34	−12·27	171·11	173·12	− 2·01	2·50	Moulmein.
5	2	5	4	1	5	5	2	1	S 34° E	S 50° W	1·9	2·6	−0·7	13	−35	90	− 4	·896	−·019	8·8	+1·8	21	19·7	+1·3	14·99	15·63	− 0·64	84·34	86 03	− 1·69	2·27	Rangoon.
20			2	2	3	1	2		S 8° E	S 5° W	2·8†	2·9	−0·1	17	−20	93	0	·943	+·021	5·6	−1·3	13	20·5	−7·5	13·59	15·48	− 1·89	88·23	96·44	− 8·21	2·79	Bassein.
3	1	1	5	3		7	5	5	S 71° W	S 51° W	6·0	5·8	+0·2	23	−18	86	0	·927	+·036	6·1	−1·3	19	17·5	+1·5	11·10	17·72	− 6·62	99·88	101·40	− 1·52	1·53	Diamond Island.
22				3	4	1			S 12° E	S 32° E	1·1	2·3	−1·2	23	−32	88	− 3	·875	−·039?	6·8	−1·4	18	17·9	+0·1	11·23	12·39	− 1·16	71·74	70·18	+ 1·56	1·93	Toungoo.
5	2	6	5	9	2	1			S 76° E		2·4*			53		88		·914		5·5		16			22·60			148·21			3·63	Kyaukpyu.
4	3	7	10	3	1	1		1	N 73° E	N 87° E	2·3	2·2	+0·1	53	− 2	91	− 1	·937	−·022	5·8	−2·0	14	19·4	−5·4	14·43	21·71	− 7·28	204·61	174·37	+30·24	1·97	Akyab.
13				4	12	1			S 8° E	S 20° E	1·7*	3·7	−2·0	49	−29	83	− 1	·877	+·001	7·6	+0·1	9	12·0	−3·0	8·44	6·19	+ 2·25	39·25	30·29	+ 8·93	2·43	Thayetmyo.
		5		6	18			1	S 21° E	S 42° E	3·0	6·0	−3·0	66	− 1	83	− 2	·865	−·016	5·0	−0·6	4	10·0	−6·0	5·01	6·19	− 1·18	27·23	26·05	+ 1·18	2·06	Minbu.
14				8	8				S 23° E	S 30° E	2·2	4·0	−1·8	49	−18	87	0	·830	−·034	6·2	+2·2	10	10·9	−0·9	4·68	7·31	− 2·63	24·32	28·29	− 3·97	0·85	Vamethin.
7		1	1	15	4	2			S 35° E	S 3° W	2·8	3·4	−0·6	62	+ 7	81	− 2	·843	−·050	4·2	−2·1	4	8·9	−4·9	2·95	6·08	− 3·13	25·80	24·48	+ 1·32	1·60	Mandalay.
6	3	1	3	12	4	1			S 51° E		2·1			46		87		·911		7·2		5	9·7	−4·7	4·31	7·73	− 3·42	24·70	23·21	+ 1·49	1·21	Monywa.
15	2	4	1		2	3	1	2	N 18° W		2·1*			7		90	− 2	·707	−·025	8·6	+0·6	18	13·5	+4·5	7·81	7·58	+ 0·23	40·41	50·45	−10·04	1·71	Lashio.
21	2	2			2	3			S 45° W	N 72° W	0·9	1·5	−0·6	3	−11	93	+ 3	·875	+·004	8·5	+1·9	13	12·5	+0·5	14·15	9·17	+ 4·98	67·28	62·10	+ 5·18	7·20	Bhamo.
27			1	1	1				S 45° E		0·9			10		92		·831		6·2		16	11·9	+4·1	8·86	9·48	− 0·62	69·59	63·43	+ 6·16	1·76	Myitkyina.
																																II.—Assam.
30									(a)		0·5					93		·866		6·0		15	14·7	+0·3	17·75	12·64	+ 5·11	90·18	80·71	+ 9·47	3·20	Dibrugarh.
19		3	1		3	2		2	S 18° E	S 79° E	1·5	1·8	−0·3	3	− 8	90	− 5	·833	−·038	7·5	−1·2	12	14·5	−2·5	11·79	11·86	− 0·07	75·05	71·42	+ 3·63	2·27	Sibsagar.
5	2	3	14	1	1	3	1		N 89° E		1·5			46		89		·892		6·1		10	11·6	−1·6	4·09	7·10	− 3·01	56·28	54·70	+ 1·58	1·15	Tezpur.
29							1		W		1·2			3		84		·906		5·7		6	10·1	−4·1	2·95	6·15	− 3·20	56·31	49·91	+ 6·40	1·53	Gauhati.
5	1	6	5	3	6	3		1	S 63° E	N 82° E	2·5	3·1	−0·6	33	+11	87	− 5	·924	+·013	6·6	−0·9	8	12·8	−4·8	5·97	14·25	− 8·28	102·77	82·95	+19·82	1·72	Dhubri.
26		2	1	1					N 77° E	N 77° E	1·3	1·6	−0·3	10	+ 7	89	− 2	·906	−·018	3·8	−4·9	15	15·0	0	8·88	13·93	− 5·05	83·17	90·91	− 7·74	1·75	Silchar.
																																III.—Bengal.
1	1	4	6	16	2				S 65° E		3·4*			72		89		·929		5·5		14			13·85			102·85			2·93	Cox's Bazar.
16		2	7	5					S 80° E	S 60° E	1·4	3·2	−1·8	40	−23	90	+ 2	·935	+·008	5·3	−2·0	13	12·7	+0·3	12·08	11·63	+ 0·45	73·96	80·64	− 6·68	3·64	Chittagong.
10		2	4	6	3	4	1		S 34° E		1·7			37		89		·943		5·2		18	15·7	+2·3	18·46	15·87	+ 2·59	75·16	100·17	−25·01	2·62	Noakhali.
27			1		1	1			S 11° E	S 27° E	0·2	2·0	−1·8	6	−20	85	− 3	·954	−·023	6·5	−0·7	13	14·8	−1·8	7·15	11·31	− 4·16	58·56	64·36	− 5·80	1·67	Barisal.
18			2	3	3	3	1		S 8° E	S 18° E	1·1	3·8	−2·7	23	−25	86	− 2	·957	−·014	7·5	−0·3	12	11·9	+0·1	8·61	9·37	− 0·76	54·85	55·56	− 0·71	1·87	Narayanganj.
23			4	3					S 71° E	S 63° E	1·0	2·0	−1·0	23	−27	90	− 1	·972	+·005	7·2	+0·1	9	15·3	−6·3	3·98	14·08	−10·10	74·70	77·77	− 3·07	0·77	Mymensingh.
21			1		5	3			S 9° W	S 49° E	0·4	2·2	−1·8	23	−33	86	− 3	·980	+·018	5·8	−1·2	10	12·9	−2·9	14·05	11·73	+ 2·32	65·58	58·39	+ 8·19	4·46	Bogra.
16			6	3	2	2	1		S 46° E	S 76° E	1·1	2·6	−1·5	27	−25	89	− 1	·964	+·021	4·3	−2·5	8	12·6	−4·6	5·31	12·35	− 7·04	83·35	61·77	+21·58	1·60	Dinajpur.
29			1						S 45° E	N 73° E	1·1			3	−57	88	− 3	·901	−·002	4·1	−2·9	14	15·4	−1·4	10·82	19·75	− 8·93	92·69	112·15	−19·46	4·15	Jalpaiguri.
	2	8	3	2	5	6	2	2	S 56° E	S 2° W	7·1	8·0	−0·9	10	−19	86	− 2	·966	−·018	6·3	−1·9	13	13·5	−0·5	5·17	11·67	− 6·50	40·18	56·49	−16·31	1·16	Saugor Island
5	3	5	2	3	5	4	2	1	S 34° E		1·2			13		84		·935		4·2		12	12·1	−0·1	7·77	8·76	− 0·99	43·25	48·89	− 5·64	1·92	Midnapore.
5		2	3	4		15		1	S 20° W	S 13° E	2·5*	3·0	−0·5	40	+ 7	86	− 1	·969	+·012	5·6	−1·1	10	13·2	−3·2	5·11	10·35	− 5·24	41·91	52·57	−10·66	1·23	Calcutta.

(a) Indeterminate.

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal—*concld.*																						
5	Jessore	33	29·767	+·034	29·747	29·914	28th	29·496	5th	·418	83·5	90·5	+1·1	78·6	+0·1	84·6	+0·6	11·9	92·5	4 days	75·7	10th	16·6
	Burdwan	99	29·685	+·025	29·732	29·829	28th	29·410	5th	·419	82·8	91·4	+1·7	79·1	+0·2	85·2	+0·9	12·3	93·9	22nd	76·3	10th	17·6
	Berhampore	67	29·717	+·024	29·738	29·867	24th	29·475	5th	·392	82·8	90·5	+1·6	79·0	+0·5	84·8	+1·1	11·5	93·1	22nd	76·2	16th, 11th & 12th.	16·9
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·736	+·040	29·731	29·848	25th	29·441	5th	·407	82·4	89·8	+0·9	77·9	+0·1	83·9	+0·5	11·9	94·4	18th	74·6	27th	19·8
	False Point	21	29·721	+·017	29·685	29·853	13th	29·491	5th	·362	82·6	89·6	+1·7	77·7	−0·5	83·6	+0·6	11·9	93·2	16th & 17th.	75·1	6th	18·1
	Cuttack	80	29·710	+·049	29·731	29·809	29th	29·426	5th	·383	82·1	89·8	−0·4	77·9	−0·2	83·8	−0·3	11·9	93·4	15th, 17th & 18th.	75·2	10th & 28th	18·2
	Puri	24	29·755		29·718	29·859	14th	29·501	6th	·358	83·1	89·4		79·2		84·3		10·2	93·6	15th	76·1	5th & 6th	17·5
	Angul	455	29·336		29·752	29·438	26th	29·069	6th	·369	80·4	88·8		75·7		82·3		13·1	92·1	18th & 19th	73·0	16th	19·1
	Sambalpur	486	29·309	+·035	29·744	29·420	14th	29·004	6th	·416	80·7	88·7	−0·6	76·9	−0·4	82·8	−0·5	11·8	91·6	20th, 21st & 22nd.	75·1	7th & 16th.	16·5
7	Chaibasa	*733*	29·035	+·031	29·722	29·152	24th	28·762	5th	·390	79·1	90·1	0	75·3	−0·7	82·7	−0·3	14·8	94·1	20th, 21st & 22nd.	72·8	16th & 25th	21·3
	Ranchi	2,128	27·676	+·047	29·716	27·785	24th	27·394	6th	·401	76·2	84·8	+0·4	71·7	0	78·3	+0·2	13·1	89·2	21st	68·4	22nd	20·8
	Purulia	*816*	28·967		29·735‡	29·091	23th	28·701	5th	·390	78·9	90·2		75·0		82·6		15·2	93·0	5 days	71·1	21st	21·9
	Daltonganj	*730*	29·056		29·748	29·175	24th	28·726	6th	·449	78·4	90·5		73·7		82·1		16·8	94·1	20th, 22nd & 24th.	64·0	22nd	30·1
8	Purnea §	134	29·648	+·025	29·736	29·814	28th	29·465	5th	·349	82·9	90·5	+1·6	77·5	+0·1	84·0	+0·9	13·0	93·6	19th	73·8	21st	19·8
	Monghyr	155	29·608		29·715	29·775	26th	29·374	5th	·401	83·2	90·5		77·5		84·0		13·0	94·2	22nd & 24th.	72·9	22nd	21·3
	Darbhanga	165	29·595	+·009	29·714	29·748	24th	29·362	6th	·386	82·5	90·3	+2·0	76·5	−2·3	83·4	−0·1	13·8	94·6	15th	70·7	22nd	23·9
	Pusa	188	29·577		29·720	29·735	24th	29·372	6th	·363	82·4	92·0		75·3		83·7		16·7	95·8	23rd	69·2	22nd	26·6
	Patna	183	29·576	+·013	29·713	29·721	24th	29·350	6th	·371	83·4	90·2	+0·3	77·9	−1·2	84·1	−0·5	12·3	93·5	21st	73·7	22nd	19·8
	Buxar	239	29·511		29·707	29·667	24th	29·243	6th	·424	81·3	91·9		77·0		84·4		14·9	96·0	21st, 22nd & 23rd.	72·1	21st, 22nd & 23rd.	23·9
	Gaya	372	29·396	+·032	29·718	29·539	24th	29·122	6th	·417	82·8	92·7	+1·7	77·0	−0·8	84·8	+0·5	15·7	96·9	4 days	70·2	23rd	26·7
	Naya Dumka	489	29·298	+·044	29·739	29·452	24th	29·077	5th	·375	81·1	90·5	+2·3	76·5	+0·2	83·5	+1·3	14·0	93·9	20th	71·5	21st & 22nd.	22·4
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·492	+·015	29·707	29·651	24th	29·280	5th	·371	82·1	91·3	+0·8	72·2	−5·5	81·8	−2·37	19·1	94·6	21st	64·3	21st	30·3
	Benares	267	29·498	+·034	29·719	29·634	24th	29·230	6th	·404	82·9	92·8	+1·8	76·1‡	−1·3	84·41	+0·3	16·7	96·6	21st & 22nd.	64·1	22nd	32·5
	Allahabad	309	29·455	+·033	29·720	29·595	24th	29·177	6th	·418	81·6	92·0	+0·5	74·9	−2·0	83·4	−0·7	17·1	96·1	4 days	65·5	22nd	30·6
	Cawnpore	416	29·333	+·023	29·706	29·485	24th	29·118	6th	·367	80·4	91·8	−0·6	74·5	−2·1	83·2	−1·3	17·3	97·2	21st & 22nd.	64·4	22nd	22·8
	Lucknow	368	29·383	+·021	29·709	29·542	24th	29·177	6th	·365	81·4	92·4	+0·3	74·8	−1·7	83·6	−0·7	17·6	96·0	4 days	65·1	22nd	30·3
	Bahraich	401	29·330	+·004	29·690	29·493	24th	29·121	5th	·372	81·5	91·7	+0·7	74·8	−1·4	83·3	−0·3	16·9	95·1	20th, 23rd & 24th.	65·0	21st	30·1
10	Jhansi	824	28·959	+·024	29·740	29·084	24th	28·736	7th	·348	79·5	89·9	−1·8	72·9	−2·9	81·4	−2·3	17·0	101·5	21st	67·0	23rd	34·5
	Agra	556	29·196	+·017	29·712	29·346	24th	28·876	7th	·470	80·3	91·7	−1·4	74·3	−2·4	83·0	−1·9	17·4	99·5	21st & 22nd.	70·0	21st	29·5
	Mainpuri	516	29·223	+·013	29·700	29·387	24th	28·979	7th	·408	78·0	89·7	−3·4	73·1	−2·8	81·4	−3·1	16·6	95·8	21st & 22nd.	65·1	21st & 23rd.	30·7
	Bareilly	568	29·162	+·011	29·694	29·336	24th	28·954	2nd	·382	78·6	89·8	−0·7	72·9	−2·9	81·3	−1·3	16·9	95·8	24th	64·0	21st	31·8
	Roorkee	899	28·849	+·021	29·719	29·022	24th	28·654	1st	·368	76·9	86·7	−4·6	70·7	−2·6	78·7	−3·6	16·0	91·0	4 days	62·9	21st	28·1
	VI.—Punjab.																						
11	Delhi	718	29·029	+·024	29·713	29·188	24th	28·729	1st	·459	78·4	91·1	−1·9	73·6	−3·4	82·3	−2·7	17·5	97·0	20th	67·3	27th	29·7
	Sirsa	662	29·084	+·029	29·713	29·241	28th	28·877	2nd	·364	80·8	96·4	−2·5	72·5	−3·2	84·5	−2·9	23·9	102·3	19th	65·0	22nd	37·3

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

‡ Mean of 29 days.
§ " " 28 "
¶ " " 17 "

B—*continued.*

in India, etc., in September, 1912—continued.

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st May to 30th Sept., 1912. (53)	Normal rainfall for period, 1st May to 30th Sept. (54)	Departure from normal of period, 1st May to 30th Sept., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																III.—Bengal—*concld.*
17			1	5	2	4	1		S 5° E	S 32° E	2·0	2·3	−0·3	27	−10	85	− 5	·973	−·028	4·4	−2·7	8	12·0	− 4·0	6·01	8·90	− 2·86	52·60	52·54	+ 0·06	1·63	Jessore.
7	2	4	1	2		7	5	2	S 89° W	S 18° E	1·3	2·2	−0·9	20	− 2	85	0	·958	+·028	5·5	−1·5	3	11·5	− 8·5	4·38	8·70	− 4·32	39·44	49·09	− 9·65	3·04	Burdwan.
6		1	3	3	10	6		1	S 3° E	S 10° E	1·5	2·7	−1·2	49	+11	86	− 4	·964	−·012	4·5	−2·9	8	11·9	− 3·9	5·35	10·08	− 4·73	37·45	47·19	− 9·74	1·69	Berhampore.
																																IV.—Bihar and Orissa.
10	4	4	2			7	1	2	N 36° W	S 59° W	1·5	2·6	−1·1	13	− 9	82	− 6	·889	−·085?	4·7	−2·3	10	13·3	− 3·3	9·66	12·23	− 2·57	22·20	48·96	−16·73	3·28	Balasore.
2	1	2	3	2	2	4	9	5	S 88° W	S 58° W	6·2	6·2	0	32	− 5	85¶	0	·942¶	−·018	5·5	−1·6	9	12·4	− 3·4	4·39	10·38	− 5·99	35·41	48·08	−12·67	1·53	False Point.
13		2	3	1	1	2	7	1	S 76° W	S 81° W	1·3*	1·8	−0·5	13	−17	81	− 1	·891	−·003	5·9	−0·1	10	12·4	− 2·4	8·00	10·09	− 2·09	40·82	49·62	− 8·80	1·31	Cuttack.
1	7	5	1	2	3	5	4	2	N 37° W		6·3			17		84		·947		4·8		14	11·3	+ 2·7	10·93	9·37	+ 1·59	56·45	40·72	+15·73	2·81	Puri.
3	1	3	1	3	1	1	5	12	N 48° W		4·1			40		85		·881		6·0		10	10·0	0	5·81	6·76	− 0·95	34·67	38·96	− 4·29	1·16	Angul.
	3	6	3	2	1	8	5	2	N 80° W	S	3·1	2·8	+0·3	10	−12	85	+ 3	·882	−·096	6·0	0	8	11·5	− 3·5	5·44	9·02	− 3·58	45·99	60·66	−14·67	2·59	Sambalpur.
8		4	2	1		14	1		S 35° W	S 53° W	1·7	1·0	+0·7	33	+10	84	0	·841	−·045	5·8	0	12	11·6	+ 0·4	6·51	8·82	− 2·31	45·47	41·67	+ 0·80	1·27	Chaibasa.
2	2	1	2	3	2	1	7	10	N 63° W	S 79° W	4·4	5·0	−0·6	37	+15	79	− 4	·704	−·046	4·7	−1·0	7	12·2	− 5·2	4·30	9·52	− 5·22	41·62	49·05	− 7·43	1·28	Ranchi.
7	1	2	3			1	8	8	N 55° W		1·3			40		85		·840		2·7		8	11·4	− 3·4	4·07	10·61	− 6·54	43·01	44·30	− 1·29	0·80	Purulia.
21		1	5		2	1			S 68° E		2·0			17		83		·834		2·9		2	9·6	− 7·6	1·43	7·16	− 5·73	28·59	36·87	− 8·28	1·03	Daltonganj.
14	1	2	2	2	1	3	3		S 9° W	N 88° E	1·7‖	2·2	−0·5	7	−21	84	− 6	·913	−·011	3·8	−2·2	10	11·0	− 1·0	6·20	12·72	− 6·52	58·85	56·00	+ 2·85	1·63	Purnea.
1		1	5	4		2	14	2	S 74° W		3·4			23		78		·889		4·0		9			5·56			37·08			1·68	Monghyr.
16			6				8		W	S 76° E	3·2	2·8	+0·4	7	−43	82	− 4	·911	−·030	3·6	−1·5	4	9·0	− 5·0	4·18	8·93	− 4·75	32·92	45·25	−12·33	1·80	Darbhanga.
7		2	4	6		5	5	1	S 4° E		2·2			20		83		·910		2·8		7			3·33			35·51			0·72	Pusa.
8			7	3		2	10		S 34° W	S 74° E	3·3	2·8	+0·5	13	−17	79	− 4	·907	−·023	3·6	−2·5	6	9·1	− 3·1	3·52	7·29	− 3·77	30·83	41·91	−11·08	1·68	Patna.
			6	3	1	3	11	1	S 48° W		4·3			40		80		·845		3·5		1	9·0	− 8·0	1·92	6·88	− 4·96	29·42	35·94	− 6·52	1·88	Buxar.
4		6		2	5	4	9		S 51° W	S 37° W	1·9	2·8	−0·9	27	− 6	76	− 6	·852	−·034	3·3	−2·5	5	9·4	− 4·4	2·42	7·79	− 5·37	19·86	41·75	−21·89	1·42	Gaya.
25		1			1	2	1		S 45° W		1·2			10		80	− 7	·856		3·1		4	12·7	− 8·7	1·86	9·49	− 7·63	40·01	48·81	− 8·77	0·82	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
5		5	6	1			12	1	N 36° W	N 63° E	1·3	1·5	−0·2	13	−13	79	− 5	·863	−·042	0·8	−3·7	4	8·7	− 4·7	1·68	7·81	− 6·13	40·37	44·44	− 4·07	0·65	Gorakhpur.
3			3	5	1	6	7	5	S 58° W	S 31° W	2·3	2·8	−0·5	30	+19	74	−10	·817	−·092	3·8	−1·4	2	8·5	− 6·5	3·70	6·64	− 2·94	31·71	34·85	− 3·14	3·04	Benares.
		2	6		1	4	14	3	S 89° W	N 63° W	3·6	4·3	−0·7	38	+23	73	− 7	·791	−·098	5·2	−0·3	6	7·5	− 1·5	5·21	5·39	− 0·18	26·49	34·36	− 7·87	3·31	Allahabad.
3	3	1	2	2	1	7	9	2	S 79° W	S 45° W	2·9	2·6	+0·3	37	+29	77	− 3	·799	−·076	2·1	−1·9	7	6·6	+ 0·4	4·18	6·27	− 2·09	29·79	32·49	− 2·70	1·15	Cawnpore.
18			3		1	2	5		S 53° W	S 83° E	1·6	2·0	−0·4	17	+10	78	− 3	·845	−·032	2·9	−2·0	5	7·3	− 2·3	5·33	5·76	− 0·43	24·84	34·41	− 9·57	2·40	Lucknow.
2	1	1	5	5	2	6	6	2	S 20° W	S 68° E	1·9	2·3	−0·4	23	−18	76	− 6	·812	−·093	2·8	−1·2	3	6·4	− 3·4	6·51	7·07	− 0·56	31·97	39·98	− 8·01	4·42	Bahraich.
1	1	2	1			10	13	2	S 80° W	N 1° E	3·3	2·4	+0·9	62	+27	73	− 2	·723	−·074	5·0	+2·0	7	7·4	− 0·4	9·26	6·14	+ 3·12	33·94	34·90	− 0·96	3·33	Jhansi.
10	1	1	1		2	6	7	2	S 74° W	S 59° W	3·5	3·3	+0·2	37	+15	71	− 3	·732	−·075	3·8	+0·3	6	5·2	+ 0·8	6·99	3·85	+ 3·14	23·67	24·67	− 1·00	4·59	Agra.
2	2	2	2	1	1	2	10	8	N 65° W	S 86° W	1·4	1·1	+0·3	46	+27	80	+ 2	·769	−·064	3·3	−0·9	9	5·5	+ 3·5	8·65	3·89	+ 4·76	33·95	23·37	+10·58	2·35	Mainpuri.
27			1				3		W	S 56° E	0·5	1·7	−1·2	3	−23	79	− 3	·768	−·078	3·6	−0·2	9	6·6	+ 2·4	17·93	6·90	+11·03	40·21	40·24	− 0·03	8·14	Bareilly.
22				2		1		5	N 63° W	S 58° E	1·4	1·4	0	10	− 5	83	+ 2	·767	−·018	2·7	−0·9	6	5·4	+ 0·6	14·05	5·69	+ 8·36	39·00	36·61	+ 2·39	4·88	Roorkee.
																																VI.—Punjab.
2	3	1	2			1	16	5	N 70° W	S 85° W	3·6†	2·6	+1·0	59	+30	72	+ 3	·687	−·058	2·4	−0·8	7	4·4	+ 2·6	11·35	4·40	+ 6·95	29·48	24·07	+ 5·41	6·79	Delhi.
4	3	2		1	2	15	1	2	S 56° W	S 59° W				43	+21	64	0	·675	−·048	1·7	−0·4	2	3·0	− 1·0	1·25	1·97	− 0·72	10·64	11·76	− 1·12	0·94	Sirsa.

‖ Mean of 27 days. * Uncorrected for scale error. † Mean of 5 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of sub-division.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Punjab—*concld.*																						
11	Patiala	*818*	28·889		29·677?	29·060	24th	28·677	6th	·383	76·9	91·6		71·1		81·3		20·5	96·8	20th	62·9	22nd	33·9
	Ambala	892	28·842	+·015	29·705	29·027	28th	28·626	1st	·401	77·5	92·7	−1·0	69·6	−4·3	81·1	−2·7	23·1	97·5	10th, 20th & 22nd.	59·9	22nd	37·6
	Ludhiana	812	28·929	+·021	29·714	29·106	26th	28·729	1st	·377	77·7	94·5	−0·4	71·5	−3·3	83·0	−1·9	23·0	98·5	7 days	64·5	22nd	34·0
	Lahore	702	28·026	+·021	29·698	29·200	28th	28·812	2nd	·388	79·9	99·9	+1·0	71·0	−1·6	85·4	−0·3	28·9	103·4	19th	62·7	20th&21st	40·7
	Sialkot	830	28·899	+·019	29·707	29·065	26th	28·685	1st	·380	76·7	95·7	0	68·5	−5·3	82·1	−2·7	27·2	98·0	16th&17th	58·5	22nd	39·5
	Rawalpindi	1,674	28·075	+·007	29·708	28·234	24th	27·873	2nd	·361	77·2	96·3	+2·7	65·4	−3·5	80·8	−0·4	30·9	98·4	19th	58·4	22nd&23rd	40·0
12	Khushab	612	29·118	+·030	29·700	29·280	28th	28·925	1st & 2nd.	·355	82·1	99·7	+0·1	71·8	−4·0	85·8	−1·9	27·9	103·4	1st & 10th	63·4	23rd	40·0
	Montgomery	558	29·166	+·024	29·892	29·323	28th	28·943	2nd	·380	82·6	100·5	−1·2	72·3	−3·8	86·4	−2·5	28·2	103·4	15th&20th	64·0	21st	39·4
	Multan	420	29·302	+·030	29·686	29·456	24th	29·080	2nd	·376	81·7	101·9	+1·6	73·8	−3·8	87·9	−1·1	28·1	105·3	9th	65·0	21st	40·3
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·636	+·007	29·730	28·796	24th	28·426	2nd	·370	75·2	96·8	+0·8	65·2	−4·9	81·0	−2·1	31·6	103·2	1st	57·9	23rd	45·3
	D. I. Khan ‡	590	29·132	+·012	29·697	29·287	28th	28·910	2nd	·377	77·8	97·8	−2·7	70·1	−4·8	83·9	−3·7	27·7	102·9	1st	62·6	25th	40·3
	VIII.—Sind.																						
16	Jacobabad	186	29·541	+·026	29·685	29·686	24th	29·304	2nd	·382	83·6	103·7	+0·2	72·5	−3·5	88·1	−1·7	31·2	105·6	1st&29th	62·8	21st&22nd	43·8
	Hyderabad	96	29·666	+·033	29·714	29·790	24th	29·429	2nd	·361	80·8	98·5	+1·0	74·1	−2·1	86·3	−0·5	24·4	108·0	28th	68·0	23rd	40·0
	Karachi	13	29·794	+·027	29·758	29·910	24th	29·567	2nd	·342	79·4	86·1	+0·7	75·7	+0·2	80·9	+0·5	10·4	88·0	7th&10th	69·0	22nd	19·0
	IX.—Rajputana.																						
17	Bikaner	*771*	28·987	+·026	29·716	29·110	28th	28·777	2nd	·333	83·2	99·1	+0·6	78·3	−2·9	87·7	−1·1	22·8	103·0	4 days	69·0	25th&27th	34·0
	Jodhpur	780	29·021	+·028	29·761	29·111	24th	28·805	1st	·306	79·3	93·6	−2·1	71·0	−5·1?	82·3	−3·6?	22·6	100·5	20th, 25th & 26th.	64·3	23rd	36·2
18	Jaipur	1,431	28·364	+·021	29·745	28·475	24th	28·136	1st	·339	78·9	92·5	−1·7	71·5	−2·1	82·0	−1·9	21·0	101·2	22nd	66·1	28th	35·1
	Ajmer	1,611	28·196	+·029	29·757	28·308	24th	27·987	1st	·321	76·0	89·1	−1·7	73·9	+0·3?	81·5	−0·7?	15·2	95·6	22nd, 23rd & 24th.	69·2	27th&28th	26·4
	Kotah	819?	28·953	+·023	29·726?	29·055	24th	28·733	1st	·322	81·3	91·0	−1·8	74·3	−3·3	82·7	−2·5	16·7	98·6	21st&22nd	70·6	25th&26th	28·0
	X.—Bombay.																						
19	Deesa	466	29·359	+·024	29·783	29·456	14th	29·173	1st	·283	77·6	92·6	−0·2	69·6	−4·3	81·1	−2·3	23·0	101·3	29th	62·4	24th	38·9
	Bhuj	395	29·427	+·030	29·775	29·514	14th	29·223	2nd	·291	79·8	93·9	+1·8	73·1	−1·5	83·5	+0·1	20·8	103·5	29th	70·0	28th	33·5
	Jamnagar	61	29·777		29·784	29·865	14th	29·583	2nd	·282	81·8	90·7		72·6		81·6		18·1	97·5	26th	70·0	12th	27·5
	Dwarka	37?	29·814	+·014	29·797	29·901	14th	29·606	2nd	·295	80·8	86·5	+1·3	78·5	+1·2	82·5	+1·3	8·0	87·8	5th, 8th & 30th.	76·2	28th&29th	11·6
	Rajkot	425	29·412	+·028	29·792	29·499	14th	29·225	2nd	·274	78·4	91·5	+0·1	70·7	−1·7	81·1	−0·8	20·8	101·1	30th	62·3	16th	38·8
	Veraval	*18*	29·838	+·016	29·799	29·933	14th	29·669	2nd	·264	79·4	85·1	+1·3	75·8	−0·5	80·4	+0·4	9·3	91·6	25th	68·8	29th & 30th.	22·8
	Bhavnagar Para	55	29·799	−·004?	29·798	29·905	14th	29·620	2nd	·285	79·9	92·8	−0·3?	72·8*	−2·1?	86·0*	−1·2?	20·0	101·0	26th&27th	71·0	30th	30·0
	Surat	39	29·827	+·027	29·809	29·937	13th	29·669	2nd	·268	80·5	89·9	+1·4	74·7	−0·8	82·3	+0·3	15·2	99·9	25th	71·6	6th	28·3
	Ahmadabad‡	163	29·669	+·005?	29·782	29·765	14th	29·490	1st & 2nd.	·275	79·7	93·1	+1·0	75·0	−1·2	84·0	−0·1	18·1	101·1	25th&26th	72·7	12th, 13th & 15th.	28·4
25	Bombay	37	29·842	+·008	29·819	29·942	13th	29·682	6th	·260	79·9	86·6	+2·1	77·2	+0·7	81·9	+1·4	9·4	90·0	22nd&25th	74·5	7th	15·5
	Ratnagiri	116	29·765	+·002	29·815	29·846	14th	29·632	6th	·214	79·3	84·9	+0·7	74·9	+0·5	79·9	+0·6	10·0	87·3	26th	71·4	9th	15·9
	Goa	199	P	P	P	P	P	P	P	P	77·7	83·1	+0·5	76·1	+0·6	79·6	+0·5	7·0	85·1	4 days	73·6	9th	11·5
	Marmagao	*60*	29·838	−·007	29·833	29·919	13th	29·714	6th	·205	75·7	84·2	+0·7	75·2	+0·1	79·7	+0·4	9·0	86·0	5 days	72·7	14th	13·3
	Karwar	44	29·864	+·003	29·843	29·948	14th	29·744	6th	·194	77·0	83·1	+0·4	74·1	+0·2	78·6	+0·3	9·0	85·2	27th	70·5	9th	14·7

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

‡ Mean of 29 days.
* „ „ 7 „

B—*continued.*

in India, etc., in September, 1912—continued.

Wind direction. Number of winds from Calm	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Sept., 1912.	Normal rainfall for period, 1st May to 30th Sept.	Departure from normal of period, 1st May to 30th Sept., 1912.	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	56	57
																																VI.—Punjab—*concld.*
8	1	1			5			8	7	N 72° W		4·3			30		69		·636		1·2		2	4·2	—2·2	2·96	3·84	—0·88	19·11	20·48	—1·37	2·75	Patiala.
10			2	4	2		6	6	S 83° W	S 39° W	2·1	1·1	+1·0	17	—12	75	— 7	·701	—·098	2·4	—0·3	4	4·5	—0·5	6·51	3·99	+2·52	26·48	24·05	+2·43	3·95	Ambala.
2	1						1		N 45° W	S 20° E	0·2	1·0	—0·8	3	— 9	67	— 8	·635	—·119	1·5	—1·6	2	3·8	—1·8	4·12	3·93	+0·19	21·10	23·04	—1·94	3·57	Ludhiana.
1				5	2		5	2	S 36° W	S 34° E	1·3	1·5	—0·2	17	+ 2	61	— 6	·634	—·100	0·7	—0·7	0	2·5	—2·5	0	2·47	—2·47	10·39	15·77	—5·38	0	Lahore.
1	5		3	3		1	1	1	N 44° E	N 73° E	0·9	1·3	—0·4	27	—14	69	— 1	·632	—·108	0·8	—1·3	0	3·8	—3·8	0·02	3·61	—3·59	12·57	24·52	—11·95	0·02	Sialkot.
2	7					1			N 7° W	N 56° E	1·3	1·1	+0·2	20	+ 5	57	—15	·533	—·132	0·6	—1·3	1	4·3	—3·3	0·58	3·43	—2·85	15·17	23·83	—8·66	0·56	Rawalpindi.
1		5	10	1	1	1	1		N 85° E	N 65° E	2·9	3·9	—1·0	43	—13	44	—16	·486	—·193	0·9	—0·2	2	2·1	—0·1	1·30	1·36	—0·06	7·88	10·35	—2·49	0·66	Khushab.
			1	2	7	11	1		S 22° W	S 4° W	4·2	5·0	—0·8	56	+12	45	—14	·501	—·201	0·8	—0·4	1	1·7	—0·7	0·20	1·34	—1·14	5·53	8·20	—2·67	0·13	Montgomery.
2	1	1		2	3	3			S	S 5° W	0·9	1·9	—1·0	16	—25	56	— 9	·603	—·146	0·5	—0·1	0	0·6	—0·6	0·02	0·36	—0·34	5·05	5·02	+0·03	0·02	Multan.
																																VII.—North-West Frontier Province.
21	1				2	2	1	3	S 87° W	N 24° W	1·1	2·0	—0·9	15	—15	54	— 9	·480	—·153	0·7	—0·4	1	1·5	—0·5	0·16	0·75	—0·59	4·02	5·50	—1·48	0·10	Peshawar.
24	4					1			N 34° E	N 67° E	1·0	1·3	—0·3	14	—16	69	+ 1	·663	—·068	0·5	—0·1	0	0·9	—0·9	0	0·59	—0·59	5·80	6·05	—0·25	0	D. I. Khan.
																																VIII.—Sind.
24		2		2	1	1			S 51° E	S 48° E	1·6	2·1	—0·5	10	—38	63	— 6	·726	—·057	0·1	—0·5	1	0·2	+0·8	0·70	0·08	+0·62	1·16	2·40	—1·24	0·70	Jacobabad.
1	1			1	12	13	1	1	S 27° W	S 39° W	6·0	9·9	—3·9	72	— 2	61	— 7	·640	—·077	1·1	—0·5	0	0·6	—0·6	0	0·48	—0·48	4·73	6·24	—1·51	0	Hyderabad.
1						7	20	2	S 82° W	S 77° W	10·0	10·7	—0·7	86	+ 5	81	0	·821	—·030	2·3	—2·7	0	0·5	—0·6	0·02	0·44	—0·42	3·17	6·19	—3·02	0·02	Karachi.
																																IX.—Rajputana.
7				1		8	12	2	S 75° W	S 46° W	4·2	5·0	—0·8	59	— 1	53	—10	·600	—·139	1·5	—0·9	0	2·0	—2·0	0	1·26	—1·26	5·07	10·20	—5·13	0	Bikaner.
6		3	1		1	16	2	1	S 49° W		2·3			46		63	— 5	·632		1·8		1	2·5	—1·5	1·40	2·40	—1·00	16·56	12·40	+4·16	1·40	Jodhpur.
6	3	3				7	11		N 45 W	N 68° W	3·3*	3·1	+0·2	59	+18	65	— 8	·639	—·083	3·8	+0·2	3	4·6	—1·6	1·28	3·42	—2·14	29·05	22·18	+6·87	0·90	Jaipur.
6		1				4	16	3	W	S 89° W	4·9	4·1	+0·8	67	0	70	— 5	·626	—·108	2·3	—0·8	1	3·3	—2·9	0·62	2·57	—1·95	12·83	19·38	—6·55	0·62	Ajmer.
15						4	8	3	S 87° W		1·0			43		66	— 2	·691		2·5		2	5·6	—3·6	0·76	5·04	—4·28	24·00	26·52	—2·52	0·32	Kotan.
																																X.—Bombay.
7	2		5		3	6	3	4	S 64° W	S 79° W	4·3	6·1	—1·8	17	—42	80	+ 4	·754	—·024	3·6	—1·4	3	3·5	—0·5	2·14	3·62	—1·48	21·35	23·35	—2·00	1·65	Deesa.
1	2					7	12	8	N 83° W	N 87° W	6·9	8·9	—2·0	76	— 2	69	— 6	·690	—·096	3·2	—1·2	1	2·1	—1·1	0·14	1·83	—1·69	20·26	13·37	+6·89	0·14	Bhuj.
						11	12	7	S 84° W		8·8			83		72		·778		3·1		2	1·9	+0·1	2·06	2·03	+0·03	29·90	18·85	+11·05	1·02	Jamnagar.
1	2					9	12	6	W		8·8			75		84	0	·878		3·8		2	1·3	+0·7	0·68	1·01	—0·33	22·71	13·66	+9·05	0·42	Dwarka.
	1				1	12	8	8	S 83° W	N 87° W	5·6	6·6	—1·0	72	— 2	81	— 1	·781	—·030	3·2	—1·6	3	4·8	—1·8	2·73	3·68	—0·95	31·49	25·62	+5·87	1·26	Rajkot.
5	6					3	10	6	N 63° W	N 86° W	3·1	5·8	—2·7	59	+ 4	87	+ 2	·867	+·015	2·8	—2·9	2	3·4	—1·4	0·41	1·80	—1·39	27·83	17·11	+10·72	0·24	Veraval.
4	4	1				4	12	5	N 75° W	S 63° W	2·2	7·9	—5·7	68	— 5	75	— 7	·763	—·093?	3·3	—2·4	2	5·7	—3·7	0·93	3·65	—2·72	39·11	19·73	+19·38	0·72	Bhavnagar Para.
	5	1	1	1	10	3	5	4	S 60° W	S 78° W	3·1	5·0	—1·9	27	—25	88	+ 5	·919	+·058	4·2	—1·5	6	7·0	—1·0	2·55	6·05	—3·50	52·70	39·30	+13·40	0·92	Surat.
7		1		4	1	6	2	8	S 78° W	N 68° W	2·8	2·8	0	27	—30	76	— 2	·774	—·040	1·7	—4·1	3	4·3	—1·3	1·41	3·62	—2·21	38·21	28·85	+9·36	0·64	Ahmadabad.
	1	3	5	11	3	1	5	1	S 48° E	S 56° W	5·4	7·9	—2·5	37	+22	86	— 1	·878	—·002	5·9	—1·4	6	13·0	—7·0	3·26	10·84	—7·58	49·78	69·39	—19·61	1·04	Bombay.
8	5	3	4	5	2	1	1	1	N 77° E	S 73° W	5·5	5·0	+0·5	23	+16	85	— 2	·841	—·018	7·5	+1·0	9	15·3	—6·3	2·91	11·97	—9·06	88·03	96·67	—8·58	0·66	Ratnagiri.
2	2	6	8	4		2	3	3	N 64° E	N 10° E	4·9	4·1	+0·8	33	+23	91	+ 2	·851	—·019	7·9	+0·5	9	14·8	—5·8	3·59	8·96	—5·37	107·58	92·66	+14·92	1·45	Goa.
11	1	1	3	1	2	4	2	5	S 86° W	N 54° W	4·2	5·4	—1·2	13	—40	92	+ 1	·904	+·019	7·5	+1·7	9	15·3	—6·3	2·83	8·56	—5·93	90·51	87·88	+2·63	0·62	Marmagao.
19	4	1			3	1	1	1	N 45° W	N 26° W	1·6	2·1	—0·5	10	—24	89	— 1	·834	+·011	5·3	—0·8	11	15·8	—4·8	5·70	11·85	—6·15	97·47	114·31	—16·84	1·31	Karwar.

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay — *concld.*																						
26	Malegaon	1,430	28·424	+·030	29·795	28·524	14th	28·260	6th	·264	78·7	94·1	+6·2	68·8	−1·4	81·5	+2·4	25·3	99·4	25th & 27th.	64·6	30th	34·8
	Ahmadnagar	2,154	27·726	+·040*	29·782	27·811	14th	27·577	6th	·234	77·5	92·0	+6·8	68·1	+0·1	80·1	+3·5	23·9	97·6	25th	61·5	8th	36·1
	Poona	1,846	28·029	+·012	29·817	28·123	14th	27·886	6th	·237	73·3	88·4	+4·0	67·2	−0·8	78·1	+1·6	20·6	96·0	29th	63·8	8th & 9th.	32·2
	Sholapur	1,590	28·269	+·008	29·787	28·351	9th	28·156	6th	·195	78·2	93·5	+5·1	72·2	+1·8	82·8	+3·5	21·3	97·3	27th	67·6	7th	29·7
	Bijapur	*1,948*	27·921	+·006	29·788	27·997	9th	27·811	6th	·186	76·7	91·0	+5·1	70·5	+0·9	80·7	+3·0	20·5	95·2	12th & 28th.	67·3	6th & 7th.	27·9
	Belgaum	2,539	27·345	+·006	29·797	27·417	13th	27·225	6th	·151	70·3	80·3	+1·4	61·8	−0·5	72·6	+0·5	15·5	85·3	16th & 28th.	59·5	9th & 10th	25·8
	XI.—Central India.																						
20	Neemuch	1,624	28·193	+·029	29·759	28·280	24th	27·990	1st	·290	74·9	87·2	−0·7	68·0	−2·9	77·6	−1·8	19·2	95·9	23rd	64·5	25th	31·4
	Indore	1,823	28·015	+·042	29·778	28·106	14th	27·853	2nd & 6th.	·253	75·9	86·1	+0·7	68·2	−1·0	77·2	−0·6	17·9	94·1	23rd	65·1	13th, 14th & 15th	29·0
21	Nowgong	754	29·031	+·043	29·746	29·145	24th	28·814	6th	·331	77·4	87·3	−3·1	72·6	−2·4	79·9	−2·7	14·7	91·0	21st, 22nd & 23rd.	65·0	24th	23·0
	Sutna	1,041	28·741	+·047	29·741	28·849	24th	28·455	6th	·394	77·3	87·0	−1·0	72·2	−2·4	79·6	−1·7	14·8	92·3	23rd	62·2	22nd	30·1
	XII.—Central Provinces.																						
22	Buldana	2,132	27·725		29·775	27·824	14th	27·562	6th	·262	75·4	86·8		69·4		78·1		17·4	92·4	25th	60·3	26th	26·1
	Akola	925	28·912	+·042	29·785	29·014	13th	28·750	6th	·264	79·4	93·0	+3·9	72·1†	−0·6†	82·5†	+1·7	20·9	99·2	22nd & 24th.	65·0	23rd	33·2
	Amraoti	1,215	28·628	+·059	29·764	28·735	14th	28·464	6th	·271	73·2	89·9	+1·5	72·5	+0·4	81·2	+0·9	17·4	95·3	24th	60·3	23rd	26·0
23	Khandwa	1,044	28·786	+·037	29·785	28·891	13th	28·618	6th	·273	77·6	90·2	+2·1	71·3	−1·9	80·7	+0·1	18·9	98·7	23rd	67·1	24th	31·6
	Hoshangabad	1,006	28·818	+·042	29·730	28·928	14th	28·621	6th	·307	76·6	88·0	−0·1	71·5	−1·8	79·7	−0·9	16·5	98·1	20th	67·4	15th, & 24th.	30·7
	Saugor	1,807	27·992	+·030	29·737	28·092	13th	27·776	6th	·316	76·1	86·1	−0·5	69·8	−1·7	78·0	−1·1	16·3	94·8	21st	66·1	14th	28·7
	Jubbulpore	1,327	28·455	+·029	29·734	28·554	13th & 14th.	28·193	6th	·361	75·8	86·4	−1·0	71·5	−1·3	79·0	−1·1	14·9	91·3	23rd	63·8	23rd	27·5
	Seoni	2,033	27·793	+·049	29·755	27·894	14th	27·568	6th	·326	75·7	84·3	−1·3	68·8	−1·8	76·6	−1·5	15·5	90·1	23rd	63·5	23rd	25·6
	Nagpur	1,017	28·794	+·047	29·759	28·899	14th	28·596	6th	·303	78·7	89·7	+0·4	73·3	−0·5	81·5	−0·1	16·4	94·6	5 days	63·8	23rd	25·8
24	Pendra	2,123?	27·768		29·732	27·873	14th	27·448	6th	·425	76·4	84·7		70·2		77·5		11·5	87·8	22nd & 23rd.	62·2	23rd	25·6
	Raipur	970	28·830	+·049	29·747	28·939	14th	28·567	6th	·372	78·8	88·1	−0·1	75·0	+0·2	81·5	+0·1	13·1	91·7	11th & 22nd.	72·6	4 days	19·1
	Chanda	*634*	29·171	+·024	29·752	29·257	14th	28·992	6th	·265	79·1	88·8	−0·3	73·4	−1·1	81·1	−0·7	15·4	92·5	4 days	69·0	23rd	23·5
	Jagdalpur	1,813	28·007		29·745	28·035	13th	27·800	6th	·235	76·8	85·2		71·4		78·3		13·8	90·2	15th	63·1	6th	22·1
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	27·967	+·028*	29·792	28·057	15th	27·813	6th	·244	78·0	91·0	+4·5	69·3	+0·6	80·2	+2·5	21·7	95·9	27th	65·2	8th	30·7
	Nizamabad	1,248	28·576		29·764	28·662	14th	28·417	6th	·251	77·6	89·3	+2·4	72·7	+0·1	81·0	+1·3	16·6	94·4	30th	67·7	25th	26·7
	Bidar	*2,165*									77·9	85·2		70·4		77·8		14·8	88·5	28th & 30th.	67·4	1st, 7th & 25th	21·1
28	Gulbarga	1,503	28·354	+·010	29·794	28·431	14th	28·243	6th	·188	76·5	92·3	+4·8	71·9	+1·0	82·1	+2·9	20·4	97·5	28th	67·8	23rd	29·7
	Raichur	*1,311*	28·553	+·018	29·800?	28·624	9th	28·445	6th	·179	78·1	91·4	+3·7	73·3	+1·1	82·4	+2·4	18·1	98·0	12th	70·1	6th & 29th	27·9
	Hyderabad (Deccan).	1,690	28·151	+·011	29·767	28·227	14th	28·016	6th	·211	76·8	87·5	+0·8	72·5	+1·7	80·0	+1·3	15·0	95·3	12th	69·7	14th	25·6
	Hanamkonda	877	28·937	+·006	29·764	29·043	13th	28·778	6th	·265	79·5	88·1	−0·2	74·3	−0·3	81·2	−0·3	13·8	94·0	10th	71·2	14th, 28th & 29th.	22·8
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·499	+·004	29·816	27·578	13th	27·394	6th	·184	72·1	83·4	−0·1	68·1	+0·6	75·8	+0·3	15·3	88·6	12th	64·8	21st	23·8
	Hassan	3,149	26·810	+·013	29·830	26·890	13th	26·719	6th	·171	69·6	80·8	+1·0	65·0	+0·8	72·9	+0·9	15·8	84·1	10th & 11th.	60·5	6th	23·6
	Bangalore	3,021	26·922	+·003	29·814	26·994	13th	26·846	6th	·148	70·2	82·7	+0·8	66·1	+0·8	74·4	+0·8	16·6	86·3	9th & 11th	62·8	6th	23·5
	Mysore	2,518	27·411	−·005	29·834	27·525	13th	27·332	6th	·193	71·7	84·2	−0·3	67·1	+0·7	75·6	+0·2	17·1	88·5	10th	61·0	5 days	24·5

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

* Mean of 19 days.
† Mean of 29 days.

B—*continued.*

in India, etc., in September, 1912—continued.

Wind direction. Number of winds from Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Sept., 1912.	Normal rainfall for period, 1st May to 30th Sept.	Departure from normal of period, 1st May to 30th Sept., 1912.	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	56	57
																																X.—Bombay—*concld.*
7	1					8	10	4	S 85° W	N 87° W	5·3	6·5	−1·3	59	−11	67	−10	·661	−·042	0·6	−5·0	0	7·8	−7·8	0	6·10	−6·10	11·04	19·76	−8·72	0	Malegaon.
2	9	1				1	5	12	N 37° W	N 70° W	4·8	9·1	−4·3	69	−20	59	−23	·558	−·127	2·3	−3·6	0	8·5	−8·5	0	6·72	−6·72	7·14	18·61	−11·47	0	Ahmadnagar
							29	1	N 89° W	N 87° W	6·3	8·1	−1·8	99	+29	79	−2	·610	−·039	1·6	−5·6	1	7·4	−6·4	0·58	4·71	−4·13	13·53	21·59	−8·06	0·42	Poona.
1	3	1	1	2		4	1	17	N 48° W	N 68° W	9·5	6·1	+3·4	55	−11	69	−9	·661	−·014	4·2	−3·1	1	9·3	−8·3	0·39	8·40	−8·01	10·45	23·87	−13·42	0·31	Sholapur.
16	1					3	4	6	N 73° W	N 87° W	6·7	5·3	+1·4	33	−12	71	−13	·615	−·055	5·2	−2·1	3	9·1	−6·1	2·09	6·26	−4·17	8·19	15·52	−7·33	0·97	Bijapur.
7	2					4	10	7	N 77° W	N 81° W	7·7	11·5	−3·8	59	−11	69	0	·692	+·005	6·7	−0·8	11	8·9	+2·1	5·28	4·59	+0·69	66·04	40·62	+25·42	1·82	Belgaum.
																																XI.—Central India.
8		1	3			3	15		S 84° W	N 89° W	6·7	6·4	+0·3	43	−12	77	−1	·654	−·087	3·8	+0·4	1	6·6	−5·6	0·59	5·07	−4·48	23·13	27·33	−3·90	0·55	Neemuch.
10	2	1				1	3	13	N 47° W	N 65° W	2·9	3·0	−0·1	53	+1	74	−12	·655	−·093	4·7	−1·6	3	8·6	−5·6	1·60	7·05	−5·45	25·53	30·67	−5·14	1·23	Indore.
6		1			5	6	11	1	S 63° W	N 89° W	2·0	1·7	+0·3	55	+17	82	+1	·770	−·051	4·3	−0·6	6	7·1	−1·1	10·61	6·06	+4·55	43·60	39·77	+3·83	3·86	Nowgong.
9	2		1	1		6	10	1	S 80° W	N 69° W	2·1	4·5	−2·4	43	+5	85	+5	·786	−·031	4·7	−1·2	5	8·8	−3·8	8·01	6·82	+1·19	39·36	39·21	+0·15	2·90	Sutna.
																																XII.—Central Provinces.
	1	1			1	3	13	11	N 75° W		5·3	5·9	−0·6	77		68		·585		2·9		1	9·2	−8·2	0·39	7·35	−6·96	20·14	30·73	−10·59	0·15	Buldana
			4	3		2	12	11	N 76° W	N 69° W	4·2	4·7	−0·5	56	−18	65	−16	·650	−·111	3·6	−2·2	1	8·4	−7·4	1·48	5·95	−4·47	18·80	28·50	−9·70	1·36	Akola.
4	1	4	5	1		1	9	5	N 39° W	S 88° W	4·8	3·9	+0·9	27	−32	71	−14	·667	−·111	4·8	−1·2	5	8·2	−3·2	5·21	6·06	−0·85	21·41	29·61	−8·20	3·07	Amraoti.
	1	1		1	1	3	11	12	N 72° W	N 79° W	4·0	4·7	−0·7	69	−9	71	−11	·671	−·085	3·5	−1·7	5	7·5	−2·5	8·74	6·45	−3·71	15·74	27·55	−11·81	1·47	Khandwa.
		3	3	1	2	11	2	8	S 74° W	S 51° W	2·1	1·9	+0·2	30	−18	80	−7	·732	−·082	5·2	−0·9	6	10·0	−4·0	5·18	9·06	−3·88	37·33	45·86	−8·53	3·23	Hoshangabad
2	2	3	1		1	4	10	7	N 71° W	S 80° W	4·8	3·2	+1·6	53	+9	77	−6	·669	−·034	5·1	−0·4	7	9·5	−2·5	5·36	7·32	−1·96	31·86	42·64	−10·78	1·90	Saugor.
4			1	4	5	3	7	8	S 58° W	S 66° W	1·5	2·2	−0·7	37	+4	81	−3	·728	−·070	4·6	−0·9	8	10·0	−2·0	11·47	7·86	+3·61	40·38	51·02	−10·64	2·70	Jubbulpore.
3	7	2	2	1	1	2	5	7	N 35° W	N 53° W	3·0	2·8	+0·2	40	+10	75	−9	·658	−·110	4·8	+0·3	11	11·2	−0·2	6·93	9·14	−2·21	42·29	47·32	−5·03	1·84	Seoni.
2	6	3		1	1	1	9	7	N 48° W	N 72° W	3·7	3·3	−0·2	53	+20	71		·699	−·093	4·9	−1·5	5	11·0	−6·0	3·60	8·57	−4·97	75·72	44·17	+1·55	2·46	Nagpur.
9	3		1	2	4	2	2	7	N 80° W		2·7			20		77		·694		4·2		6	10·1	−4·1	4·66	5·88	−1·22	35·57	43·15	−7·58	1·76	Pendra.
1	3	3	4	1	1	12	3	2	S 59° W	S 63° W	3·5	4·3	−0·8	27	−7	83	−1	·817	−·021	4·1	−2·4	8	10·5	−2·5	8·36	7·82	+0·54	44·54	45·15	−0·61	2·60	Raipur.
13	1		1	1	5	3	5	1	S 45° W	N 79° W	2·3	2·9	−0·6	27	+3	82	+2	·817	+·007?	4·2	−1·9	7	11·2	−4·2	5·80	9·83	−4·03	41·74	48·31	−6·57	2·08	Chanda.
11	6	1	1	2	1	4	4		N 67° W		4·4†			13		84		·772		3·8		12			13·19			49·97			5·00	Jagdalpur.
																																XIII.—Hyderabad
1	6	3	1	1		4	7	7	N 49° W		7·7			46		61	−17	·578		4·3		1	8·9	−7·9	0·25	7·09	−6·84	11·64	21·96	−10·32	0·18	Aurangabad.
23						3	4		S 71° W		2·7			23		78	−2	·741		3·7		5	9·9	−4·9	2·87	10·09	−7·22	30·93	36·35	−5·42	1·71	Nizamabad.
15						6	3	5	S 85° W		6·0			38		77		·740		7·1		5	11·2	−6·2	4·55	9·75	−5·20	27·55	30·87	−3·32	2·16	Bidar.
2	6	5			1	3	5	8	N 38° W	N 51° W	5·5	7·9	−2·4	49	−9	71	−9	·654	−·057	2·5	−4·3	2	11·5	−9·5	0·94	8·56	−7·62	21·48	27·54	−6·06	0·68	Gulbarga.
	2					8	10	10	N 82° W	S 89° W	6·1	7·1	−1·0	76	+7	71	−9	·687	−·038	5·5	−1·2	7	10·8	−3·8	2·67	7·62	−4·95	15·38	23·06	−7·68	0·82	Raichur.
24							6		W	N 83° W	1·5	4·1	−2·6	20	−47	77	−6	·713	−·021	5·7	−0·8	5	9·2	−4·2	4·41	6·92	−2·51	19·73	24·88	−5·15	2·74	Hyderabad (Deccan).
12	1			2	2	2	6	5	S 88° W		3·6			32		73	+2	·778		5·7		7	9·3	−2·3	5·78	7·28	−1·50	23·03	30·11	−7·08	2·07	Hanamkonda
																																XIV.—Mysore.
2						11	13	4	S 79° W	S 80° W	3·9	6·4	−2·5	76	−10	81	−1	·636	−·007	7·2	−0·9	7	7·4	−0·4	4·99	4·09	+0·90	19·87	16·93	+2·94	1·27	Chitaldrug.
3	2	1		1		6	11	6	N 84° W	N 79° W	4·8	2·6	+2·2	60	−16	86	+4	·618	+·013	7·8	−0·4	14	7·7	+6·3	7·14	3·95	+3·19	22·15	22·68	−0·53	2·41	Hassan.
1	1	1				6	17	4	N 89° W	S 82° W	4·3	5·1	−0·8	77	−4	88	+2	·651	+·019	8·2	+0·3	11	9·4	+1·6	18·75	6·76	+11·99	33·98	23·63	+10·35	4·91	Bangalore.
3		1				16	9	1	S 64° W	S 74° W	5·3	7·3	−2·0	72	+1	85	+2	·656	+·021	8·1	+0·6	11	7·9	+3·1	3·94	4·59	−0·65	16·97	18·60	−1·63	0·82	Mysore.

* Mean of 29 days.
† " 28 "
‡ " 21 "

Tabl

(2) *Abstract of observations taken at 8 hrs. at 220 station*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	V.—Madras.																						
30	Mangalore	65	29·852	−·014	29·848	29·922	13th	29·754	6th	·168	78·8	84·9	+0·8	74·6	+1·0	79·8	+0·9	10·3	87·3	27th	70·4	25th	16·9
	Calicut	27	29·885	−·022	29·841	29·983	13th	29·791	6th	·192	77·7	84·0	−0·3	75·1	+0·7	79·5	+0·2	8·9	85·8	9th, 21st & 29th.	73·1	14th, 23rd & 24th.	12·7
	Cochin	9	29·913	−·019	29·850	29·989	13th	29·832	6th	·157	79·1	85·7	+1·1	75·1	+0·6	80·4	+0·9	10·6	87·7	18th, 19th & 23rd	73·7	6 days	14·0
	Trivandrum	198	29·721	−·009	29·850	29·767	13th	29·627	6th	·140	78·5	84·4	+1·5	75·4	+2·3	79·9	+1·9	9·0	87·0	14th	74·0	4 days	13·0
31	Pamban	37	29·828	−·019	29·793	29·886	10th	29·748	6th	·138	82·0	83·8	+0·8	77·5	−0·6	85·6	0	12·3	93·2	17th	75·8	29th	17·4
	Madura	447	29·432	+·011	29·810	29·501	13th	29·336	6th	·165	82·2	95·3	0	76·3	+1·0	85·9	+0·5	19·0	100·0	2nd	71·6	18th	28·4
	Pudukkottai	318	29·559		29·308	29·645	13th	29·464	6th	·181	82·5	96·5		76·6		86·5		19·9	101·6	1st & 2nd	71·9	16th	29·7
	Negapatam	31	29·825	−·018	29·785	29·905	13th	29·725	6th	·180	83·0	92·3	−0·[illegible]	78·2	+1·7	85·2	+0·7	14·1	97·4	4th & 7th	72·7	16th	25·0
	Trichinopoly	255	29·620	−·001	29·808	29·724	13th	29·527	6th	·197	82·1	96·5	+1·4	76·3	+0·5	86·6	+1·0	20·6	102·4	8th	72·3	15th	29·8
	Coimbatore	1,341	28·531	−·017	29·836	28·670	13th	28·444	6th	·226	76·1	88·2	−1·4	69·9	−0·8	79·1	−1·1	18·3	93·0	11th	67·3	13th	25·7
	Salem	940	28·973	+·005	29·847	29·091	13th	28·896	6th	·195	78·5	93·2	+1·9	73·8	+1·5	83·5	+1·9	19·4	100·0	9th	70·8	13th	29·2
	Cuddalore	37	29·818	−·026	29·785	29·915	13th	29·722	6th	·193	82·8	91·6	−0·3	77·3	+1·6	84·4	+0·7	14·3	96·3	2nd	72·2	22nd	24·1
	Vellore	707	29·142		29·784	29·212	13th	29·049	6th	·163	80·7	92·3		75·7		84·0		16·6	97·2	8th	71·5	19th	25·7
	Madras	22	29·822	−·005	29·775	29·912	9th	29·714	6th	·198	83·6	94·4	+1·4	78·5	+1·0	86·5	+1·5	15·8	99·5	2nd, 6th & 7th.	71·0	18th	28·5
32	Cuddapah	433	29·426	+·003	29·796	29·505	13th	29·331	6th	·174	80·8	94·6	+2·1	76·4*	+0·6*	85·1*	+1·3	18·2	100·2	11th	70·8	21st	29·4
	Bellary	1,475	28·385	+·001	29·798	29·470	13th	29·279	6th	·191	77·0	91·4	+0·8	72·7	0	82·1	+0·4	18·7	98·0	15th	69·8	21st & 25th.	28·2
	Kurnool	923	28·921	+·001	29·784	28·963	9th	28·810	6th	·173	78·5	92·3	+3·1	71·5	+1·5	83·4	+2·3	17·7	97·7	12th	70·6	25th	27·1
33	Nellore	66	29·760	+·004	29·761	29·850	9th	29·643	6th	·207	83·1	94·8	+0·2	77·7	0	86·2	+0·1	17·1	100·1	1st & 13th.	71·1	19th	29·0
	Masulipatam	15	29·806	+·020	29·756	29·893	13th	29·618	6th	·245	81·9	89·9	−0·8	77·3	−0·1	83·6	−0·5	12·6	94·8	2nd	73·2	24th	21·6
	Cocanada	26	29·787	+·025	29·750	29·882	13th	29·618	5th	·264	81·6	89·0	−0·2	77·7	−0·4	83·4	−0·3	11·3	94·7	2nd	74·7	10th & 24th.	20·1
	Waltair (Vizagapatam).	*296*	29·578	+·037	29·745	29·674	14th	29·362	5th	·312	81·3	87·8		77·1		82·5		10·7	93·0	1st	73·4	3rd	20·2
	Calingapatam	19	29·775		29·732	29·880	13th	29·533	5th	·347	82·0	90·5		78·0		84·2		12·5	94·8	1st	75·3	4 days	19·5
	Gopalpur	72	29·754	+·038	29·728	29·852	13th & 14th.	29·509	6th	·344	81·6	88·3	+0·5	78·2	+0·1	83·5	+0·2	10·6	92·2	2nd & 16th.	73·5	10th	18·7
	Bay Islands.																						
1	P. V. Fraser	8	29·809		29·733	29·920	28th	29·500	5th	·420	84·2												
	Port Blair	58	29·822	0	29·810	29·892	28th	29·716	1st	·176	79·5	84·3	−0·8	75·7	−0·8	80·0	−0·8	8·6	87·7	12th	73·0	2nd	14·7
	Slipper Island	90	29·761		29·785	29·856	28th	29·599	2nd	·257	80·4	84·4		77·2		80·8		7·2	87·1	13th	73·6	22nd	13·5
	Kashmir.																						
13	Muzaffarabad	2,475	27·375		29·818	27·557	28th	27·161	2nd	·396	68·1	91·7		59·6		75·7		32·1	96·1	3rd	53·7	22 nd	42·4
	Srinagar	5,204	24·851	+·005	24·822	24·989	24th	24·662	1st	·327	57·7	79·4	0	49·3	−3·7	64·4	−1·9	30·1	87·1	1st	40·6	23rd	46·5
	Gulmarg	*8,569*	21·871	−·013	21·839	21·997	24th	21·716	1st	·281	52·5	65·6	+2·5	38·9	−3·8	52·3	−0·7	26·7	74·7	1st	33·8	23rd	40·9
	Dras	*10,059*	20·817	0	20·785	20·942	24th	20·625	1st	·317	46·8	63·8		35·0		49·4		28·8	73·0	1st	24·5	17th	48·5
	Leh	*11,503*	19·724	−·006	19·692	19·838	24th	19·558	1st	·280	50·3	69·2	−1·1	38·8	−2·7	54·0	−1·9	30·4	74·9	1st & 11th.	33·0	20th, 21st & 22nd.	41·9
	Skardu	*7,505*	22·849	0	22·819	22·988	29th	22·553	1st	·395	59·6	76·3	−1·6	52·4	−1·4	64·2	−1·5	23·9	87·0	1st	45·1	21st	41·9
	Gilgit	*4,890*	25·118		25·091	25·282	29th	24·871	1st	·411	66·7	85·6	−1·1	61·2	−3·5	73·4	−2·2	24·4	97·2	1st	54·2	20th	43·0

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau

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

* Mean of 23 days.

B—*continued.*

in India, etc., in September, 1912—continued.

Wind direction. Number of winds from Calm. (25)	N. (26)	N. E. (27)	E. (28)	S. E. (29)	S. (30)	S. W. (31)	W. (32)	N. W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st May to 30th Sept., 1912. (53)	Normal rainfall for period, 1st May to 30th September. (54)	Departure from normal of period, 1st May to 30th Sept., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																XV.—Madras.
8	5	2	7	1	2	1	2	2	N 49° E	N 52° E	3·5	1·6	+1·9	23	+12	84	− 6	·828	−·017	6·8	−0·8	6	15·9	−9·9	3·43	10·77	− 7·34	125·45	115·22	+10·23	1·50	Mangalore.
11	1	5	1	3		2	2	5	N 3° W	N 30° W	3·1*	5·2	−1·8	14	−19	90	+ 2	·856	+·024	7·1	+0·8	8	11·7	−3·7	6·53	7·21	− 0·68	121·12	96·44	+24·68	2·13	Calicut.
1	2	12	8	5		1		1	N 69° E	N 5° E	4·6*	3·7	+0·9	66	+25	86	0	·849	+·014	6·0	0	11	13·9	−2·9	8·82	8·71	+ 0·11	108·10	84·20	+23·90	2·38	Cochin.
6	13	1					1	9	N 18° W	N 16° W	4·8	5·9	−1·1	69	−12	80	− 4	·781	−·022	7·7	+0·9	4	7·6	−3·6	1·94	3·83	− 1·89	52·10	36·72	+15·38	1·31	Trivandrum.
9			1	3	8	8	1		S 13° W	S 42° W	6·2	7·1	−0·9	53	+ 1	78	+1	·849	+·112	3·7		2	2·0	0	2·22	1·20	+ 1·02	3·31	3·36	− 0·05	1·15	Pamban.
5	2	1	1	1			10	10	N 58° W	N 29° W	3·2	2·1	+1·1	56	−22	68	0	·740		6·8	+1·6	4	6·8	−2·8	5·30	5·29	+ 0·01	17·78	15·62	+ 2·16	3·21	Madura.
6	2	1			1	2	4	14	N 55° W		5·2			60		73		·811		5·6		3	6·8	−3·8	4·20	3·83	+ 0·37	12·47	18·00	− 5·53	2·47	Pudukkottai.
						6	22	2	S 81° W	S 72° W	5·9	4·0	+1·9	92	+18	76	+ 1	·857	+·037	0·6	−5·1	2	6·2	−4·2	1·33	3·70	− 2·37	5·87	12·51	− 6·64	1·17	Negapatam.
2		1				5	17	5	N 88° W	N 87° W	3·7	4·7	−1·0	76	+ 6	68	− 4	·735	−·015	4·2	−1·8	5	6·0	−1·0	5·44	4·38	+ 1·06	12·72	14·65	− 1·93	1·90	Trichinopoly.
3				1	10	11	2		S 29° W	S 33° W	6·1	4·0	+2·1	79	+ 5	37	+ 3	·732	+·034	4·6	−0·7	3	3·1	−0·1	3·51	1·42	+ 2·09	8·77	8·05	+ 0·72	2·98	Coimbatore.
8	1					5	14		S 76° W	S 43° W	2·8	2·5	+0·3	56	− 4	82	+ 2	·811	+·040	6·7	+0·8	9	8·8	+0·2	8·37	6·54	+ 1·83	19·50	25·69	− 6·19	1·92	Salem.
5				1	4	11	6		S 46° W	S 81° W	4·1	1·9	+2·2	69	− 1	79	− 3	·873	−·007?	5·1	−0·9	3	7·1	−4·1	3·70	6·28	− 2·58	15·68	16·85	− 1·17	2·17	Cuddalore.
11							19		W		1·9*			63		77		·798		4·0		11	9·0	+2·0	4·65	7·87	− 3·22	12·99	26·36	−13·37	1·09	Vellore.
1				2	7	14	6	2	S 43° W	S 63° W	3·9	4·4	−0·5	69	− 1	77	− 1	·887	+·045	4·4	−2·3	3	7·4	−4·4	1·36	5·14	− 3·78	10·75	17·15	− 6·40	0·86	Madras.
	4			1		3	9	13	N 62° W	N 84° W				69	− 9	74	0	·774	+·052	5·1	−2·1	12	8·5	+3·5	7·71	6·32	+ 1·39	15·13	21·17	− 6·04	2·11	Cuddapah.
3	1	1		1	1	4	12	7	N 84° W	N 79° W	4·3*	6·7	−2·4	59	−19	74	+ 4	·683	+·031	5·9	−1·5	6	7·2	−1·2	4·92	4·54	+ 0·38	11·81	12·69	− 0·88	1·15	Bellary.
				1	2	9	15	5	S 76° W	N 88° W	4·9*			72	+24	73	− 5	·702	−·032	5·1	−1·8	6	9·8	−3·8	4·49	6·41	− 1·92	15·51	20·98	− 5·47	1·70	Kurnool.
7	1				5	2	2	13	N 74° W	N 68° W	4·2	4·9	−0·7	46	−13	73	− 3	·826	−·023	6·0	−1·2	6	6·3	−0·3	5·98	4·55	+ 1·43	16·52	12·73	+ 3·79	3·70	Nellore.
5	1				1	4	7	14	N 73° W	N 68° W	3·8	4·2	−0·4	62	+ 3	86	+ 2	·928	+·021	6·5	−0·5	14	9·2	+4·8	6·08	5·80	+ 0·28	30·41	24·48	+ 5·93	0·90	Masulipatam.
6	3	1		1	1	1	10	4	N 72° W	N 87° W	3·3	4·7	−1·4	43	−22	84	+ 4	·911	+·051	7·3	−0·1	10	8·3	+1·7	4·42	5·98	− 1·56	20·42	23·14	− 2·72	1·30	Cocanada.
2	3	3		1	1	13	7		S 66° W	N 86° W	5·2			46	−21	82	+ 1	·879	−·003	6·7	−0·6	10	9·1	+0·9	7·66	7·15	+ 0·51	24·85	23·63	+ 1·22	2·18	Waltair.
4	8	3		1	1	4	3	6	N 36° W		6·2			40		86		·934		5·5		12	7·8	+4·2	15·49	4·57	+10·92	60·21	24·72	+35·49	4·84	(Vizagapatam). Cattugapatam.
1	8	6			6	5	1	3	N 27° W	N 61° W	5·9	6·8	−0·9	20	−21	88	+ 3	·941	+·012	5·6	−1·0	9	9·8	−0·8	10·46	7·53	+ 2·93	30·60	30·13	+0·47	2·40	Gopalpur.
																																Bay Islands.
	2		2	8	3	7	5	3	S 24° W					33		82		·958		5·6		10			4·50			26·12			2·17	P.V.Fraser.
7					1	4	10	8	N 85° W	S 61° W	4·7	6·9	−2·2	59	− 7	87	− 3	·878	−·047	6·3	−1·8	17	20·4	−3·4	15·21	18·55	− 3·34	74·41	85·18	−10·77	2·65	Port Blair.
	1			2	4	8	11	4	S 68° W		9·5			62		89		·921		4·7		14	16·4	−2·4	9·20	11·83	− 2·63	64·56	63·85	+ 0·71	2·70	Slipper Island.
																																Kashmir.
		1		2	10	14		3	S 28° W		3·4			73		61		·426		0·6		3			1·36			35·51			0·53	Muzaffarabad.
12		1		7	5	2		3	S 14° E	S 43° E	1·5	2·4	−0·9	30	+ 5	79	− 8	·379	−·089	2·2	−1·1	1	3·8	−2·8	0·17	1·82	− 1·65	7·29	11·46	− 4·17	0·12	Srinagar.
25		1	1	1	1			1	S 79° E		3·6			6		64	−17	·257		1·5		0	5·6	−5·6	0·25	3·39	− 3·14	13·79	16·35‡	− 2·56	0·08	Gulmarg.
24		1				1	3	1	N 79° W		4·6			13		59	− 2	·193		1·0		0	2·1	−2·1	0·04	1·31	− 1·27	5·63	6·40	−0·77	0·03	Dras.
30									(a)	N 85° W	2·0	1·4	+0·6			39	− 9	·148	−·028	2·1	−1·5	0	0·7	−0·7	0	0·28	− 0·28	1·24	1·65	− 0·41	0	Leh.
14			4	1	1	9	1		S 18° W		3·5			27		41	−20	·209		2·9		0	1·5	−1·5	0	1·08	− 1·08	3·93	3·67	+ 0·26	0	Skardu.
23				2		5			S 23° W		0·9			20		46	− 5	·299	− 086	2·2	−1·3	0	1·2	−1·2	0·02	0·37	− 0·35	1·75	2·75	− 1·00	0·02	Gilgit.

stations, the elevations of which exceed 3,000 feet. † Mean of 29 days. * Uncorrected for scale error. (a) Indeterminate. ‡ Normal rainfall since June.

Tabl

(2) *Abstract of observations taken at 8 hrs. at 220 station*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Baluchistan.																						
15	Fort Sandeman		25·295†		25·264†	25·505	28th	25·186	1st	·319	69·4	89·5		57·9		73·7		31·6	97·9	1st	51·6	19th	46·
	Quetta	5,502	24·637	+·034	24·597	24·762	24th	24·458	2nd	·304	60·8	81·2	−4·2	41·4	−8·1	61·3	−6·1	39·8	91·1	1st	36·7	17th	54·
	Chaman	4,311	25·685	+·037	25·647	25·815	24th	25·499	2nd	·316	69·5	84·1	−7·5	55·5	−9·3	69·8	−8·4	25·6	94·8	1st	49·8	20th	45·0
	Kalat	6,630	23·686		23·648	23·840	29th	23·469	2nd	·371	44·7	78·3		30·5		54·4		47·8	87·0	1st	25·2	21st	61·
	Dalbandin	2,779	27·082		29·780	27·203	24th	26·866	2nd	·337	71·6	93·9		56·9		75·4		37·0	104·3	1st	52·3	21st & 24th.	52·
	Pasni		29·789		29·749	29·918	29th	29·565	2nd	·353	74·4	90·5		71·8		81·1		18·7	98·5	8th	67·0	24th	31·
	Panjgur		26·697		26·655	26·805	24th	26·533	2nd	·272	63·3	88·4		59·0		73·7		29·4	98·8	2nd	53·5	16th & 23rd.	45·
	Robat		26·773		26·731	26·877	28th	26·584	2nd	·293	71·4	95·1		62·9		79·0		32·2	104·0	1st	58·8	8th	45·
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*																					
	Para Chinar	6,000	24·425		24·401	24·558	24th	24·265	1st & 2nd.	·293	66·7	79·3		53·7		66·5		25·6	83·7	1st	49·6	21st	34·
	Cherat	*4,256*	25·671	+·028	25·639	25·815	24th	25·486	1st	·329	71·2	83·9	−1·9	63·2	−2·7	73·6	−2·3	20·7	91·2	1st	58·9	23rd	32·
	Drosh				P						65·0	84·7		60·4		72·6		24·3	92·7	1st	52·1	20th	40·
	Murree	6,333	23·842	+·012	23·810	23·980	24th	23·674	1st	·306	62·2	72·7	−1·1	59·1	+0·3	65·9	−0·4	13·6	75·6	1st & 30th.	49·7	16th	25·
	Simla	7,232	23·100	+·010	23·062	23·240	24th	22·941	1st	·299	58·6	65·2	−0·9	55·6	−0·3	60·4	−0·9	9·6	69·2	7th	52·3	27th	16·
	Sarain		23·137		23·099	23·267	24th	22·971	1st	·296	56·5	67·1		51·1		59·1		16·0	72·4	6th	45·7	21st	26·
	Kalabagh		20·134		20·096	20·248	24th	20·011	2nd	·237	47·5	53·6		41·4		47·5		12·2	58·8	5th	38·7	25th	20·
	Chakrata	7,022	23·273	+·014	23·235	23·402	24th	23·108	1st	·294	60·8	68·5	−0·2	55·7	−1·3	62·1	−0·7	12·8	72·2	6th	51·2	28th	21·
	Mukteswar	7,592	22·826	−·017	22·785	22·958	24th	22·656	1st	·302	58·6	66·3	−3·0	52·6	−2·9	59·5	−2·9	13·7	72·5	23rd	47·0	27th & 28th.	25·
	Darjiling	7,376	22·993	−·026	22·948	23·119	26th	22·884	2nd	·235	59·5	65·3	+1·2	56·2	+0·7	60·7	+0·9	9·1	70·8	5th	52·2	24th	18·
	Shillong	4,920	25·112		25·064	25·241	26th	24·952	2nd	·289	67·6	74·1		60·4		67·3		13·7	77·9	6th	54·7	14th	23·
	Cherrapunji	4,309	25·656		25·607	25·791	24th	25·487	5th	·204	67·8	73·8		63·8		68·8		10·0	78·2	4th	61·1	25th	17·
	Maymyo	3,545	26·397	+·005	26·344	26·532	26th	26·230	2nd	·302	69·1	76·8	−1·1	65·6	+1·5	71·3	+0·2	11·2	81·0	26th	62·6	14th & 19th.	18·
	Pachmarhi	3,528	26·395	+·032	26·342	26·484	10th & 11th.	26·185	6th	·299	70·0	77·4	+0·2	64·3	−2·0	70·9	−0·9	13·1	83·0	22nd	58·1	23rd	24·
	Mount Abu	3,945	26·010	+·027	25·960	26·107	24th	25·821	1st	·286	68·3	74·9	−0·4	63·7	−0·8	69·3	−0·7	11·2	82·2	25th & 26th.	60·4	11th, 12th & 13th.	21·
	Mercara	3,781	26·201	−·010	26·154	26·279	13th	26·119	6th	·160	65·1	74·1	+1·9	61·9	0	68·0	+0·9	12·2	79·0	29th	59·0	8th	20·
	Ootacamund	*7,327*	23·046		22·982	23·134	13th	22·951	7th	·183	57·9	66·0		51·0		58·5		15·0	69·0	7th, 8th & 29th.	44·7	21st	24·
	Kodaikanal	7,638	22·815	−·011	22·750	22·872	13th	22·754	6th	·118	58·0	66·1	+2·8	52·2	0	59·2	+1·4	13·9	70·5	12th & 15th.	50·0	3rd	20·
	Extra India.																						
	Singapore (a)	10	29·915		29·846	29·987	12th	29·356	21st	·131	83·5	87·9		75·2		81·5		12·7	91·4	18th	72·0	13th & 14th.	19·
	Penang (a)	20	29·867		29·812	29·963	28th	29·790	2nd	·173	81·3	88·1†		73·8		80·9†		14·3	91·5	7th	71·0	3rd	20·
	Trincomalee	99	29·765	P	29·792	29·819	13th	29·668	6th	·151	79·3	94·2	+3·0	76·7	+0·1	85·5	+1·5	17·5	98·5	8th	74·0	18th	24·
	Colombo	24	29·894	−·032	29·844	29·938	29th	29·315	6th	·123	77·6	87·5	+1·5	75·3	−1·7	81·4	−0·1	12·2	89·0	9th, 14th & 19th.	72·0	11th	17·
	Minicoy	7	29·939			30·005	13th	29·849	6th	·156													
	Amini Divi	*13*	29·907	−·019	29·848	29·975	13th	29·801	6th	·174	81·6	87·4	+2·4	78·5	+1·3	83·0	+1·9	8·9	90·1	18th	75·3	26th	14·
	Gyantse	13,120	17·134		17·095	17·196	25th	17·043	2nd	·153	50·7	72·9		35·3		54·1		37·6	76·5	22nd	30·2	16th	46·
	Pharijong	14,400									52·1	55·6		34·6		45·1		21·0	58·8	1st	24·8	30th	34·
	Gangtok	5,660?	24·575‡		24·530‡	24·660	26th & 27th.	24·494	16th, 20th & 21st.	·166	65·2	73·7		61·3		67·5		12·4	79·9	4th	58·2	23rd	21·
	Gartok (b)	15,100?	17·607			17·675	8th, 10th & 11th.	17·550	1st	·125	34·3	57·0		24·2		40·6		32·8	69·5	3rd	11·2	22nd	58·

N.B.—Elevations in italics indicate barometrical determinations.
(a) 9 hrs. observations.
(b) Aneroid corrected.

† Mean of 29 days.
‡ ,, ,, 15 ,,

NOTE.—The barometric readings are not reduced to sea-level, in the case of h

B—*continued.*

in India, etc., in September, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September, 1912.	Normal rainfall for period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September, 1912.	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	56	57
																																Baluchistan.
13	1	1		1	1	6	6	1	S 69° W		3·0			30		49		·350		0·1		0			0			4·07			0	Fort Sandeman.
28								2	N 45° W	S 45° W	1·2	1·6	−0·4	3	+ 1	28	−22	·149	−·181	0	−0·2	0	0·2	−0·2	0	0·08	− 0·08	1·00	1·82	− 0·82	0	Quetta.
20					3	6	1		S 36° W	S 8° E	3·3	5·7	−2·4	30	− 3	30	+ 7	·213	−·056	0	−0·2	0	0	0	0	0	0	0·41	0·22	+ 0·19	0	Chaman.
6				3	13	8			S 9° W	S 14° W	4·0			69	+29	38		·114		0·1		0			0			1·28	1·37	− 0·09	0	Kalat.
5		4	12	2	3	3	1		S 74° E		3·8			46		33		·293		0		0			0			0·46			0	Dalbandin.
20							6	4	N 71° W		4·0			30		87		·742		1·0		0			0			1·25			0	Pasni.
4	3	9	7	3	1	2		1	N 67° E		4·4			46		47		·272		0		0			0			1·92			0	Panjgur.
5		1	2	3	6	5	8		S 32° W		2·1			43		41		·319		0		0			0			0			0	Robat.
																																Hill stations, excluding Kashmir and Baluchistan.
										S 32° W													1·0			0·15			3·72			Chitral.
21			1			5	2	1	S 62° W	N 37° W	1·7			20		40		·260		0·5		2	4·1	−2·1	0·48	1·63	− 1·15	14·85	13·00	+ 1·85	0·22	Para Chinar.
6	11	2		1	2	2	2	4	N 20° W		5·7	5·8	−0·1	40	+35	34	−24	·280	−·188	0·4	−1·5	4	2·9	+1·1	2·32	2·16	+ 0·16	11·22	13·30	− 2·08	1·54	Cherat.
26			3	1					S 79° E		3·0*			13		42		·257		0		0	2·3	−2·3	0·14	0·82	− 0·68	0·20b			0·07	Drosh.
19	8			1	1			1	N		2·2	4·2	−2·0	23	+ 4	50	−15	·278	−·103	1·1	−1·4	4	7·0	−3·0	0·82	5·91	− 5·09	31·71	38·15	− 6·44	0·27	Murree.
																71	−5	·359	−·038	3·2	−0·8	9	8·3	+0·7	10·06	5·71	+ 4·35	47·62	50·41	− 2·79	3·66	Simla.
																79		·360		4·5		10	7·3	+2·7	13·61	8·37	+ 5·24	40·22	39·22	+ 1·00	5·22	Sarain.
12	1			8	6			3	S 18° E		4·1			30		76		·253		4·4		9	8·4	+0·6	19·45	11·11	+ 8·34	54·93	53·51‡	+ 1·42	7·73	Kalabagh.
15	16	2			3				N 9° E	N 21° E	1·4	4·4	−3·0	27	+14	79	− 4	·424	−·025	5·2	+1·5	10	7·7	+2·3	10·93	6·35	+ 4·58	66·24	56·80	+ 9·44	3·76	Chakrata.
11			8	2	2		6	1	S 45° E		5·5†			13		81	− 1	·393		5·5		10	8·5	+1·4	13·39	6·15	+ 7·24	43·43	40·29	+ 3·14	3·23	Mukteswar.
27							1	2	S 75° W	S 83° E	0·6	2·7	−2·1	10	− 9	94	0	·431	+·007	8·4	−0·1	16	17·0	−1·0	15·93	13·46	− 2·53	97·23	108·94	−11·71	3·50	Darjiling.
27				2		1			S 18° E		0·9			7		81		·550		5·2		15	16·8	−3·8	12·31	10·99	+ 1·82	63·09	68·98	− 5·89	2·59	Shillong.
22			1	1	1	2	2	1	S 45° W		1·9			10		92		·626		6·8		14	19·1	−5·1	30·37	35·06	− 4·19	288·21	347·68	−59·47	7·77	Cherrapunji.
16		1		3		10			S 45° W		1·3			20		93	+ 3	·657		6·8		15	15·5	−0·5	6·44	11·14	− 4·70	38·85	43·32	− 4·47	1·03	Maymyo.
2	1	5	1	2		5	6	8	N 60° W	N 85° W	4·3	4·5	−0·2	33	−11	81	− 2	·580	−·047	3·7	−2·9	10	13·4	−3·4	4·89	14·82	− 9·93	69·36	70·46	− 0·50	1·45	Pachmarhi.
	2	1		1	6	14	2	4	S 50° W	S 70° W	4·1	5·8	−1·7	56	+12	74	− 6	·495	−·053	3·9	−0·7	6	7·5	−1·5	7·84	8·92	− 1·08	42·79	58·91	−16·12	4·14	Mount Abu.
20	1	1					4	4	N 53° W	N 67° W	1·4	5·3	−3·9	27	−47	95	+ 3	·582	+·008	7·3	−1·2	14	18·2	−4·2	7·24	10·80	− 3·56	113·63	111·00	+ 2·63	0·86	Mercara.
12	1	1	1	1	2	1	5	6	N 71° W		1·6			23		83		·400		7·5		14	11·5	+2·5	6·33	5·76	+ 0·57	30·63	35·39	− 4·71	1·59	Ootacamund.
1	1	1	3	4	4		9	7	S 88° W		7·7			25		73	− 1	·383		5·2		11	12·4	−1·4	7·04	6·52	+ 0·52	25·42	28·74	− 3·32	1·42	Kodaikanal.
																																Extra India.
9			1	12	3	4		1	S 24° E					46						5·8		8	9·7	−1·7	6·38	5·66	+0·72	38·55	32·80	+5·75	2·82	Singapore. (a)
	2	11	1	6	1	2		7	N 39° E		8·0			33								15	13·4	+1·6	12·67	13·77	−1·10	58·61	47·72	+10·89	2·23	Penang. (a)
						30			S 45° W	S 43° W	6·6*	9·3	−2·5	36	+ 2	76	− 4	·761	−·104	5·5	+2·6	4	5·8	−1·8	3·78	4·63	−0·85	14·25	14·74	−0·49	1·76	Trincomalee.
9					2	13	2	4	S 59° W	S 57° W	3·9*	6·7	−2·8	53	−28	88	+10	·832	−·020	6·7	+0·7	8	8·1	−0·1	4·21	4·60	−0·39	49·73	31·58	+18·15	1·11	Colombo.
	2						7	21	N 52° W	N 75° W	5·3	8·5	−3·2	93	+13					6·4	+1·2	6	10·5	−4·5	2·71	6·86	−4·15	38·41	38·52	−0·11	1·22	Minicoy.
	8					5	6	11	N 55° W		8·5			67		79	− 3	·849	−·031	5·9	−0·4	4	11·0	−7·0	3·42	5·76	−2·34	29·59‖	41·26	−11·67	1·88	Amini Divi.
23			2	4		1			S 53° E		0·6			16		74		·274		0·9		2			0·27			6·69			0·15	Gyantse.
8			1	14	7				S 33° E		7·9			67		67		·263		4·2		0			0·11			16·09			0·02	Pharijong.
20									(a)		1·2					95		·583		3·5		20	21·6	−1·6	10·69	19·30	−8·61	105·78	106·96	−0·18	2·21	Gangtok.
18			1	6	4	1			S 29° E		5·8			33						2·6		2			0·18			1·28			0·30	Gartok.

‡ Normal rainfall since June.

or plateau stations, the elevations of which exceed 3,200 feet.

* Uncorrected for scale error.

(a) Indeterminate.

† Mean of 27 days.

b Rainfall since 6th August 1912.

‖ Rainfall for May wanting.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India—*concld.*																						
	Kashgar (*a*)	4,255																					
	Kabul										61·2	87·5	+0·3	58·9	+7·9	73·2	+4·1	28·6	96·2	1st	57·9	21st	45·3
	Meshed	3,104	26·856		29·953	27·004	27th	26·679	1st	·325	60·9	80·5		44·3	—9·9	62·4		36·2	87·4	30th	40·1	22nd	47·2
	Jask	13	29·783	+·035	29·749	29·900	24th	29·534	2nd	·366	81·8	95·4	+1·9	73·8	—2·0	87·1	—0·1	16·6	102·3	8th & 21st.	73·3	30th	29·0
	Muscat	20	29·796	+·041	29·765	29·920	24th	29·541	2nd	·379	85·7	96·5	+9·3	81·7	—1·7	89·0	+3·8	14·8	101·3	2nd	77·1	26th	24·2
	Bahrein	18	29·782		29·753	29·919	24th	29·561	2nd	·358	87·9	93·9		80·9		87·4		13·0	98·1	4th	76·3	1st, 26th & 30th.	19·8
	Bushire	14	29·768	+·039	29·745	29·909	24th	29·533	2nd	·376	85·2	93·5	—0·8	79·1	0	86·2	—0·4	14·4	96·8	4th	75·5	29th	21·3
	Busrah	28	29·753		29·747	29·974	17th	29·465	22nd	·509	84·5	105·4		79·1		92·3		25·3	108·9	4th	75·3	30th	33·6
	Kerman		24·737			24·920	8th	24·540	30th	·380	58·5	87·6		(g) 45·4		(g) 65·1		44·2	98·3	2nd	35·5	23rd	62·8
	Ispahan (*b*)	*5,817*	24·359			24·480	24th	24·199	2nd	·290	67·2	(e) 86·2	(e) —4·2	53·9	—1·2	(e) 70·0	—2·7	32·3	93·4	1st	49·2	27th, 29th & 30th.	44·2
	Tehran (*b*)	*4,002*	25·809			26·000	9th	25·635	30th	·365	72·5	86·1	—4·6	61·8	—3·2	74·0	—3·9	24·3	92·6	16th	57·8	21st	34·8
	Baghdad	127	29·669	—·004	29·771	29·800	25th	29·444	2nd	·356	80·9	107·4	+5·5	73·5	+1·8	90·5	+3·7	33·9	112·9	2nd	65·9	30th	47·0
	Beirut (*c*)				29·917						76·1	83·4		73·1		78·2		10·3	87·3	17th	70·5	7th, 15th & 20th	16·8
	Aden	94	29·781	+·044	29·806	29·899	30th	29·575	6th	·324	84·0	91·3	—2·3	81·2	—1·0	86·3	—1·7	10·1	95·0	6th	75·9	27th	19·7
	Zanzibar	72	30·045	—·021	30·044	30·092	4th	29·999	11th	·093	76·8	82·2	+0·2	73·7	+0·3	77·9	+0·3	8·5	85·2	4th	70·8	16th	14·4

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*) Aneroid corrected.
(*b*) ,, uncorrected.
(*c*) 8½ hrs. observations.
(*g*) Mean of 27 days.
(*e*) ,, 28 ,,

B—*concluded.*

in India, etc., in September, 1912—concluded.

Wind direction.											Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Number of winds from									Resultant direction.	Normal direction.	Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury	Departure from normal in inches of mercury.	Mean amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Sept, 1912.	Normal rainfall for period, 1st May to 30th Sept.	Departure from normal of period, 1st May to 30th Sept, 1912.		
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.																								
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																																Extra India —*concld.*
										N 23° W		2·2											0·7			0·31			2·24			Kashgar.
		1	4	8	9	2	4	2	S 12° E	S 13° W				47	+38	71		·375				0	0·1	—0·1	0	0·03	—0·03	0	1·50	—1·50	0	Kabul.
30									(a)		0·7					37		·197		0	—0·6	0	0·1	—0·1	0	0·02	—0·02	1·60	1·84	—0·24	0	Meshed.
3	5	7	12		1			2	N 56° E	S 81° E	5·2	9·8	—4·6	59	— 4	68	— 5	·733	—·192	0·2	—1·3	0	0	0	0	0	0	0	0·06	—0·06	0	Jask.
11	2	3	7					7	N 25° E	N 72° E	2·6	2·8	—0·2	33	+ 4	65	—12	·800	—·130	0·2	—0·8	0	0	0	0	0	0	0·26	0·17	+0·09	0	Muscat.
	1		3	3	3	3	10	7	S 85° W		3·4			40		71		·535		0·4		0	0	0	0	0	0	0	0·10	—0·10	0	Bahrein.
7	1	9	10	3					N 74° E	N 60° E	4·6	5·0	—0·4	59	+ 7	81	+18	·980	+·154	0·9		0	0	0	0	0	0	0	0·03	—0·03	0	Bushire.
5		1	2		3	2	10	7	N 88° W		2·7			47		53		·625		0·2		0	0·3	—0·3	0	0·19	—0·19	0	0·65	—0·65	0	Busrah.
20	1	4	1				1	3	N 9° E		2·4			20		42		·202		0		0			0			0			0	Kerman.
25				2	1			2	S (n)	N 72° W	1·3	·5	—1·2	4	—30	46	— 2	·307	—·068	0·3	0	0	0·1	—0·1	0	0·03	—0·03	0·22	0·33	—0·11	0	Ispahan.
6		5		1	4	4			S 14° E	N 62° E	1·9	2·0	—0·1	20	+ 8	34	0	·272	—·039	0·2	—0·4	0	0·3	—0·3	0	0·08	—0·08	0·88	0·88	0	0	Tehran.
3	4	4	1	3	1		1	13	N 17° W	N 11° W	5·1	1·8	+3·3	47	— 5	40	— 8	·413	—·094	0·4	+0·2	0	0	0	0	0	0	0	0·28	—0·28	0	Baghdad.
19		1			4	4	2		S 34° W					23		62		·616		4·5		0			0			1·36			0	Beirut.
6	8	13		1		1		1	N 27° E	S 56° E	7·0	7·0	0	59	+29	76	+ 1	·887	—·045	3·5	—0·4	0	0·2	—0·2	0	0·14	—0·14	0·02	0·50	—0·48	0	Aden.
10				6	8	5	1		S 1° W	S 5° E	3·3	4·1	—0·8	54	—32	82	— 1	·746	+·002	5·3	—0·6	5	5·4	—0·4	6·59	2·10	+4·49	11·58	19·81	—8·23	2·01	Zanzibar.

(a) Indeterminate.
(n) Wind observations for 20 days.

Table C.—Abstract of observations taken at 8 hrs. at 66 fourth and fifth class stations in India, etc., in September, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Balek	...	87·0‡	...	73·0‡	...	80·0‡	...	14·0	96·5	14th	69·6	13th	26·9	...	...	...	...	...	...	...	...	...	...	...
	Bishnath	78·5	90·4	...	74·8	...	82·6	...	15·6	95·1	18th	70·9	24th	24·2	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	79·4	89·9	...	74·3	...	82·1	...	15·6	94·7	3rd, 6th & 18th.	70·1	26th	24·6	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	80·1	93·2	...	74·3	...	83·7	...	18·9	97·6	3rd	71·5	26th	26·1	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	76·9	90·6	...	72·2	...	81·4	...	18·4	97·3	6th	67·2	15th	30·1	...	...	...	...	...	...	...	...	...	...	...
	Dikom	77·7	89·6	...	74·1	...	81·9	...	15·5	95·2	4th	71·0	25th	24·2	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	79·2	87·8§	...	75·2	...	81·5	...	12·6	92·3	27th	72·6	22nd & 23rd.	19·7	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	79·2	90·6	...	74·8	...	82·7	...	15·8	94·4	6th	74·0	26th	20·4	...	...	...	...	...	...		...	...	...	...
	Jorehat	79·3	89·8	...	75·8	...	82·8	...	14·0	94·1	6th	73·0	14th	21·1	...	...	...	...	...	...	...	...	...	...	...
	Lumding	78·6†	90·2	...	75·0	...	82·5	...	15·2	93·8	6th	71·0	13th	22·8	...	...	...	...	...	...	...	...	...	...	...
	Messa	85·6	94·5	...	72·9	...	84·2	...	20·6	98·0	2nd	69·0	24th	29·0	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	75·8	89·5	...	73·4	...	81·5	...	16·1	92·8	19th	69·7	28th	23·1	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	80·7	91·1	...	74·9	...	83·0	...	16·2	94·7	6th & 27th	72·2	15th	22·5	...	...	...	...	...	...	...	...	...	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	84·0	89·8	...	77·2	...	83·5	...	12·6	94·1	27th	74·9	23rd	19·2	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	85·2	92·0	...	78·0	...	85·0	...	14·0	95·2	29th	72·7	3rd	22·5	...	...	...	...	...	...	...	...	...	...	...
	Pabna	84·1	91·8	...	75·1	...	83·4	...	16·7	97·0	22nd	75·6	5th	21·4	...	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	81·8	89·9	...	70·3	...	80·1	...	19·6	96·6	18th	63·9	22nd	32·7	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	79·8	89·3	...	72·7	...	81·0	...	16·6	94·1	4th	68·0	23rd, 24th & 26th.	26·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

† Observations of 29 days.
‡ Do. 28 do.
§ Do. 27 do.
‖ Do. 6 do.

66 fourth and fifth class stations in India, etc., in September, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
...hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Sept. 1912.	Normal rainfall of period, 1st May to 30th Sept.	Departure from normal of period, 1st May to 30th Sept., 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	...	...	...	...	...	...	...	...	...	12	...	...	30·45	...	...	71·20*	...	...	7·58	Balek.
...	...	...	...	...	98	...	·954	...	...	...	14	15·2	−1·2	8·76	11·65	−2·89	71·41‡	71·08	+0·33	1·83	Bishnath.
...	...	...	...	...	89	...	·892	...	...	...	17	14·3	+2·7	9·28	10·40	−1·12	72·16	65·07	+7·09	1·81	Borjuli.
...	...	...	...	...	91	...	·930	...	...	...	13	16·6	−3·6	8·15	9·97	−1·82	63·70	78·71	−15·01	1·48	Chandkhira.
...	...	...	...	...	93	...	·855	...	...	...	16	13·8	+2·2	8·63	8·90	−0·27	79·79	70·40	+9·39	1·40	Doom Dooma.
...	...	...	...	...	91	...	·806	...	...	...	14	14·8	−0·8	10·63	10·51	+0·12	82·19	75·89	+6·30	1·91	Dikom.
...	...	...	...	...	91*	...	·903	...	...	...	9	13·8	4·8	2·65	7·58	−4·93	53·25	51·06	+2·19	0·40	Golaghat.
...	...	...	...	...	89	...	·887	...	...	...	14	14·8	−0·8	7·06	13·31	−6·25	14·68*	88·23	−73·55	1·17	Hailakandi.
...	...	...	...	...	91†	...	·906	...	...	...	14	13·3	+0·7	6·03	8·83	−2·80	64·89	58·83	+6·06	1·11	Jorehat.
...	...	...	...	...	89	...	·866†	...	...	...	11	...	...	4·29	...	...	32·82	...	...	1·00	Lumding.
...	...	...	...	...	75	...	·924	...	...	...	12	14·0	−2·0	8·93	10·49	−1·56	59·80	71·48	−11·68	2·50	Messa.
...	...	...	...	...	96	...	·852	...	...	...	12	12·3	−0·3	12·40	8·69	+3·71	63·42	59·01	+4·41	2·77	Panerihat.
...	...	...	...	...	90	...	·943	...	...	...	12	15·8	−3·8	7·81	12·11	−4·30	60·90	70·63	−9·73	1·41	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	17	13·3	+3·7	13·48	10·99	+2·49	76·52	70·54	+5·98	2·61	Comilla.
...	...	...	...	...	81	...	·935	...	...	...	9	14·3	−5·3	3·43	10·49	−7·06	49·55	62·44	−12·89	0·82	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	10	12·1	−2·1	5·39	9·01	−3·62	52·42	55·27	−2·85	2·77	Faridpur.
...	...	...	...	...	80	...	·966	...	...	...	13	12·2	+0·8	7·86	9·99	−2·13	49·43	51·84	−2·41	1·59	Goalundo.
...	...	...	...	...	84	...	·983	...	...	...	5	11·5	−6·5	2·50	8·76	−6·26	46·38	48·75	−2·37	0·86	Pabna.
...	...	...	...	...	...	...	...	...	...	...	7	11·7	−4·7	3·31	10·04	−6·73	41·61	53·19	−11·58	0·73	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	7	12·1	−5·1	2·98	10·08	−7·10	33·06	46·33	−13·27	1·11	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	6	11·2	−5·2	4·61	10·24	−5·63	45·48	45·28	+0·20	2·06	Malda.
...	...	...	...	...	...	...	...	...	...	...	8	13·4	−5·4	5·21	14·62	−9·41	75·84	70·86	+4·98	1·83	Rangpur.
...	...	...	...	...	...	...	...	...	...	...	...	18·7	...	...	20·79	...	... ††	139·93	...	...	Dam Dim.
...	...	...	...	...	80	...	·877	...	...	...	18	15·5	+2·5	18·37	17·71	+0·66	89·84	135·30	−45·46	3·68	Kalchini.
...	...	...	...	...	86	...	·869	...	...	...	17	19·5	−2·5	28·77	21·95	+6·82	132·58	142·88	−10·30	5·06	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	15	15·3	−0·3	20·57	26·59	−6·02	113·66	131·74	−18·08	3·38	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	3	10·8	−7·8	0·95	8·51	−7·56	48·76	46·45	+2·31	0·25	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	6	11·7	−5·7	7·03	8·91	−1·88	55·50	47·10	+8·40	2·45	Bankura.
...	...	...	...	...	...	...	...	...	...	...	6	11·6	−5·6	5·52	8·41	−2·89	37·66	45·75	−8·09	2·12	Raniganj.

* Rainfall for August and September only.
† " 8th to 14th May not included.
†† " 17th to 30th July "

Table

Abstract of observations taken at 8 hrs.

Number of sub-division.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	83·0	92·4	...	76·7	...	84·5	...	15·7	97·0	21st	67·6	22nd	29·4	...	...	...	...	...	...	...	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XII.—Central Provinces.																								
23	Chhindwara	74·6	85·2	...	67·7	...	76·4	...	17·5	90·7	23rd	62·4	23rd	28·3	...	2	3	...	1	...	3	10	11	N 62° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	77·7	91·3	...	72·7	...	82·0	...	18·6	97·3	12th & 15th.	68·4	30th	28·9	...	...	...	...	...	...	...	...	...	...	...
33	Guntur	81·4	91·7	...	76·1	...	83·9	...	15·6	96·5	8th	71·2	14th	25·3	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	83·4	94·0	...	71·5	...	82·8	...	22·5	97·6	11th	66·2	22nd	31·4	...	13	14	...	...	3	...	...	...	N 27° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	56·6	79·6	...	48·7	...	64·1	...	30·9	90·5	1st	40·6	22nd	49·9	...	8	...	11	11	...	...	...	...	N 89° E	...

C—*continued.*

at 66 fourth and fifth class stations in India, etc., in September, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity, 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs., in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September, 1912.	Normal rainfall of period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	4	11·9	−7·9	2·59	9·04	−6·45	39·90	45·56	−5·66	1·03	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	4	9·5	−5·6	3·39	9·48	−6·09	40·00	44·10	−4·10	2·13	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	7	8·7	−1·7	6·24	7·41	−1·17	40·19	43·98	−3·79	1·66	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	6	8·9	−2·9	8·47	9·49	−1·02	41·24	50·80	−9·56	4·47	Motihari.
...	...	...	...	...	...	...	...	...	...	...	5	8·6	−3·6	2·65	6·93	−4·28	32·44	37·25	−4·81	1·20	Chapra.
...	...	...	...	...	...	...	...	...	...	...	3	9·0	−6·0	2·59	7·32	−4·73	32·28	39·33	−7·05	1·24	Arrah.
...	...	...	...	...	...	...	...	...	...	...	4	8·9	−4·9	3·00	7·00	−4·00	28·20	37·40	−9·20	2·25	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	79	...	·893	...	...	...	...	...	...	No	rain g	auge.	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	6	5·0	+1·0	11·10	5·72	+5·38	30·95	28·12	+2·83	4·05	Meerut.
...	...	...	...	...	...	...	...	...	...	...	9	10·3	−1·3	9·98	9·43	+0·55	57·10	76·88	−19·78	2·28	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	4	5·3	−1·3	1·77	4·27	−2·50	24·97	22·57	+2·40	1·03	Udaipur.
																					XII.—Central Provinces.
2·4	...	...	63	...	76	...	·652	...	3·6	...	7	...	...	5·49	...	...	34·42	...	...	1·86	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	1	1·7	−0·7	0·28	1·24	−0·96	3·66	4·31	−0·65	0·25	Tinnevelly.
...	...	...	...	...	75	...	·709	...	8·8	...	9	...	...	9·85	...	...	19·81	...	...	3·13	Anantapur.
...	...	...	...	...	86	...	·915	...	6·0	...	10	...	...	3·08	...	...	16·96	...	...	0·70	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	15	17·3	−2·3	14·18	13·69	+0·49	85·76	58·57	+27·19	3·18	Car Nicobar.
																					Kashmir.
...	...	...	73	...	78	...	·893	...	0·5	...	0	...	...	0	...	...	21·51	...	...	0	Jammu.
...	...	...	...	...	...	...	...	...	...	...	4	8·0	−4·0	1·22	4·67	−3·45	14·11	21·04	−6·93	0·28	Sonamarg.
...	...	...	64	...	52	...	·234	...	1·4	...	0	...	...	0	...	...	4·27	...	...	0	Kargil.

Table

Abstract of observations taken at 8 hrs.

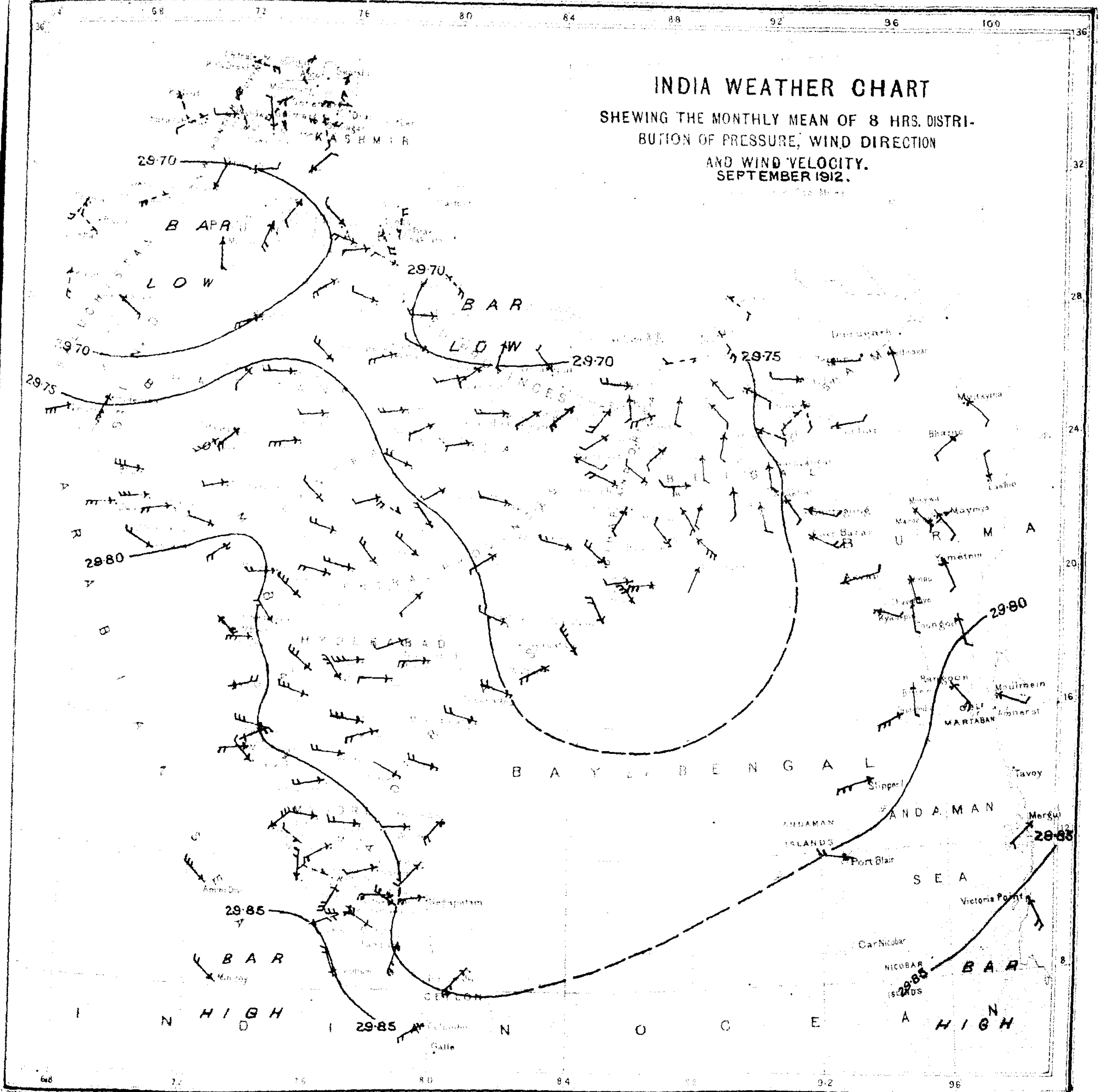
Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill stations, exclusive of Kashmir.																								
	Panighatta	79·2	87·2	...	72·0	...	79·6	...	15·2	91·5	5th	68·0	23rd	23·5	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	67·7	72·0	...	63·0	...	67·5	...	9·0	75·9	4th	59·9	26th	16·0	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	72·5	...	51·8	...	62·2	...	20·7	78·9	10th	44·0	28th	34·9	15	...	...	1	2	...	2	10	...	S 72° W	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pishin	...	81·8	...	44·8	...	63·3	...	37·0	92·4	1st	39·0	21st	53·4	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	108·4	...	93·0	...	100·8	...	15·4	112·9	23 d	91·2	22nd & 30th.	21·7	...	...	...	...	...	...	...	...	...	...	...
	Birjand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	53·4	65·3	...	48·7	...	57·0	...	16·6	71·6	4th	30·7	24th & 25th	34·9	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	68·3	89·9	...	51·5	...	70·7	...	38·4	97·8	2nd	45·5	28th	52·3	...	...	...	...	...	...	...	...	...	...	...
	Koweit	...	102·5	...	80·1	...	91·3	...	22·4	110·4	3rd	75·2	6th & 30th.	35·2	1	1	...	...	...	1	7	16	4	S 85° W	...
	Maidan	...	107·1	...	78·6	...	92·9	...	28·5	112·2	3rd	72·5	30th	39·7	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	98·1	...	78·0	...	88·1	...	20·1	102·7	11th	74·2	8th	28·5	...	...	...	...	...	...	...	...	...	...	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	87·4	...	62·4	...	75·0	...	25·0	93·3	1st	50·8	24th	42·5	1	8	...	...	...	...	...	...	21	N 33° W	...

C—*concluded.*

at 66 fourth and fifth class stations in India, etc., in September, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity, at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th September, 1912.	Normal rainfall of period, 1st May to 30th September.	Departure from normal of period, 1st May to 30th September, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill stations, exclusive of Kashmir.
...	...	...	...	...	80	...	·790	...	...	...	19	18·8	+0·2	19·94	22·09	−2·15	120·37	125·26	−4·89	4·04	Panighatta.
...	...	...	...	...	90	...	·611	...	...	...	18	19·8	−1·8	22·41	23·07	−0·66	144·96	138·88	6·08	5·68	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	23	...	...	16·84	...	...	115·32	...	...	2·11	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	15	...	...	5·08	...	...	...	...	...	0·90	Lachung.
...	...	...	...	...	...	...	...	...	...	...	17	...	...	11·01	...	...	‡125·97	...	...	2·12	Ringim.
...	...	...	30	...	...	...	...	...	4·0	...	4	1·3	2·7	2·23	0·34	+1·89	3·44	3·12	+0·32	0·97	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	2·7	...	...	1·93	...	...	8·51	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	1·97	...	...	65·61	...	...	1·20	Bakloh.
...	...	...	...	...	...	...	...	...	...	...	0	0	0	0	0	0	1·81	0·43	+1·38	0	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	0·3	...	0	...	...	0	...	...	0	...	...	0	Ahwaz.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Birjand.
...	...	...	...	...	84	...	·345	...	5·7	...	5	...	...	1·43	...	...	...	...	...	0·28	Chumbi.
...	...	...	...	...	36	...	·245	...	...	...	0	...	...	0	...	...	0·20	...	...	0	Kirmanshah.
...	...	...	80	...	...	...	...	...	0	...	0	...	...	0	...	...	0	...	...	0	Koweit.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Maidan.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Muhammerah.
...	...	...	...	...	...	...	...	...	...	...	5	2·7	+2·3	1·72	1·30	+0·42	9·7	30·25	−20·48	0·86	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	5·1	...	...	1·73	...	...	21·78	...	...	Prison Island.
13·9	...	...	90	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Seistan.

‡ Total rainfall since 1st June.

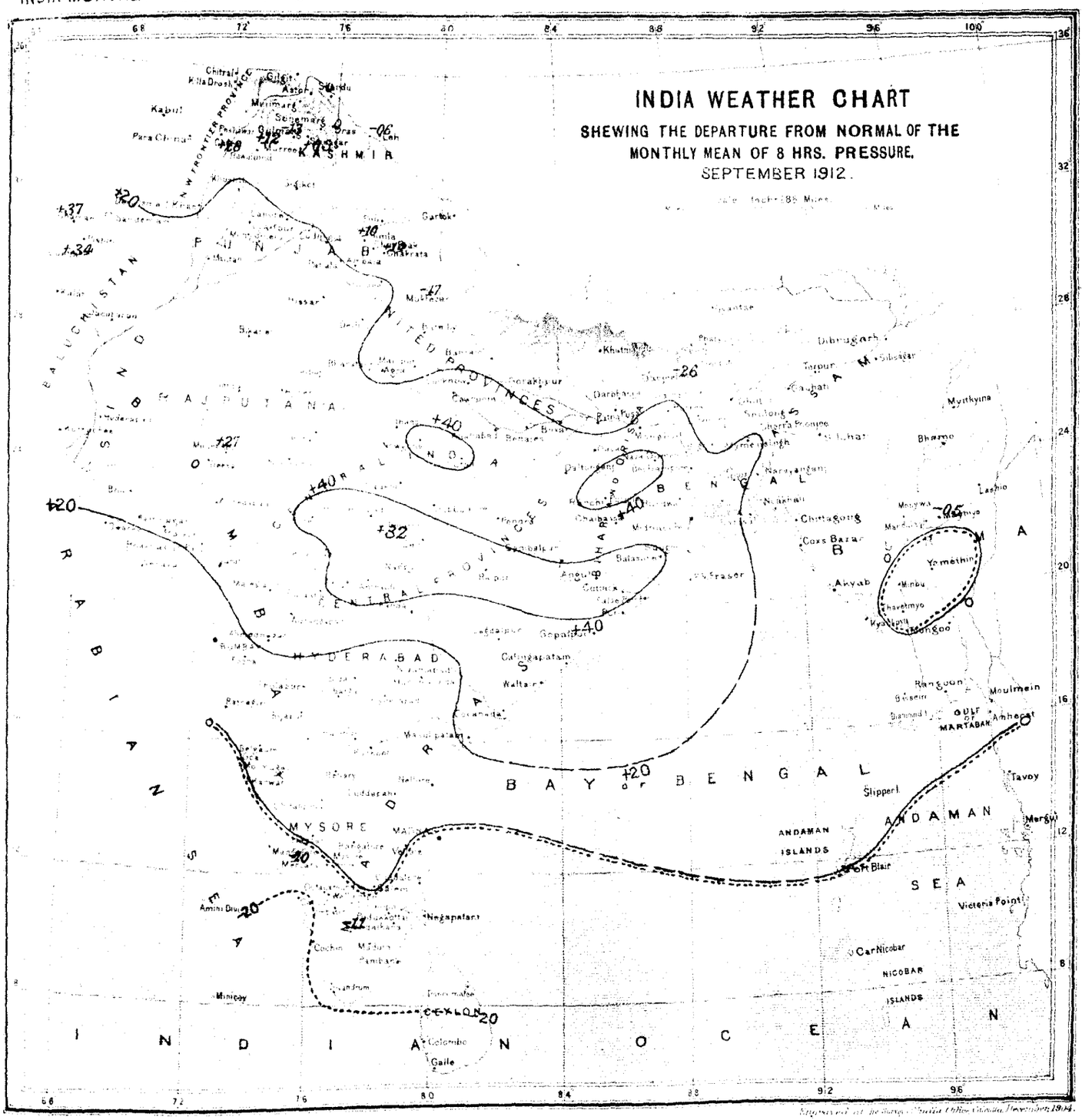


The lines of the above chart represent isobars or lines of equal barometric pressure, the numbers attached indicating the barometric pressure in inches and being drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.



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

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

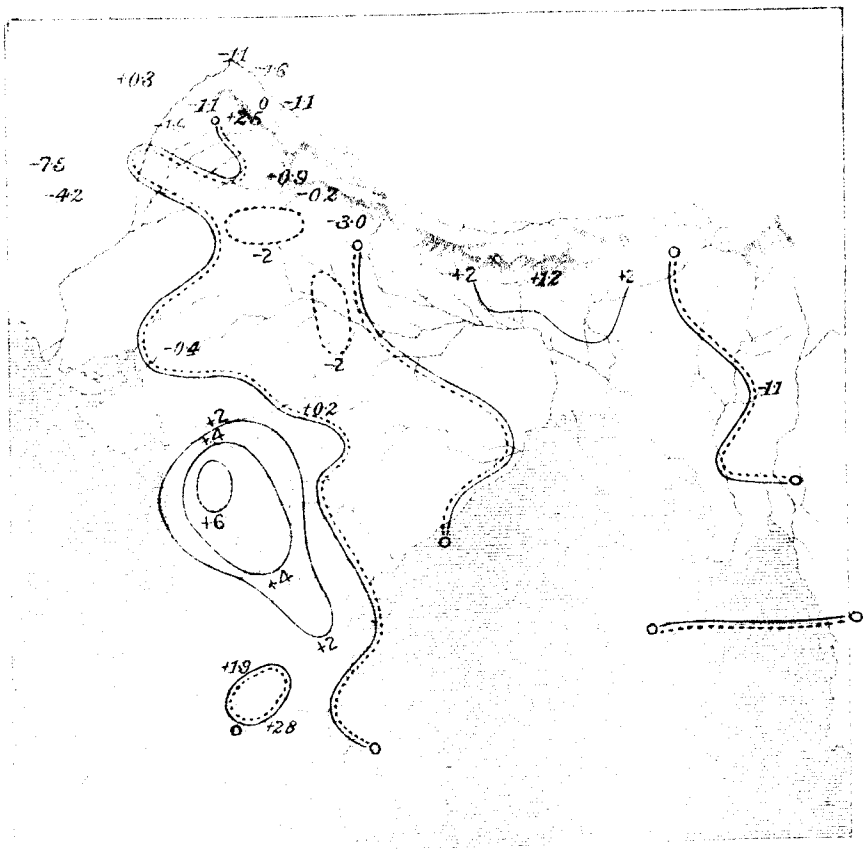
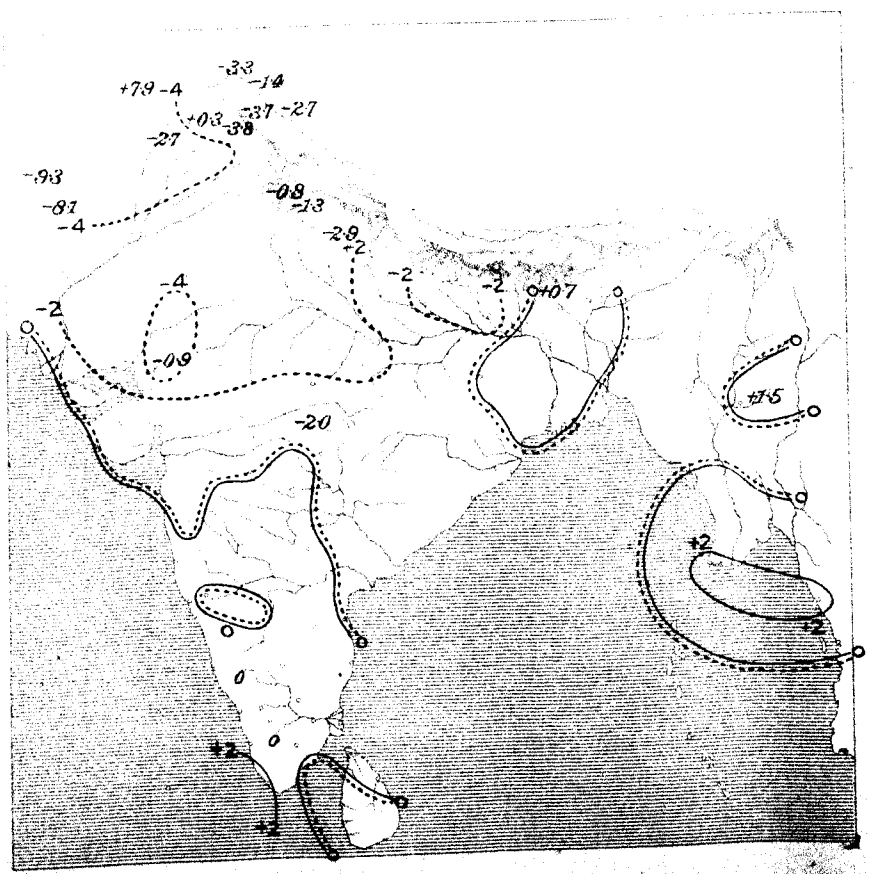


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S.S.M.

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

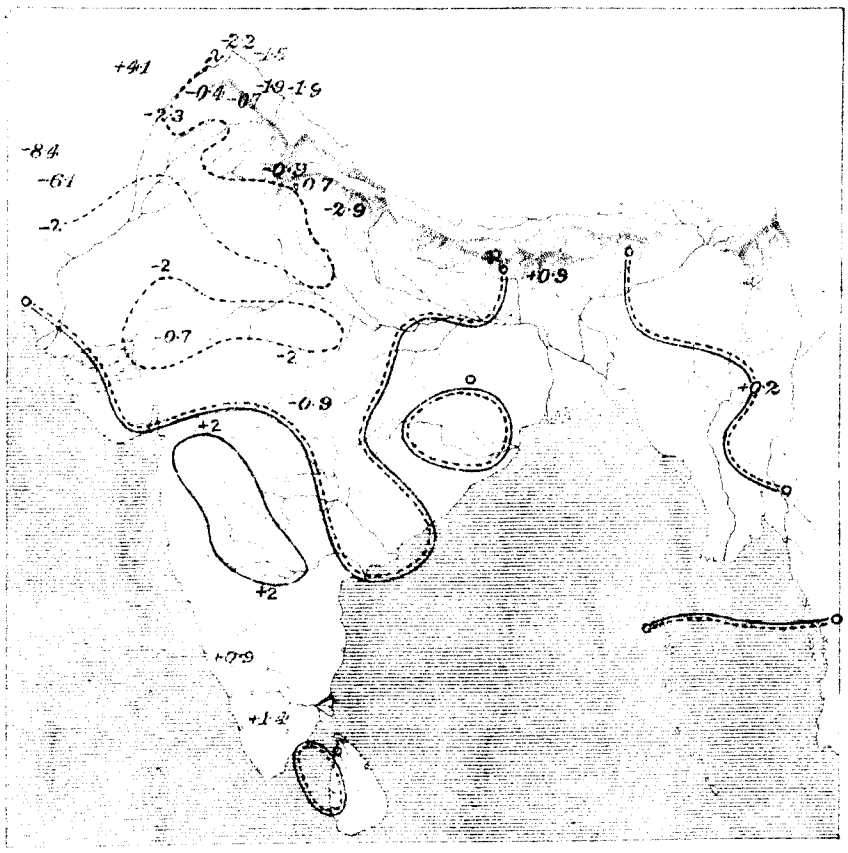


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

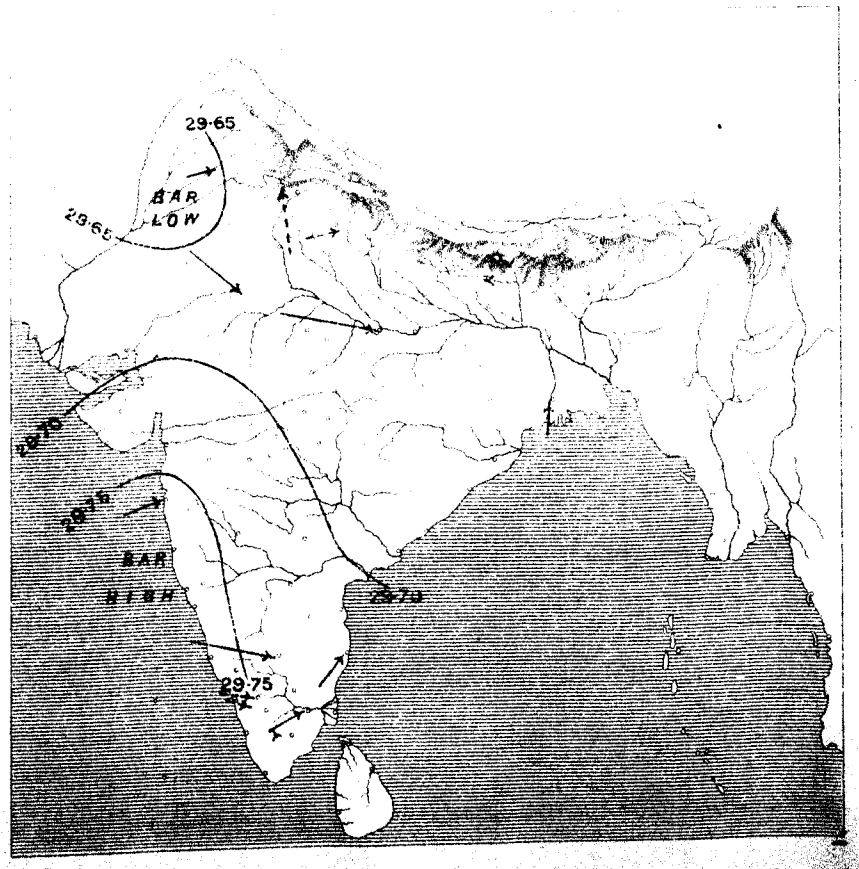


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF ABSOLUTE
HUMIDITY AT 8 HRS.

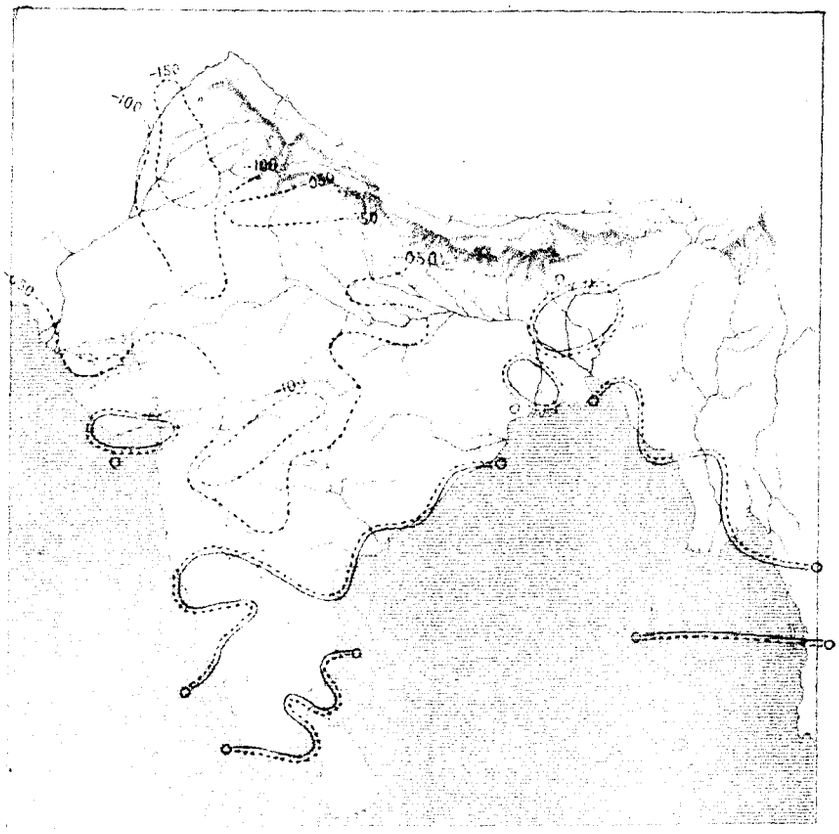
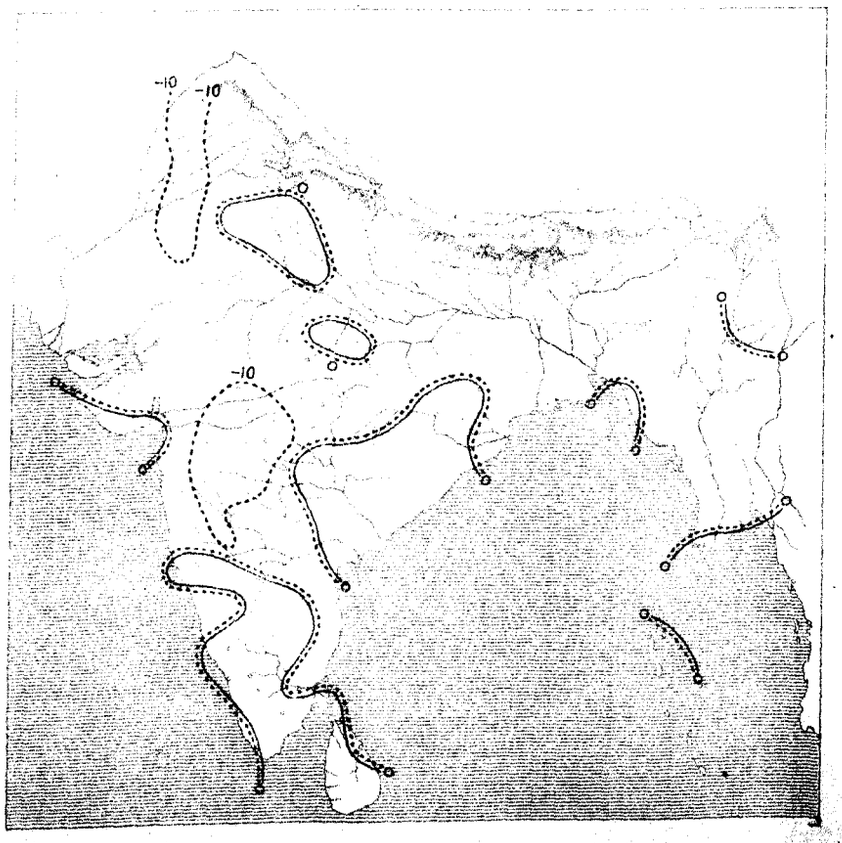


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF RELATIVE
HUMIDITY AT 8 HRS.



LITHO. BY S.E.M.

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

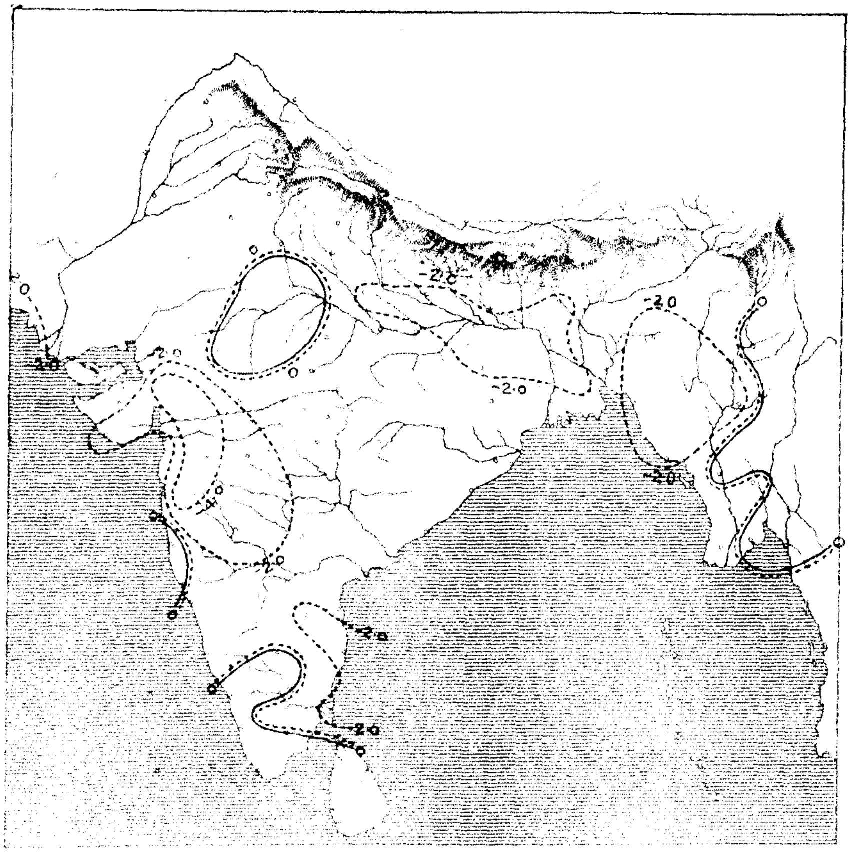
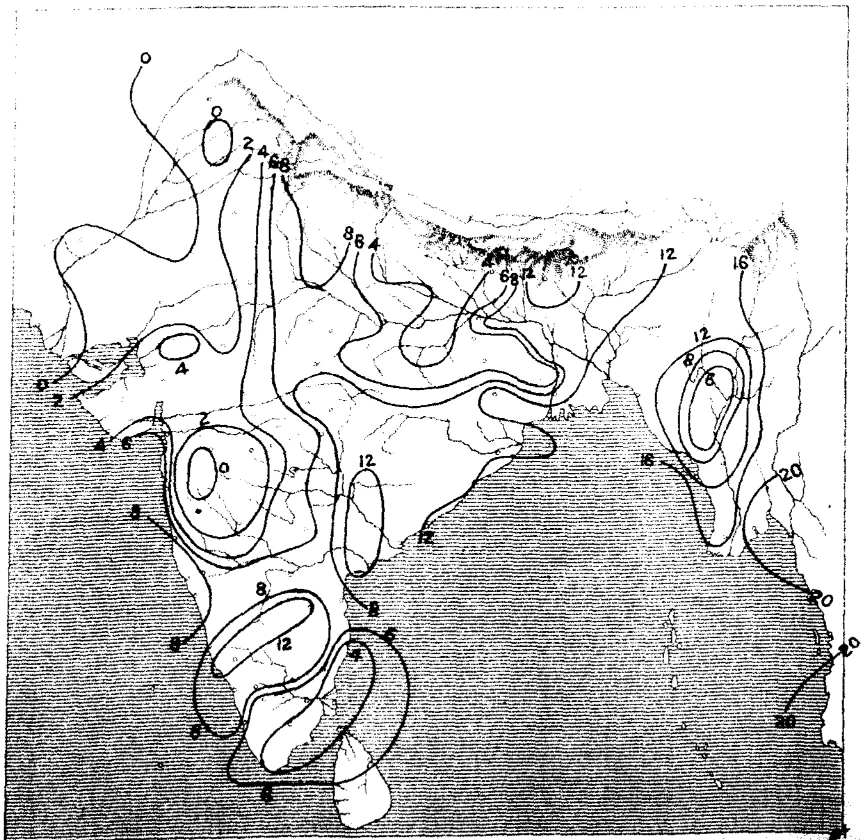
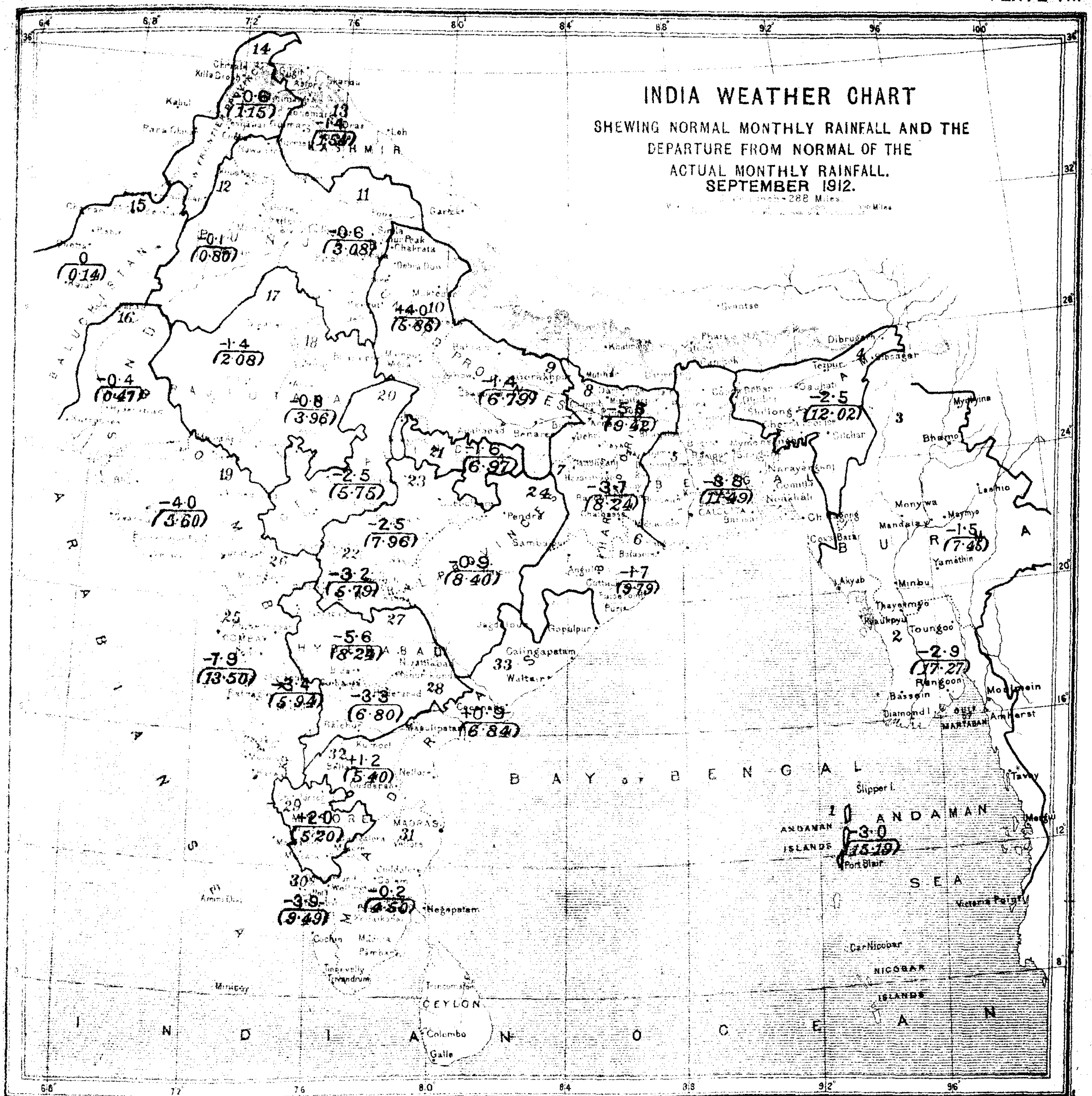


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)





Reg. No. 4195 E., 11—1—3500.

Engraved at the Survey of India Offices, Calcutta, December 1904.

LITHO. BY S. S. MUNDLE.

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 monthly 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
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

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, OCTOBER, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of October, 1912, is based on observations taken daily at 8 hrs. at 220 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 18 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. (*a*) The most important event of the meteorology of the month was the sudden retreat of the monsoon from the Gangetic plain and the central parts of the country at the beginning of the month, about a fortnight before the normal date. Unusually dry weather prevailed accordingly in these areas. The monsoon was on the other hand more than usually vigorous in Bengal, Assam, Burma and the south of the Peninsula. In north-west India generally the weather was, as is ordinarily the case in October, settled and dry.

(*b*) Three disturbances appeared over the Bay and of these one was transmitted across the Peninsula into the Arabian Sea ; but until the arrival of logs from shipping it is not possible to discuss the origin and character of these disturbances.

(*c*) The month's total rainfall was above the average in Burma, Assam, Bengal, Mysore and Madras; equal to the normal in the North-West Frontier Province and Bombay and deficient in all the other larger provinces. The defect amounted to about two inches in Bihar and Orissa and Hyderabad where it was most marked.

On the average of the whole country there was a defect of one-seventh of an inch or 5 per cent.

(*d*) Over by far the greater part of the country the departures from normal of climatic elements other than rainfall were not marked.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—Observations for spots and faculae were made on all days during the month except three when the weather was cloudy throughout. Prominence observations could not be made on eight other days.

Sunspots.—There was only one group of spots observed in the month. It was first seen on the 4th as two small dots

and by the 9th had developed into a moderate sized double spot. The rear spot soon after broke up and the leader alone went round the west limb on the 11th. The mean latitude of the group was 7° south.

Prominences.—There were 31 large prominences recorded for the month. The highest was photographed on the 1st at latitude +32° east and attained 120″ above the limb. No eruptive or metallic prominence was observed.

Magnetic disturbances.—Moderate disturbances were recorded from the 14th to 17th and 20th to 21st. The latter belongs to the series of moderate disturbances occurring at intervals of a synodic rotation period of the sun since May 12th last.

Seismological records.

TABLE 1.

No.	Date.	P. T. commencement. G. M. T.	L. W. commencement. G. M. T.	Maxima. G. M. T.	End. G.M.T.	Duration. G. M. T.	Maximum amplitude.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
67	October 12.	15 44·9	...	...	17 07·4	1 22·5	...	Widening of line.
68	October 18.	10 18·1	10 43·0	10 44·6	13 22·0	3 03·9	1·0=0·4	Instrument disturbed in the day time from the 17th to 23rd during building operations.
69	October 31.	17 41·3	...	...	18 44·4	1 03·1	...	Widening of line.

J. EVERSHED,
Director,
Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of October 1912, the traces showed 8 calm days, 22 days of small and one day of moderate disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 5th, 9th, 18th, 19th and 26th.

The following table represents the magnetic character of each day during the month:—

TABLE 2.

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

C=calm; S=small; M=moderate; G=great; V. G.=very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follow:—

Easterly declination	0° 50′ 10″
Horizontal force	0·36875 C. G. S. unit.
Vertical force	0·16400 C. G. S. unit.
Inclination	23° 58′·6
Inclination (observed)	23° 56′·9
Horizontal force range	0·00040 C. G. S. unit.
Horizontal force summed range	0·00233 C. G. S. unit.
Declination range	1′·9
Declination summed range	7′·3.

(NOTE.—Summed range means sum without regard to sign of 24 ordinates of the diurnal inequality.)

Seismic disturbances.

Three seismic disturbances were recorded during the month on the 12th, 18th and 31st.

TABLE 3.

Date.	Commencement.		Maximum.		End.		Maximum amplitude.	Duration.	
1912.	h.	m.	h.	m.	h.	m.	mm.	h.	m.
October 12	16	3·1	16	12·7	16	44·6	0·5	0	41·5
„ 18	12	25·8	12	41·3	13	15·0	2·3	0	49·2
„ 31	17	43·5	18	7·6	18	32·0	0·2	0	48·5

All times given above denote G. M. T.
Sensibility to tilt 1 mm. = 0″·37.

N. A. F. MOOS,
Director,
Bombay & Alibag Observatories.

CALCUTTA OBSERVATORY.

5.—*List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. commencement G. M. T.	L. W. commencement G. M. T.	Maximum G. M. T.	End G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	m m.	
October 12th	15 42·3	16 0·6	16 8·2	16 45·8	1 3·5	0·50	
,, 18th	12 7·1	12 32·9	12 35·1	13 32·5	1 25·4	2·50	
,, 31st	17 39·5	17 44·6	17 56·8	18 41·6	1 2·1	1·25	

Sensibility 1 mm. = 0″·38 of tilt.

C. W. PEAKE,
Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. List of earthquakes recorded by the Omori-Ewing seismographs :—

TABLE 5.

Date.		Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Maximum amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
October		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
18th	A	12 5·8	12 14·8	12 30·3	12 33·6	13 38	1 32	1·6	
18th	B	?	12 14·7	12 30·8	12 33·9	13 24	?	1·5	
23rd	A	?	?	1 49·8	1 49·8	1 52·8	?	Small	B. stopped.
23rd	V	1 48·5	1 49·2	1 49·8	1 49·8	1 52	0 3	0·6	
26th	A	?	9 5·9	9 14·9	9 15·3	9 38	?	0·3	Not shown by B.
31st	A	17 33·5	17 42·1	17 53·5	18 2·7	?	?	0·3	
31st	B	?	12 47·7	13 3·7	13 6·8	13 31	?	Small	Not shown by A.
31st	B	16 38·9	17 41·9	17 53·2	17 59·8	?	?	0·7	

October 1st A Slight disturbance from about 21 hrs. 8 mins. to about 21 hrs. 20 mins. Max. Amp. small at about 21 hrs. 8·1 mins.
,, 1st B Slight disturbance from about 21 hrs. 7 mins. to about 21 hrs. 20 mins. Max. Amp. small at about 21 hrs. 9·0 mins.
} Times approximate, time marking being out of order.
,, 12th A Disturbance from about 15 hrs. 39 mins. to about 16 hrs. 53 mins., Max. Amp. 0·3 mm. at 16 hrs. 6·0 mins.
,, 12th B Disturbance from about 15 hrs. 59 mins., to about 16 hrs. 39 mins. Max. Amp. 0·5 mm. at 16 hrs. 7·0 mins.
,, 22nd A Disturbance from about 13 hrs. 55 mins. to about 14 hrs. 19 mins. Max. Amp., small at 13 hrs. 58·4 mins. Very slight on B. record.

All times are given in G. M. T.
A = R—W component.
B = N—S component.
V = Vertical.
Magnification of A = 15, B = 15, and V = 80.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquakes.		Duration.	Intensity Rossi-Forel scale.	No. of shocks.
	Oct.	h.	m.	Sec.		
Drosh	1st	0	5	3	6	1
,, ...	2nd	5	25	3	6	1
,, ...	6th	13	40	3	6	1
Shillong	9th	15	8	1	3	1
,, ...	10th	1	52	1	3	1
Drosh	12th	17	28	3	6	1
,, ...	23rd	1	51	5	6	1
,, ...	23rd	23	22	3	6	1
,, ...	28th	7	10	25	6	3

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·37
Minimum	1·23
Mean	1·30
Number of days of observation . . .	16

W. A. HARWOOD,
Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. In the subequatorial region as represented by Seychelles and Zanzibar pressure was higher than usual, and at the latter station a strong and unusual westerly component was shown in wind direction. The velocity was considerably below the average at Seychelles and nearly normal at Zanzibar.

The rainfall of the month was in large defect at Zanzibar and within 10 per cent. of the normal at Seychelles.

TABLE 7.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	+·002	+·026	+·031
Actual mean wind direction .	S 84 E	S 34° W	S 45° E
Normal mean wind direction .	S 79 E	S 20 E	S 39° E
Actual mean wind velocity (miles per diem).	241	93	134
Normal mean wind velocity (miles per diem).	245	89	191
Rainfall departure from normal .	+5·25	−2·69	−0·48

Depressions and cyclonic storms.

9. The first depression of the month appeared off False Point on the morning of the 7th, it moved slowly along the coast and on the following morning its centre was over the Sandheads. During the next day it disappeared without passing beyond deltaic Bengal. This depression was very feeble and only gave moderate to heavy rain in Bengal and Assam.

The second depression appeared off Madras on the morning of the 21st, the barometric deficiency being only small. The centre crossed the Madras coast on the afternoon of the 21st, and travelled across the Peninsula out into the Arabian Sea during the 22nd; it gave moderate to heavy rain on the north of its track. Its exact course after passing into the Arabian Sea cannot yet be determined, but the Mail Steamer which left Aden on the 27th met in Lat. 16° N. Long. 58° E. on the morning of the 30th a strong easterly gale with considerable sea, indicating that the depression had increased to a storm and moved westwards.

The third and final depression of the month formed in the south of the Bay and on the morning of the 30th had its centre off Masulipatam, at about 150 miles from the coast. By the next day it had moved northwards and its centre was shown at 8 hrs. just off Waltair. The pressure deficiency in its centre was then over ·250″, and it was giving extremely rough weather over the north-west of the Bay. Until the end of the month, this depression had given rain only on the northern coast of the Bay.

Pressure.

10. Except for two small regions, one in the extreme south of the Peninsula and the other over the North-West Frontier Province, India experienced either normal or an excess of pressure on the average throughout the month, but nowhere was the excess as much as ·050″.

The vertical pressure gradient was very irregular.

TABLE 8.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
	″
Burma	+·031
Assam	+·029
Bengal	+·019
Bihar and Orissa	+·021
United Provinces	+·025
Punjab	+·022
North-West Frontier Province	−·009
Sind	+·017
Rajputana	+·024
Bombay	+·015
Central India	+·031
Central Provinces	+·031
Hyderabad	+·013
Mysore	+·007
Madras	+·003

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B—A.
	"		"	"
Quetta	+·029	Jacobabad	+·006	—·023
Leh	+·029	Lahore	+·024	—·005
Murree	+·019	Peshawar	—·012	—·031
Simla	+·034	Ludhiana	+·034	0
Chakrata	+·042	Roorkee	+·035	—·007
Darjiling	—·008	Dhubri	+·031	+·039
Mount Abu	+·026	Deesa	+·031	+·005
Pachmarhi	+·034	Khandwa	+·032	—·002
Kodaikanal	—·007	Madura	+·015	+·022

Temperature.

11. At no period during the month was there any large departure from the normal temperature, and on the mean of the month both maximum and minimum temperatures were in every division within 2° of the normal.

TABLE 10.

SUB-DIVISION.	ACTUAL TEMPERATURE.					DEPARTURE FROM NORMAL OF		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	85·9	77·1	81·5	8·7	17·3	—1·1	—1·3	+0·2
2. Lower Burma	87·1	75·5	81·3	11·5	17·6	—0·5	+0·7	—1·2
3. Upper Burma	87·7	71·5	80·2	15·1	26·5	—2·6	—0·5	—2·1
4. Assam	84·8	70·5	77·7	14·3	25·0	—1·0	—0·7	—0·3
5. Bengal	87·3	73·3	80·3	14·0	24·0	+0·2	—0·5	+0·7
6. Orissa	89·2	73·0	81·1	16·2	27·1	+0·1	—0·6	+0·7
7. Chota Nagpur	88·9	67·8	78·3	21·1	32·4	+0·7	+0·3	+0·4
8. Bihar	90·7	69·9	80·3	20·7	32·0	+2·1	—1·5	+3·6
9. United Provinces, East	92·1	65·4	78·8	26·8	37·0	+1·7	—1·1	+2·8
10. Do., West	90·6	64·7	77·6	25·9	35·7	—1·0	—0·9	—0·1
11. Punjab, East and North	93·7	61·3	77·5	32·4	44·7	+1·3	—0·3	+1·6
12. Do., South-west	96·8	63·5	80·1	33·3	46·2	+1·5	+0·7	+0·8
13. Kashmir	66·6	37·5	52·1	29·1	44·5	+2·4	—0·3	+2·7
14. North-West Frontier Province	91·8	58·3	75·1	33·5	46·1	+0·6	—0·5	+1·1
15. Baluchistan	84·2	50·8	67·5	33·4	46·2	+1·7	—0·5	+2·2

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
16. Sind	95·7	68·7	82·2	27·1	39·9	+1·2	+0·7	+0·5
17. Rajputana, West	97·1	68·0	82·6	29·1	44·1	+0·5	−1·8	+2·3
18. Do., East	93·9	67·0	80·4	26·9	39·2	+0·5	−0·6	+1·1
19. Gujarat	94·6	70·3	82·4	24·3	36·4	+0·9	−0·7	+1·6
20. Central India, West	91·2	63·1	77·1	28·1	39·9	+2·1	−0·9	+3·0
21. Do., East	88·1	63·5	75·8	24·6	34·5	−1·0	−1·9	+0·9
22. Berar	92·1	68·7	80·4	23·4	34·8	+2·5	+1·3	+1·2
23. Central Provinces, West	90·3	65·1	77·7	25·1	37·5	+1·5	−0·8	+2·3
24. Do., East	88·4	66·5	77·5	21·9	33·3	+1·3	−1·1	+2·4
25. Konkan	87·1	75·7	81·4	11·4	22·7	+0·6	+0·7	−0·1
26. Bombay Deccan	89·6	67·9	78·7	21·7	38·1	+1·5	+1·6	−0·1
27. Hyderabad, North	90·3	69·2	79·7	21·1	34·3	+2·5	+1·7	+0·8
28. Do., South	90·5	70·6	80·5	19·9	33·5	+1·3	+0·5	+0·8
29. Mysore	82·1	66·4	74·3	15·7	26·9	−0·7	+0·3	−1·0
30. Malabar	84·5	74·7	79·6	9·7	16·9	−1·0	+0·8	−1·8
31. Madras, South-east	88·5	74·3	81·4	14·2	25·4	−0·6	+0·2	−0·8
32. Do., Deccan	91·2	72·6	81·9	18·7	33·2	+0·4	+0·5	−0·1
33. Do. Coast, North	88·7	75·8	82·3	12·8	23·1	+0·8	+0·2	+0·6

TABLE II.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−1·3	+0·2	−0·5
Assam	−1·0	−0·7	−0·9
Bengal	+0·2	−0·5	−0·1
Bihar and Orissa	+1·2	−0·8	+0·2
United Provinces	+0·3	−1·0	−0·4
Punjab	+1·4	0	+0·7
North-West Frontier Province	+0·6	−0·5	+0·1

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature
	°	°	°
Sind	+1·2	+0·7	+1·0
Rajputana	+0·5	−1·2	−0·4
Bombay	+1·0	+0·4	+0·7
Central India	+0·5	−1·4	−0·5
Central Provinces	+1·7	−0·5	+0·6
Hyderabad	+1·7	+0·9	+1·3
Mysore	−0·7	+0·3	−0·2
Madras	−0·3	+0·4	0

Winds.

12. Except in Bihar and Orissa and Assam the wind velocity was everywhere normal or in defect. Also the wind direction varied by large amounts from the normal in nearly every part of India. Both these effects were the direct consequence of the early withdrawal of the monsoon.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	−0·3	+ 6
Assam	+0·2	+14
Bengal	−0·5	0
Bihar and Orissa	+0·5	+ 6
United Provinces	−0·3	+ 7
Punjab	−0·1	+11
North-West Frontier Province	−0·5	− 6
Sind	−1·4	+ 6
Rajputana	−0·4	− 9
Bombay	−0·3	+ 8
Central India	−1·0	+ 1
Central Provinces	−0·1	+16
Hyderabad	−0·7	+15
Mysore	0	− 5
Madras	0	+ 1

Humidity and cloud.

13. The largest departures from normal of the relative humidity were an excess of 8 per cent. in the North-West Frontier Province and a deficiency of 7 per cent. in the Central Provinces; on the average of the whole of the country the humidity was approximately normal. The early withdrawal of the monsoon from upper and central India was shown by the relatively small amount of cloud reported, the defect being the largest in the United Provinces and Assam.

TABLE 13.

Division.	Hygrometry, 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	89	+ 2	·836	−·013	5·9	+0·9
Assam	89	− 1	·767	−·015	4·6	−1·0
Bengal	86	0	·830	−·016	3·8	−0·1
Bihar and Orissa	75	− 5	·704	−·036	2·3	−0·7
United Provinces	67	− 2	·591	−·009	0·3	−0·9
Punjab	53	− 4	·408	−·027	0·3	−0·3
North-West Frontier Province.	66	+ 8	·432	+·037	0·5	−0·2
Sind	64	+ 7	·607	+·076	0·6	−0·1
Rajputana	48	− 1	·425	−·022	1·2	+0·1
Bombay	70	− 1	·678	−·003	3·1	+0·4
Central India	62	0	·514	−·020	1·4	−0·1
Central Provinces	60	− 7	·541	−·045	2·0	−0·3
Hyderabad	64	− 5	·619	−·032	3·5	−0·3
Mysore	83	+ 2	·641	+·001	7·2	+0·6
Madras	82	+ 2	·819	+·008	5·6	+0·1

Rainfall.

14. Rainfall was in defect everywhere to the west of Bengal with the exception of Rajputana West. The percentages were very large, being over 70% in 13 divisions out of 19.

TABLE 14.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	14·5	12·9	9·81	8·71	+1·10	+ 13
2. Lower Burma	10·6	9·6	7·49	6·98	+0·51	+ 7
3. Upper do.	8·0	6·2	6·52	4·45	+2·07	+ 47
4. Assam	7·2	6·4	6·43	5·08	+1·35	+ 27
5. Bengal	5·5	5·0	6·19	4·57	+1·62	+ 35
6. Orissa	3·0	5·8	3·19	5·37	−2·18	− 41
7. Chota Nagpur	0·9	3·7	0·92	2·77	−1·85	− 67
8. Bihar	0·6	2·9	0·42	2·69	−2·27	− 84
9. United Provinces, East	0·1	1·6	0·04	1·87	−1·83	− 98
10. Do., West	0	0·7	0	0·68	−0·68	−100
11. Punjab, East and North	0	0·5	0·01	0·26	−0·25	− 96
12. Punjab, South-west	0·1	0·2	0·04	0·07	−0·03	− 43
13. Kashmir	0·3	1·4	0·14	0·61	−0·47	− 77
14. North-West Frontier Province	0·9	0·6	0·23	0·28	−0·05	− 18
15. Baluchistan	0	0·2	0	0·06	−0·06	−100
16. Sind	0	0	0	0·02	−0·02	−100
17. Rajputana, West	0·6	0·1	0·27	0·07	+0·20	+286
18. Do., East	0·2	0·3	0·05	0·19	−0·14	− 74
19. Gujarat	0·6	1·1	0·33	0·83	−0·50	− 60
20. Central India, West	0·3	1·0	0·11	0·60	−0·49	− 82
21. Do., East	0	1·7	0	1·55	−1·55	−100
22. Berar	0·6	2·3	0·30	1·71	−1·41	− 82
23. Central Provinces, West	0·1	2·3	0·07	1·70	−1·63	− 96
24. Do., East	0·5	2·7	0·22	1·95	−1·73	− 89
25. Konkan	5·4	6·1	3·30	4·49	−1·19	− 27
26. Bombay Deccan	6·5	5·1	4·00	3·54	+0·46	+ 13
27. Hyderabad, North	1·5	3·7	0·78	2·59	−1·81	− 70
28. Do., South	2·2	4·6	0·92	2·98	−2·06	− 69
29. Mysore	10·5	7·9	7·62	5·29	+2·33	+ 44
30. Malabar	15·6	11·4	15·13	9·05	+6·08	+ 67
31. Madras, South-east	12·0	9·0	9·87	7·34	+2·53	+ 34
32. Do., Deccan	6·0	5·8	4·19	4·20	−0·01	0
33. Do., Coast, North	5·6	6·6	4·73	6·33	−1·60	− 25

TABLE 15.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	6·97	5·63	+1·34	+ 24
Assam	6·43	5·08	+1·35	+ 27
Bengal	6·19	4·57	+1·62	+ 35
Bihar and Orissa	1·14	3·31	−2·17	− 66
United Provinces	0·02	1·31	−1·29	− 98
Punjab	0·01	0·23	−0·22	− 96
North-West Frontier Province	0·23	0·28	−0·05	−18
Sind	0	0·02	−0·02	−100
Rajputana	0·12	0·16	−0·04	− 25
Bombay	2·69	2·84	−0·15	− 5
Central India	0·07	0·92	−0·85	− 92
Central Provinces	0·20	1·76	−1·56	− 89
Hyderabad	0·86	2·80	−1·94	− 69
Mysore	7·62	5·29	+2·33	+ 44
Madras	8·15	6·82	+1·33	+ 20
Mean of India	2·72	2·87	−0·15	− 5

Snowfall.

I.—AFGHANISTAN.

15. No report has been received.

II.—NORTH-WEST FRONTIER PROVINCE.

The Babusar Pass was reported closed by snow by the middle of the month.

III.—KASHMIR.

No report has been received.

IV.—PUNJAB.

(*a*) *Kailang.*—On the northern hill side snow came down to about 14,800 feet.

(*b*) *Kilba* (*Simla hills*).—A fall of half an inch occurred down to 10,000 feet, but its lower portion melted rapidly. The high passes, such as the Rupan, were scarcely open but there was no accumulation of snow on the lower passes, such as the Haran, of 12,500 feet.

V.—UNITED PROVINCES.

(*a*) *Garhwal.*—Snow fell on the 11th, 29th and 31st on the higher peaks in the north of the district. Weather was hot and dry.

(*b*) *Almora.*—The reports of snow fall received from the patwaris were as follows :—

Mala Darma	2¼	feet.
„ Johar	2½	„
„ Danpur	5¾	„
Chaudas	3	„
Biyans	6	„

The snow line descended to a distance of a quarter of a mile below the perpetual snows.

SUMMARY.

16. So far as can be estimated the snowfall of the month may have been in excess on the North-West Frontier, but was normal in the Punjab and the United Provinces.

G. C. SIMPSON.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 18 stations in India, etc., in October, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at p. 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs. at 18

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, Wet-bulb. Mean minimum.	Temperature, Wet-bulb. Mean 10 hrs.	Temperature, Wet-bulb. Mean 16 hrs.	Temperature, Wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
5	Calcutta	21	29·919	29·810	·109	29·861	+·021	29·829	87·5	74·0	13·5	91·9	67·3	24·6	83·8	84·6	80·2	+0·2	72·3	76·6	76·1	75·0
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad	309	29·645	29·528	·117	29·579	+·023	29·840	92·9	65·0	27·9	95·8	58·4	37·4	85·5	91·5	77·4	−0·2	62·6	70·0	69·0	67·2
	VI.—Punjab.																					
11	Lahore	702	29·218	29·129	·088	29·163	+·014	29·826	96·3	60·5	35·8	103·4	55·1	48·3	84·3	94·1	77·0	+1·3	56·5	67·1	70·0	64·5
	IX.—Rajputana.																					
18	Jaipur	1,431	28·533	28·437	·096	28·479	+·020	29·833	95·3	64·2	31·1	100·7	57·3	43·4	87·2	92·7	78·4	+0·5	56·2	66·1	66·7	63·0
	X.—Bombay.																					
25	Bombay	37	29·918	29·809	·109	29·860	+·013	29·837	88·9	77·5	11·4	92·4	73·1	19·3	82·8	85·4	81·9	+1·2	73·6	76·6	77·6	75·9
	XIV.—Mysore.																					
29	Bangalore	3,021	26·966	26·860	·106	26·914	+·007	29·767	81·0	65·5	15·5	84·7	56·1	28·6	75·7	77·1	71·7	−0·1	64·5	69·2	69·4	67·7
	XV.—Madras.																					
31	Pudukkottai	318	29·616	29·479	·137	29·547		29·795	88·6	74·0	14·6	94·1	66·4	27·7	82·7	85·4	81·3			75·4	75·8	
	Madras	22	29·894	29·786	·108	29·845	0	29·798	90·2	75·8	14·4	98·3	66·6	29·7	85·8	85·9	81·7	+0·9	74·8	78·7	79·3	77·6
	Hill stations, excluding Kashmir and Baluchistan.																					
	Simla	7,232	23·222	23·174	·048	23·189	+·027	23·151	63·4	51·9	11·5	68·9	47·8	21·0	57·9	60·1	57·6	+0·9	43·3	47·5	49·8	46·9
	Sanaia		23·259	23·201	·058	23·222		23·184	63·6	42·7	20·9	70·6	36·6	34·0	57·9	57·7	53·1			48·1	49·4	
	Kalabagh		20·218	20·177	·041	20·189		20·151	49·0	36·0	13·0	58·8	32·1	26·7	45·1	45·0	42·5			38·1	39·0	
	Mukteswar	7,592	22·939	22·878	·061	22·900		22·857	65·7	48·7	17·0	71·7	42·9	28·8	59·1	61·7	57·2		40·6	50·2	53·2	48·0
	Katmandu	4,388	25·716	25·613	·103	25·662	+·025†	25·616	81·8	55·5	26·3	85·6	46·8	39·0	71·7	76·6	67·7	+0·8†	53·2	62·7	64·9	60·3
	Ootacamund	*7,337*	23·074	22·997	·077	23·033		22·970	64·3	50·6	13·7	69·2	39·0	30·2	60·5	59·4	57·5		49·3	56·0	56·1	53·8
	Kodaikanal	7,688	22·846	22·780	·067	22·813		22·813	62·0	51·6	10·4	66·2	46·4	19·8	59·3	57·3	55·7		49·3	56·3	55·8	53·7
	Dodabetta	8,539†	22·081	22·014	·070	22·047		21·984	57·4	47·9	9·5	63·4	42·7	20·7	54·3	53·8	52·7		44·6	52·0	51·9	49·5
	Extra India.																					
	Diego Garcia																					
	Seychelles	15	30·023	29·926	·098	29·986	+·031†	29·924	82·3	76·9	6·4	85·3	73·6	11·7	81·1	82·0	78·7	+1·0†	70·8	75·4	75·6	73·9
	Mauritius	181				·949	+·002	30·080	79·2	65·5	13·7	82·1	60·4	21·7			71·6	−0·3				67·8

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.

stations in India, etc., in October, 1912.

Vapour tension, in inches of mercury.					Humidity.					Cloud.				Wind direction.											Wind steadiness.		Wind velocity.		Rainfall.		Station.	Number of subdivision.
														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.		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·774	·821	·790	·815	—·001	92	71	67	79	— 3	4·0	4·8	4·4	-0·2	5	8	10	5	7	4	8	2	13	N 1° E	N 18° W	16	11	56	67	4·23	1·07	Calcutta	5
																															V.—United Provinces of Agra and Oudh.	
·544	·529	·412	·496	—·121	87	43	29	56	—10	1·1	0·9	1·0	-1·2	18	1	2	3		1	3	24	10	N 78° W	N 48° W	48	19	35	74	0	0	Allahabad	9
																															VI.—Punjab.	
·408	·433	·411	·424	—·021	77	37	26	51	— 1	0·4	0·3	0·3	—0·5	33	2		1	6	6	2	6	6	S 50° W	N 9° W	13	11	20	38	0	0	Lahore	11
																															IX.—Rajputana	
·361	·384	·334	·365	—·037	59	30	22	41	— 5	1·0	1·9	1·5	-0·2	11	6	7	1	1		4	13	19	N 48° W	N 27° W	50	38	53	74	0	0	Jaipur	18
																															X.—Bombay.	
·773	·829	·843	·828	—·024	82	75	69	77	— 4	4·4	4·2	4·3	+1·2		1	6	17	2	1	1	11	23	N 16° W	N 9° E	31	32	130	218	0·65	0·50	Bombay	25
																															XIV.—Mysore.	
·596	·641	·622	·637	+·029	94	72	69	81	+ 3	6·5	6·9	6·7			5	8	19	4	3	4	8	11	N 42° E	N	21	8	95	113	5·91	1·51	Bangalore	33
																															XV.—Madras.	
	·786	·762				74	63			7·7	7·9	7·8		4	11	8	4	3	4	5	6	17	N 28° W		34		93		14·17	2·20	Pudukkottai	31
·649	·887	·913	·898	+·042	95	72	74	83	0	5·8	5·6	5·7	—0·3		11	12	11	5	4	7	4	8	N 34° E	N 54° E	25	20	83	115	11·00	4·44	Madras	
																															Hill stations, excluding Kashmir and Baluchistan.	
·194	·221	·253	·221	—·015	50	46	49	49	— 4	0·7	1·1	0·9	—0·5																0	0	Simla.	
	·239	·270				49	56			1·6	2·7	2·2																	0	0	Sarais.	
	·173	·188				57	62			2·3	2·6	2·5		19	10			9	7		2	15	N 40° W		13		103		0·15	0·10	Kalabagh.	
·170	·374	·323	·254		49	54	58	55		2·3	3·7	3·8		23			1	2			36		S 88° W		55		90		0·12	0·12	Mukteswar.	
·385	·466	·477	·448	—·028	86	60	53	69	— 6	2·0	3·0	2·5	—1·5	62									a	S 86° W	a	34	9	16	0	0	Katmandu.	
·341	·402	·417	·382		92	77	82	84		8·2	9·1	8·6		10	5	13	15	5	3	4	4	3	N 70° E		32		65		11·27	1·30	Ootacamund.	
·333	·428	·432	·398		86	84	91	89		8·5	9·4	8·9			9	8	7	7	2	3	9	17	N 17° W		29		235		10·73	1·85	Kodaikanal.	
·263	·365	·368	·332		78	86	88	84		9·0	9·6	9·3		5	10	21	9	2	3	2	2	7	N 35° E		50		264		11·16	1·54	Dodabetta.	
																															Extra India.	
																															Diego Garcia.	
·674	·805	·801	·773	—·021	73	75	73	76	— 5	5·3	4·8	5·1	—1·1†	6	3	5	6	21	7	4	3	7	S 45° E	S 39° E	31	51	134	191	4·30	1·82	Seychelles.	
			·588	+·041				76	+ 6			7·2	+2·0										S 84° E	S 79° E			241*	245	68·1	1·17	Mauritius.	

* Uncorrected for scale error. † Departure from old normal. ‡ Mean of three previous columns. a Indeterminate.

Table B.—Abstract of observations taken at 8 hrs. at 220 stations in India, etc., in October, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at p. 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

		Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
	Pressure departure from normal.	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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·031	87·3	−1·3	74·3	+0·2	80·8	−0·5	13·0	21·2	−0·3	+ 6	89	+ 2	·836	−·013	5·9	+0·9	6·97	5·63	+1·34
Assam	+·029	84·8	−1·0	70·5	−0·7	77·7	−0·9	14·3	25·0	+·02	+14	89	− 1	·767	−·015	4·6	−1·0	6·43	5·08	+1·35
Bengal	+·019	87·3	+0·2	73·3	−0·5	80·3	−0·1	14·0	24·0	−0·5	0	86	0	·830	−·016	3·8	−0·1	6·19	4·57	+1·62
Bihar and Orissa	+·021	89·8	+1·2	70·3	−0·8	80·1	+0·2	19·5	30·7	+0·5	+ 6	75	− 5	·704	−·036	2·3	−0·7	1·14	3·31	−2·17
United Provinces of Agra and Oudh.	+·025	91·4	+0·3	65·1	−1·0	78·3	−0·4	26·4	36·4	−0·3	+ 7	67	− 2	·591	−·009	0·3	−0·9	0·02	1·31	−1·29
Punjab	+·022	94·5	+1·4	61·9	0	78·2	+0·7	32·6	45·1	−0·1	+11	53	− 4	·408	−·027	0·2	−0·3	0·01	0·23	−0·22
North-West Frontier Province	−·009	91·8	+0·6	58·3	−0·5	75·1	+0·1	33·5	46·1	−0·5	− 6	66	+ 8	·432	+·037	0·5	−0·2	0·23	0·28	−0·05
Sind	+·017	95·7	+1·2	68·7	+0·7	82·2	+1·0	27·1	39·9	−1·4	+ 6	64	− 7	·607	+·076	0·6	−0·1	0	0·02	−0·02
Rajputana	+·024	95·2	+0·5	67·4	−1·2	81·3	−0·4	27·8	41·1	−0·4	− 9	48	− 1	·425	−·022	1·2	+0·1	0·12	0·16	−0·04
Bombay	+·015	91·2	+1·0	70·9	+0·4	81·1	+0·7	20·3	33·5	−0·3	+ 8	70	− 1	·678	−·003	3·1	+0·4	2·69	2·84	−0·15
Central India	+·031	89·7	+0·5	63·3	−1·4	76·5	−0·5	26·3	37·3	−1·0	+ 1	62	0	·514	−·020	1·4	−0·1	0·07	0·92	−0·85
Central Provinces	+·031	90·1	+1·7	66·4	−0·5	78·3	+0·6	23·7	35·6	−0·1	+16	60	− 7	·541	−·045	2·0	−0·3	0·20	1·76	−1·56
Hyderabad	+·013	90·4	+1·7	70·0	+0·9	80·2	+1·3	20·4	33·9	−0·7	+15	64	− 5	·619	−·032	3·5	−0·3	0·86	2·80	−1·94
Mysore	+·007	82·1	−0·7	66·4	+0·3	74·3	−0·2	15·7	26·9	0	− 5	83	+ 2	·641	+·001	7·2	+0·6	7·62	5·29	+2·33
Madras	+·003	88·2	−0·3	74·4	+0·4	81·3	0	13·8	24·6	0	+ 1	82	+ 2	·819	+·008	5·5	+0·1	8·15	6·82	+1·33

Table

(2) Abstract of observations taken at 8 hrs. at 220

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·810		29·888	29·882	8th	29·709	26th	·173	78·3	84·8		74·5§		79·5§		10·3	88·6	24th & 28th.	72·2	2nd	16·4
	Mergui	65	29·895	+·028	29·890	29·973	7th	29·811	26th	·162	78·3	86·9	−0·3	72·2	+0·1	79·6	−0·1	14·7	90·0	30th	69·8	13th	20·2
	Tavoy	19	29·945	+·019	29·897	30·021	8th	29·873	26th	·148	77·8	88·8	+0·8	76·1‡	+2·8‡	82·4‡	+1·8	12·7	91·0	29th	72·8	24th & 31st	18·2
	Moulmein	94	29·878	+·043	29·910	29·931	7th	29·816	4th & 14th.	·115	77·8	88·4	0	75·2	+0·5	81·8	+0·3	13·2	91·0	12th & 20th.	72·3	8th	18·7
	Rangoon	18	29·947	+·032	29·903	30·005	10th	29·877	1st & 5th	·128	78·9	88·0	+0·3	75·5	−0·1	81·7	+0·1	12·5	90·5	20th, 21st & 26th.	73·5	30th & 31st	17·0
	Bassein	27?	29·928	+·035	29·891	29·997	10th	29·841	5th	·156	79·1	86·8	−0·6	75·9	+0·7	81·4	+0·1	10·9	90·2	1st & 12th.	73·9	30th	16·3
	Diamond Island	41	29·904	+·023	29·879	29·978	10th	29·796	5th	·182	81·8	85·9	−0·6	79·3	+2·6	82·6	+1·0	6·6	89·4	21st	76·2	29th, 30th & 31st.	13·2
	Toungoo	164	29·800	+·037	29·908	29·867	31st	29·732	1st	·135	77·8	89·0	−1·3	74·3	−0·5	81·7	−0·9	14·7	92·0	21st	71·9	27th	20·1
	Kyaukpyu	18	29·925		29·883	29·989	10th & 11th.	29·833	5th	·156	79·8	86·5		76·0		81·2		10·5	90·0	2nd & 6th.	72·4	23rd	17·6
	Akyab	20	29·925	+·027	29·886	29·998	10th	29·834	1st	·164	78·6	85·4	−2·4	76·0	−0·7	80·7	−1·5	9·4	89·4	6th & & 20th.	71·5	31st	17·9
3	Thayetmyo	121	29·828	+·030	29·891	29·902	31st	29·717	1st	·185	78·3	87·8	−2·6	74·3	+0·2	81·1	−1·2	13·5	92·4	1st	69·9	31st	22·5
	Minbu	*165*	29·790	+·023	29·899	29·892	31st	29·674	1st	·218	78·3	87·6	−3·7	74·3	−0·7	80·9	−2·2	13·3	94·3	1st	70·0	2nd	24·3
	Yamethin	657	29·279	+·001	29·892	29·355	31st	29·185	1st	·170	76·2	88·7	−3·8	73·4	−0·4	81·0	−2·1	15·3	98·8	6th	70·0	31st	28·8
	Mandalay	250	29·705	+·035	29·902	29·800	31st	29·586	1st	·214	79·6	91·4	−0·4	74·3	−0·5	82·9	−0·5	17·1	96·7	12th, 14th & 21st.	69·6	31st	27·1
	Monywa	*280*	29·691		29·923	29·777	28th	29·589	1st	·188	77·6	89·2		74·4		81·8		14·8	94·8	15th & 22nd.	70·1	23rd, 27th & 28th.	24·7
	Lashio	*4,820*	27·212‡	+·039‡	29·965‡	27·312	31st	27·101	1st	·211	67·4	P	P	63·2	−0·3	P	P	P	P	P	51·0	27th	P
	Bhamo	*381*	29·607	+·061?	29·948	29·734	31st	29·480	1st	·254	73·4	86·0	−2·5	68·5	−1·1	77·3	−1·8	17·5	91·4	14th	61·6	27th	29·8
	Myitkyina	458	29·503		29·928	29·630	31st	29·401	4th	·229	71·8	83·2		69·3		76·2		13·9	90·2	13th	62·0	30th	28·2
	II.—Assam.																						
4	Dibrugarh	353	29·609		29·932	29·707	26th	29·472	5th	·235	71·7	82·6		68·5		75·6		14·1	86·4	14th & 21st.	60·1	28th	26·3
	Sibsagar	333	29·647	+·027	29·943	29·744	28th	29·508	5th	·235	73·4	83·0	−1·8	69·4‡	−1·4‡	76·2‡	−1·6	13·6	87·6	14th	62·5	30th	25·1
	Tezpur	252	29·721		29·936	29·819	31st	29·575	5th	·244	74·0	84·9		70·3		77·6		14·6	89·1	15th	63·3	30th	25·8
	Gauhati	195	29·775		29·929	29·876	28th	29·625	4th	·251	75·8	86·3		70·6		78·5		15·7	89·8	14th & 15th.	64·1	27th & 29th.	25·7
	Dhubri	115	29·876‖	+·031‖	29·946‖	29·934	28th	29·828	26th	·106	76·4	83·9	−0·6	72·2	−0·6	78·1	−0·6	11·7	87·0	12th	68·1	25th	18·9
	Silchar	104	29·853	+·028	29·910	29·936	11th	29·731	1st	·205	76·2	88·0	−0·7	72·1	−0·2	80·0	−0·5	15·9	94·3	22nd	66·3	30th	28·0
	III.—Bengal.																						
5	Cox's Bazar	36	29·902		29·883	29·976	11th	29·802	1st	·174	78·4	85·6		73·6		79·6		12·0	90·2	21st	69·7	26th	20·5
	Chittagong	87	29·852	+·024	29·885	29·925	11th	29·748	1st	·177	76·6	86·1	−0·4	73·0	−0·4	79·6	−0·4	13·1	90·0	21st	68·0	27th & 31st.	22·0
	Noakhali	43	29·900		29·890	29·976	11th	29·792	1st	·184	77·7	84·8		73·7		79·2		11·1	87·8	1st, 2nd & 21st.	66·4	27th	21·4
	Barisal	12	29·914	+·014	29·873	29·995	19th	29·798	1st	·197	80·3	86·9	−0·7	74·0	−0·6	80·4	−0·7	12·9	91·3	1st	67·6	28th	23·7
	Narayanganj	26	29·903	+·020	29·878	29·985	11th	29·777	1st	·208	79·5	87·5	−0·4	74·5	−0·8	81·0	−0·6	13·0	91·0	22nd	70·3	17th & 26th.	20·7
	Mymensingh	63	29·883	+·022	29·898	29·958	28th	29·769	4th	·189	77·0	86·8	+0·6	72·6	−0·6	79·7	0	14·2	92·1	22nd	67·1	18th & 19th.	25·0
	Bogra	75	29·865	+·024	29·892	29·940	11th	29·729	1st	·211	77·3	87·2	0	72·5	−0·2	79·9	−0·1	14·7	90·7	12th & 13th.	66·2	26th	24·5
	Dinajpur	123	29·806	+·011	29·885	29·905	28th	29·657	1st	·248	76·7	87·3	−0·1	71·2	−0·8	79·3	−0·5	16·1	91·8	12th	64·5	28th & 27th,	27·3
	Jalpaiguri	283	29·662	+·017	29·908	29·763	28th	29·514	1st	·249	74·8	87·5	+1·7	70·0	+0·2	78·7	+0·9	17·5	90·4	12th & 22nd.	62·9	27th	27·5

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

‡ Mean of 30 days.
§ " " 29 "
‖ " " 16 "

B.

stations in India, etc., in October, 1912.

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st May to 31st Oct. 1912. (53)	Normal rainfall for period 1st May to 31st October. (54)	Departure from normal of period, 1st May to 31st Oct., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																I.—Burma.
5	2	11	7	3	2		1		N 70° E		3·9*			56		88		·848		6·1		11			6·77			160·78			2·40	Victoria Point.
30				1					S 45° E	N 8° E	2·0	1·1	+0·9	3	−15	90	+ 3	·865	+·010	4·1	−0·8	15	16·6	− 1·6	7·98	12·35	−4·37	158·13	147·48	+10·65	1·95	Mergui.
31									(a)	N 8° E	1·1*	0·8	+0·3			89	+ 1	·850	−·018	2·8	−2·0	10	12·4	− 2·4	4·89	10·33	−5·44	182·10	207·51	−25·41	0·81	Tavoy.
2		10	17	2					N 77° E	S 85° E	2·2	1·6	+0·6	86	+54	91	+ 3	·873	−·003	5·0	0	10	11·3	− 1·3	5·42	8·71	−3·29	176·53	181·83	−5·30	1·85	Moulmein.
6	4	10	6	2	2	1			N 64° E	S 53° E	1·2	2·1	−0·9	49	+27	89	− 3	·879	−·028	7·7	+2·1	11	9·9	+ 1·1	4·99	6·75	−1·76	89·33	92·78	−3·45	1·04	Rangoon.
20	1	1	6	3					S 87° E	N 80° E	2·1	2·4	−0·3	28	+10	92	+ 1	·927	+·012	5·1	−0·1	17	12·3	+ 4·7	9·51	8·00	+1·51	97·74	104·44	−6·70	1·90	Bassein.
1	2	6	10	6	4		1	1	S 86° E	N 53° E	6·5	5·5	+1·0	56	+24	92	+ 9	1·007	+·108	4·8	−0·9	11	10·9	+ 0·1	8·42	8·11	+0·31	108·30	109·51	−1·21	1·83	Diamond Island.
18	3	2			2	1	1	4	N 35° W	N 84° E	1·0	1·3	−0·3	20	+ 2	89	0	·841	−·046	7·6	+2·1	13	10·2	+ 2·8	9·41	7·42	+1·99	81·15	77·60	+3·55	2·65	Toungoo.
3		6	4	16	2				S 65° E		2·3*			69		86		·683		4·7		13			8·78			156·99			1·64	Kyaukpyu.
		12	13	4	2				N 82° E	N 50° E	2·1	1·8	+0·3	79	+ 4	92	+ 1	·893	−·020	6·0	+0·1	16	8·8	+ 7·2	22·63	9·89	+12·74	227·24	184·26	+42·98	4·60	Akyab.
16	2	5		1	6			1	S 82° E	S 37° E	1·1*	2·6	−1·5	10	−12	87	+ 3	·845	−·005	8·7	+3·0	5	7·2	− 2·2	4·89	4·01	+0·88	44·14	34·30	+9·84	1·55	Thayetmyo.
1	5	8		7	4	1	1	4	N 57° E	S 10° W	2·8	4·7	−1·9	27	+16	85	+ 1	·813	−·030	6·5	+2·0	7	6·3	+ 0·7	4·75	4·51	+0·24	31·98	30·56	+1·42	1·52	Minbu.
16	1			4	4			3	S 45° E	S 45° E	1·4	2·5	−1·1	3	−34	89	+ 3	·799	−·058	6·6	+3·5	8	7·9	+ 0·1	6·54	5·88	+0·66	30·86	34·17	−3·31	2·62	Yamethin.
13	2	2	1	9	2			2	S 64° E	S	1·7	2·3	−0·6	23	− 2	81	− 2	·798	−·062	2·9	−1·2	8	6·4	+ 1·6	3·17	5·00	−1·83	28·97	29·48	−0·51	0·75	Mandalay.
9	12	1	1	6	2				N 43° E		1·7			30		89		·844		6·5		6	6·5	− 0·5	3·99	4·68	−0·69	26·69	27·89	+0·80	2·68	Meiktila.
25	1	2				2		1	N 24° W		1·0*			7		94	+ 2	·626	−·021	9·1	+1·5	12	9·2	+ 2·8	6·74	5·43	+1·31	47·15	55·88	−8·73	1·19	Lashio.
23	2	5						1	N 25° E	N 4° W	0·8	1·4	−0·6	23	+ 1	92	+ 5	·759	−·015	7·6	+3·5	7	6·2	+ 0·8	9·33	3·94	+5·39	76·61	66·04	+10·57	2·25	Bhamo.
22	1	2	3	2	1				E		0·9			19		90		·701		5·2		7	8·4	− 1·4	11·17	7·16	+4·02	80·76	70·58	+10·18	4·06	Myitkyina.
																																II.—Assam.
30			1						E		0·5			3		92		·711		4·2		9	7·6	+ 1·4	5·11	4·26	+1·85	96·29	84·97	+11·32	2·30	Dibrugarh.
16	4	7	2			1		1	N 32° E	N 86° E	1·7‡	1·4	+0·3	33	+ 8	93	− 3	·763	−·039	7·3	+0·1	6	7·5	− 1·5	4·83	4·97	−0·14	79·83	76·39	+3·49	2·19	Sibsagar.
14	2	10	18						N 70° E		2·0			86		86		·726		4·2		4	5·8	− 1·8	1·23	3·75	−2·42	56·86	58·45	−1·59	0·67	Tezpur.
26	3	1				1			N		1·1			10		89		·791		5·0		3	3·6	− 0·6	1·68	2·46	−0·78	57·99	52·37	+5·62	0·28	Gauhati.
2		13	12	1	1	2			N 73° E	N 67° E	3·4	2·8	+0·6	69	+26	87	− 2	·789	−·002	2·7	−1·1	4	4·2	− 0·2	3·87	3·59	+0·28	106·64	86·54	+20·10	1·65	Dhubri.
28	1	1	3						N 64° E	N 63° E	1·0	1·2	−0·2	13	+ 9	90	+ 1	·823	−·005	4·2	−1·9	10	7·4	+ 2·6	10·94	6·49	+4·45	94·11	97·40	−3·29		Silchar.
																																III.—Bengal.
26	6	4	6	10	1	1		1	N 87° E		2·3*			46		90		·869		5·5		11			13·18			116·03			3·71	Cox's Bazar.
28		4	6						N 71° E	N 67° E	1·2	2·0	−0·8	30	−17	95	+ 5	·876	+·012	5·5	+0·5	8	6·9	+ 1·1	7·32	6·22	+1·10	81·28	86·86	−5·58	2·65	Chittagong.
6	8	8	3	6	2				N 61° E		1·4			42		90		·856		3·1		8	7·3	+ 0·7	11·72	7·96	+3·76	86·88	108·13	−21·25	3·32	Noakhali.
30			1	1					S 45° E	N 20° E	0·1	1·5	−1·4	3	− 8	83	− 1	·846	−·039	3·9	+0·2	9	6·3	+ 2·7	11·80	5·93	+5·87	70·36	70·29	+0·07	2·80	Barisal.
16	1	1	6	2	2	1		1	S 77° E	N 50° E	1·1	2·0	−0·9	27	+16	85	+ 1	·854	+·006	4·7	+0·4	9	5·5	+ 3·5	11·10	4·58	+6·52	65·95	60·14	+5·81	2·78	Narayanganj.
25		2	3	1					S 52° E	S 85° E	0·7	1·2	−0·5	17	−20	89	+ 1	·832	−·018	4·1	−0·2	6	5·5	+ 0·5	9·28	5·20	+4·08	83·58	82·97	+1·61	3·68	Mymensingh.
27	1	1	1	1					S 67° E	N 86° E	0·3	1·2	−0·9	7	− 9	87	+ 1	·819	−·046	3·9	+0·4	8	4·9	+ 3·1	11·64	4·22	+7·42	78·22	62·61	+15·61	4·05	Bogra.
42	3	6	6	3			1	1	N 62° E	N 53° E	1·0	1·8	−0·8	43	+21	86	+ 1	·795	−·013	2·9	−0·2	3	3·8	− 0·8	1·40	3·08	−1·68	84·75	64·85	+19·90	0·80	Dinajpur.
28		1	1	1					E	N 51° E	1·3			8	−35	83	− 5	·729	−·048	2·9	−0·4	5	4·4	+ 0·6	9·36	4·41	+4·95	102·05	116·56	−14·51	5·27	Jalpaiguri.

* Uncorrected for scale error. ‡ Mean of 30 days. (a) Indeterminate.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal.—*contd.*																						
5	Saugor Island	25	29·897	+·017	29·867	29·983	19th	29·783	1st	·200	80·0	87·2	+0·3	76·1	—0·1	81·6	+0·1	11·1	90·2	17th & 22nd.	68·7	31st	21·5
	Midnapore	149	29·765§		29·863	29·852	28th	29·643	1st	·209	78·7	89·5		73·2		81·4		16·3	93·8	5th & 6th	66·2	27th	27·6
	Calcutta	21	29·907	+·019	29·875	29·997	19th	29·786	4th	·211	78·5	88·1	+1·4	74·1	—0·2	81·1	+0·6	14·0	92·1	14th	67·0	27th	25·1
	Jessore	33	29·909	+·029	29·889	29·993	19th	29·778	1st	·215	79·7	87·5	—0·9	72·3	—1·3	80·4	—1·1	14·2	91·0	2nd & 13th.	65·7	27th & 28th.	25·3
	Burdwan	99	29·830	+·016	29·878	29·922	28th	29·686	1st	·236	78·4	89·1	+0·4	74·2	—0·4	81·6	0	14·9	93·9	5th	68·3	27th	25·6
	Berhampore	67	29·866	+·017	29·883	29·956	28th	29·715	1st	·241	78·0	88·2	+0·7	73·6	—0·7	80·9	0	14·6	91·6	13th	68·7	27th & 28th.	22·9
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·873	+·006	29·869	29·969	28th	29·758	7th	·211	77·9	88·8	+0·8	72·8	—0·3	80·8	+0·3	16·0	92·4	5th & 13th.	65·1	27th	27·3
	Hukitola (False Point).	42	29·896	+·010	29·879	29·989	28th	29·728	7th	·261													
	Cuttack	80	29·818	+·023	29·869	29·944	28th	29·711	7th	·233	78·4	88·7	—1·0	74·4	—0·2	81·6	—0·6	14·3	91·5	5 days	68·2	29th	23·3
	Puri	24	29·891		29·854	29·988	11th	29·698	31st	·290	80·4	89·8		76·8		83·3		13·0	93·1	16th	70·6	31st	22·5
	Angul	455	29·476		29·898	29·576	28th	29·363	1st	·213	77·1	89·3		70·5		79·9		18·8	92·1	4th, 6th & 14th.	61·0	28th	31·1
	Sambalpur	488	29·459	+·027	29·900	29·545	19th	29·333	1st	·212	77·3	89·4	+0·6	70·7	—1·2	80·0	—0·3	18·7	92·6	2nd	61·1	28th	31·5
7	Chaibasa	*733*	29·182	+·012	29·880	29·276	19th	29·041	1st	·235	73·9	88·7	—0·1	69·1	—0·7	78·9	—0·4	19·6	92·1	2nd & 5th	60·3	27th	32·8
	Ranchi	2,128	27·812	+·023	29·877	27·888	20th	27·690	1st	·198	73·6	84·5	+1·5	67·0	+1·4	75·7	+1·5	17·5	87·2	4 days	59·9	27th	27·3
	Purulia	*816*	29·109		29·887	29·189	19th	28·962	1st	·227	75·8	90·4		69·8		80·1		20·6	93·5	6th & 13th.	63·1	28th	30·4
	Daltonganj ‖	*730*	29·202		29·909	29·331	28th	29·071	1st	·230	71·8	91·9		65·2		78·5		26·7	95·1	6th & 14th.	56·0	27th & 28th.	39·1
8	Purnea	134	29·808	+·027	29·896	29·911	28th	29·615	1st	·296	76·4	87·7	+0·3	70·9	—0·3	79·3	0	16·8	93·1	1st	62·8	27th	30·3
	Monghyr	155	29·771		29·881	29·866	19th	29·602	1st	·264	79·7	90·5		71·4		80·9		19·1	94·2	4 days	64·9	25th & 26th.	29·3
	Darbhanga	165	29·770	+·020	29·892	29·873	20th	29·581	1st	·292	78·1	90·0	+3·2	68·8	—4·3	79·4	—0·5	21·2	94·6	1st	61·7	17th	32·9
	Pusa	188	29·745		29·890	29·855	20th	29·563	1st	·292	76·9	91·3		68·3		79·8		23·0	96·3	1st	61·2	17th	35·1
	Patna	183	29·745	+·012	29·885	29·850	20th	29·566	1st	·284	78·9	89·6	+1·4	71·8	—0·7	80·7	+0·3	17·8	93·5	11th & 12th.	66·2	24th & 27th.	27·3
	Buxar	239	29·682		29·883	29·782	20th	29·522	1st	·260	75·3	94·1		68·9		81·5		25·2	98·0	11th & 12th.	62·1	27th	35·9
	Gaya	372	29·557	+·021	29·885	29·658	20th	29·405	1st	·253	78·9	93·5	+3·9	69·4	—1·6	81·5	+1·1	24·1	96·9	12th	62·2	24th & 27th.	34·7
	Naya Dumka	489	29·453*e*	+ 047*e*	29·900?*e*	29·538	28th	29·280	1st	·258	76·7	88·9	+1·9	70·1	—0·5	79·4	+0·5	18·8	92·4	7th	62·0	18th	30·4
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·663	+·019	29·882	29·770	20th	29·495	1st	·275	76·9	91·3	+2·6	63·4	—6·6?	77·4	—2·0?	27·9	95·1	1st & 2nd	56·3	16th	38·8
	Benares	267	29·671	+·032	29·895	29·770	19th	29·519	1st	·251	78·7	92·6	+3·7	65·7§	—2·6§	79·7§	+0·5	27·9	96·6	5 days	57·6	27th	39·0
	Allahabad	309	29·630	+·033	29·900	29·728	28th	29·469	1st	·259	76·5	93·0	+2·5	65·0	—2·6	79·0	—0·1	28·0	95·6	6 days	58·5	27th	37·1
	Cawnpore	416	29·508	+·021	29·888	29·610	20th	29·353	1st & 5th.	·257	74·8	91·6	+0·3	65·0	—0·8	78·4	—0·3	26·8	95·7	11th	57·4	27th	38·3
	Lucknow	368	29·562	+·031	29·893	29·664	20th	29·391	1st	·273	77·2	93·0	+1·8	66·0	+0·5	79·5	+1·1	27·0	96·0	10th, 11th & 12th.	59·1	26th	36·9
	Bahraich	401	29·505	+·010	29·873	29·613	28th	29·336	1st	·277	75·8	90·2	+0·1	67·1	—0·1	78·7	0	23·1	93·1	11th	61·0	19th	32·1
10	Jhansi	824	29·123	+·030	29·914	29·213	28th	28·969	1st	·244	76·8	91·9	—1·0	64·7	—4·4	78·3	—2·7	27·2	94·5	5 days	56·5	27th	38·0
	Agra	556	29·374	+·021	29·897	29·472	28th	29·201	1st	·271	77·2	94·6	+1·2	67·7	+0·1	81·1	+0·7	26·9	98·5	10th	61·0	28th & 28th.	37·5
	Mainpuri	516	29·400	+·024	29·888	29·505	28th	29·234	1st	·271	71·6	90·4	—2·5	64·2	—0·4	77·3	—1·5	26·2	92·8	10th & 11th.	57·1	26th	35·7
	Bareilly	588	29·338	+·014	29·879	29·461	20th	29·151	1st	·310	72·9	89·6	+0·1	65·2	—0·1	77·4	0	24·4	92·3	4 days	59·0	23rd	33·3
	Roorkee	899	29·027	+·035	29·914	29·139	19th	28·834	1st	·305	71·1	86·4	—2·9	61·7	+0·4	74·0	—1·3	24·7	90·0	9th	55·9	18th, 23rd & 28th.	34·1

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

§ Mean of 30 days.
‖ „ 25 „
e „ 29 „

B—*continued.*

in India, etc., in October, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct., 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period 1st May to 31st Oct., 1912.	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	56	57
																																III.—Bengal—*contd.*
	6	11	2	1	2	3	3	3	N 16° E	N 13° W	5·8	5·4	+0·4	37	+15	86	0	·877	—·011	4·4	—1·0	5	7·5	—2·5	5·68	7·91	—2·23	45·86	64·40	—18·54	2·45	Saugor Island.
7	4	12	2		2	4			N 45° E		1·5			36		80		·787		2·5		4	5·0	—1·0	3·37	3·29	+0·08	46·62	52·18	—5·56	1·25	Midnapore.
5	2	5	2	2	1	5	1	8	N 13° W	N 58° W	2·1*	2·0	+0·1	20	+ 1	87	+ 3	·854	+·011	3·3	—0·1	8	5·9	+2·1	4·28	3·91	+0·37	46·19	56·48	—10·29	1·07	Calcutta.
19	1	3	3	4			1		N 88° E	S 67° E	1·6	1·5	+0·1	22	0	83	— 3	·844	—·032	3·2	—0·7	6	5·7	+0·3	7·98	4·81	+3·17	60·58	57·35	+3·23	2·74	Jessore.
10	9	4			1	3	1	3	N 13° W	N 28° W	1·1	1·4	—0·3	37	+23	84	+ 4	·816	+·022	3·7	0	5	4·0	+1·0	3·96	2·91	+1·05	43·40	52·00	—8·60	2·13	Burdwan.
14	3	2	2	2	5	2		1	S 45° E	S 39° W	1·0	1·5	—0·5	13	+ 8	83	— 3	·801	—·034	3·2	—0·5	2	4·5	—2·5	2·83	3·55	—0·72	40·28	50·74	—10·46	2·10	Berhampore.
																																IV.—Bihar and Orissa.
14	6	2	1		1	3		4	N 19° W	N 41° W	1·4	1·9	—0·5	27	— 9	80	— 6	·758	—·082	3·3	—1·3	5	5·6	—0·6	3·92	5·54	—1·62	36·12	54·50	—18·38	1·22	Balasore.
2	3	1	1	1		5	4	13	N 59°‡W	N 45° W	7·1	4·4	+2·7	53	+ 6					2·3	—2·3	5	7·4	—2·4	6·17	8·27	—2·10	41·58	56·35	—14·77	2·18	Hukitola (False Point).
20	1	1	1			4	4		S 78° W	N 51° W	1·3*	1·3	0	17	— 1	81	+ 2	·791	+·004	3·0	—0·6	7	5·8	+1·2	6·58	4·99	+1·59	47·40	54·61	—7·21	1·74	Cuttack.
7	16	4				2	1	1	N 1° W		4·5			58		83		·852		3·4		5	7·2	—2·2	6·59	7·09	—0·50	63·04	47·81	+15·23	3·15	Puri.
2	1	1	1				8	18	N 54° W		3·5			74		77		·727		2·5		1	4·8	—3·8	1·08	3·38	—2·30	35·75	42·34	—6·59	1·08	Angul.
1	8	14	2			2	1	3	N 21° E	N 38° E	6·1	2·1	+4·0	69	+12	76	— 2	·714	—·035	3·1	+0·5	1	3·3	—2·3	0·36	1·87	—1·51	46·35	62·53	—16·18	0·28	Sambalpur.
19		1		1	1	4	5		S 59° W	S 63° W	1·2	0·7	+0·5	27	+ 5	83	+ 1	·709	—·030	3·6	+0·4	4	3·7	+0·3	9·21	2·32	+6·89	54·68	46·99	+7·69	8·45	Chaibasa.
6	2	2	2			2	7	10	N 53° W	N 89° W	3·1	3·3	—0·2	49	+28	64	— 8	·541	—·045	3·2	+0·1	2	3·9	—1·9	0·68	2·46	—1·78	42·30	51·51	—9·21	0·50	Ranchi.
9	3	1	1			1	12	4	N 67° W		1·1			48		74		·647		1·6		2	3·5	—1·5	0·59	2·62	—2·03	43·60	46·92	—3·32	0·45	Purulia.
17			3	3	1	1			S 45°§ E		1·0			24		78		·617		1·6		1	2·9	—1·9	0·14	1·60	—1·46	28·73	38·47	—9·74	0·14	Daltonganj.
27		1		1		1	1		S 23° W	N 79° E	0·9	1·5	—0·6	2	—13	83	— 5	·810	+·010	1·8	—0·8	3	3·1	—0·1	1·75	2·92	—1·17	60·60	58·92	+1·68	1·15	Purnea.
5	3	5	6			4	5	3	N 4° W		2·2			20		73		·748		2·5		1			0·40			37·48			0·40	Monghyr.
16			12				3		E	S 68° E	1·2	1·5	—0·3	29	+ 8	79	— 4	·763	—·020	1·8	—0·2	0	3·0	—3·0	0	2·74	—2·74	32·92	47·99	—15·07	0	Darbhanga.
10	1		6	7	2	3		2	S 45° E		1·3			32		77		·715		1·5		1			0·16			35·67			0·14	Pusa.
7			6	1	2	9	6		S 32° E	S 8° W	1·9	1·6	+0·3	37	+15	69	— 4	·690	—·041	1·4	—1·0	1	3·1	—2·1	0·44	2·76	—2·32	31·27	44·67	—13·40	0·44	Patna.
3		2	2	2	5	9	7	1	S 39° W		2·6			45		67		·587		1·0		0	2·6	—2·6	0	2·70	—2·70	29·42	38·64	—9·22	0	Buxar.
10		2		2	8	3	6		S 29° W	S 9° W	1·4	2·0	—0·6	37	+ 5	60	—14	·597	—·087	1·4	—1·6	1	2·8	—1·8	0·31	2·01	—1·70	20·17	43·76	—23·59	0·31	Gaya.
30	1								N		0·9			3		75	— 7	·699		1·7		3	4·0	—1·0	2·01	3·21	—1·20	42·05	52·02	—9·97	1·45	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
9		5	6	2			7	2	N 36° E	N 27° W	0·9	0·9	0	13	— 9	74	— 3	·689	—·025	0·1	—1·5	0	2·5	—2·5	0	3·91	—3·91	40·37	48·35	—7·98	0	Gorakhpur.
7		1	1	2	3	9	4	4	S 54° W	S 50° W	1·3	1·8	—0·5	40	+22	61	—16	·597	—·082	0·5	—1·7	0	2·4	—2·4	0	2·58	—2·58	31·71	37·43	—5·72	0	Benares.
6		1	1		2	4	14	3	S 83° W	N 86° W	1·6	2·3	—0·7	56	+31	62	— 7	·567	—·067	1·0	—1·0	0	1·9	—1·9	0	2·52	—2·52	28·49	36·88	—10·39	0	Allahabad.
13			1			8	7	2	S 72° W	S 76° W	1·5	1·5	0	46	+17	68	+ 2	·590	—·012	0·1	—1·0	1	1·4	—0·4	0·63	1·35	—0·72	30·42	33·84	—3·42	0·63	Cawnpore.
30							1		W	N 58° W	1·1	1·3	—0·2	3	— 6	64	— 8	·614	—·014	0	—1·4	0	1·6	—1·6	0	1·20	—1·20	24·84	35·61	—10·77	0	Lucknow.
13	1	2	4	3	1		3	4	N 39° E	N 77° E	1·2	1·2	0	10	0	71	— 5	·635	—·056	0·2	—1·1	0	1·5	—1·5	0	1·69	—1·69	31·97	41·67	—9·70	0	Bahraich.
10						15	5	1	S 59° W	S 70° W	1·5	1·8	—0·3	62	+19	56	+ 4	·525	+·028	1·5	+0·8	0	0·9	—0·9	0	0·72	—0·72	32·94	35·62	—1·68	0	Jhansi.
19		1	1		1	4	4	1	S 68° W	N 68° W	1·5	2·3	—0·8	28	—17	52	— 5	·491	—·006	0·1	—0·7	0	0·7	—0·7	0	0·83	—0·83	23·67	25·50	—1·83	0	Agra.
14	1		1	1	2	3	6	3	S 79° W	N 83° W	0·7	0·7	0	30	+14	73	+ 8	·572	+·040	0	—1·1	0	0·8	—0·8	0	1·52	—1·52	33·95	24·89	+9·06	0	Mainpuri.
31									(a)	N 15° W	0	0·9	—0·9			78	+ 3	·634	+·029	0·1	—0·7	0	0·8	—0·8	0	1·38	—1·38	40·21	41·62	—1·41	0	Bareilly.
27		2		2					E	S 58° E	0·9	0·9	0	9	+ 3	77	+ 3	·591	+·068	0·1	—0·6	0	0·7	—0·7	0	0·57	—0·57	39·00	37·18	+1·82	0	Roorkee.

* Uncorrected for scale error.

‡ Wind observations of 30 days.
§ " " 25 "

(a) Indeterminate.

Table

(2) Abstract of observations taken at 8 hrs. at 220 stations

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Punjab.																						
11	Delhi	718	29·203	+·027	29·899	29·305	20th	29·030	1st	·275	73·8	91·6	−0·5	67·6	−0·3	79·6	−0·4	24·0	97·0	3rd	60·8	20th	36·2
	Sirsa	662	29·253	+·025	29·894	29·358	20th	29·075	1st	·263	74·2	97·0	+0·9	63·1	+0·5	80·0	+0·7	33·9	102·8	2nd	55·0	27th	47·8
	Patiala	*818*	29·059		29·865	29·208	21st	28·884	4th	·324	69·7	91·6		62·0		76·8		29·6	96·2	4th	55·9	21st	40·3
	Ambala	892	29·019	+·028	29·904	29·128	20th	28·828	1st	·300	69·8	94·3	+1·1	59·1	−1·7	76·7	−0·3	35·2	100·5	17th & 18th.	52·9	23rd & 26th.	47·6
	Ludhiana	812	29·108	+·034	29·906	29·206	20th	28·934	1st	·272	72·2	94·3	+2·4	62·8	−0·2	78·5	+1·1	31·5	100·0	3rd & 4th.	56·5	30th	43·5
	Lahore	702	29·206	+·024	29·899	29·313	20th	29·028	1st	·285	70·0	96·6	+1·5	60·5	+1·4	78·5	+1·5	36·1	103·4	3rd & 4th.	55·2	21st, 22nd & 26th.	48·2
	Sialkot	830	29·078	+·027	29·905	29·186	22nd	28·889	1st	·297	69·2	92·7	+0·4	59·4	−2·5	76·1	−1·1	33·3	99·0	2nd & 4th	53·5	23rd	45·5
	Rawalpindi	1,674	28·242	+·009	29·921	28·371	11th	28·070	1st & 5th.	·301	66·7	91·6	+3·4	56·2	+0·4	73·9	+1·9	35·4	99·4	5th	50·9	23rd & 26th.	48·5
12	Khushab	612	29·301	+·028	29·900	29·417	21st	29·109	1st	·308	72·1	94·8	+1·0	62·2	+0·3	78·5	+0·7	32·6	102·4	3rd	55·9	29th	46·5
	Montgomery	558	29·340	+·012	29·878	29·458	13th	29·147	1st	·311	75·1	97·3	+0·7	63·2	+1·0	80·3	+0·9	34·1	103·9	4th	57·0	28th	46·9
	Multan	420	29·477	+·007	29·871	29·586	18th & 21st.	29·281	1st	·305	74·4	98·2	+2·7	65·1	+0·7	81·6	+1·7	33·1	103·8	3rd	58·5	21st	45·3
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·805	−·012	29·931	28·987	11th	28·612	1st	·375	64·7	90·7	+2·3	57·4	+0·2	74·0	+1·3	33·3	97·2	4 days	52·9	31st	44·3
	D. I. Khan	590	29·311	−·007	29·892	29·443	13th	29·099	5th	·344	68·0	92·9	−1·1	59·3	−1·3	76·1	−1·2	33·6	99·9	2nd & 4th.	52·1	21st	47·8
	VIII.—Sind.																						
16	Jacobabad	186	29·717	+·006	29·866	29·850	18th	29·595	1st	·255	76·2	100·6	+2·0	63·8	+1·3	82·2	+1·7	36·8	107·1	2nd	56·8	19th	50·3
	Hyderabad	96	29·834*	+·025*	29·882*	29·931	18th	29·685	1st	·246	77·8	98·3	+0·3	69·2	−0·8	83·8	−0·3	29·1	106·5	1st	63·0	17th & 20th.	43·5
	Karachi	13	29·940	+·029	29·904	30·024	18th	29·837	1st	·187	78·1	88·3	+1·4	73·0	+1·7	80·6	+1·5	15·3	95·5	14th & 22nd.	69·5	18th, 25th & 27th.	26·0
	IX.—Rajputana.																						
17	Bikaner	*771*	29·138	+·028	29·881	29·234	13th	28·976	1st	·258	77·7	97·7	+1·8	69·9	−1·5	83·8	+0·1	27·6	104·0	2nd	61·5	24th	42·5
	Jodhpur	780	29·161	+·024	29·911	29·253	28th	29·003	1st	·250	75·8	96·6	−0·9	66·1	−2·1	81·4	−1·5	30·5	102·0	2nd	56·3	26th	45·7
18	Jaipur	1,431	28·518	+·020	29·915	28·604	20th	28·371	1st	·233	76·3	95·5	+1·2	64·2	+0·2	79·9	+0·7	31·3	100·7	2nd	57·6	26th	43·1
	Ajmer	1,611	28·348	+·023	29·937	28·432	19th	28·199	1st	·233	70·2	91·2	−0·8	67·5	+4·3?	79·3	+1·7?	23·7	96·1	2nd	59·7	26th	36·4
	Kotah	819?	29·107*	+·016*?	29·890*?	29·202	28th	28·983	1st	·219	78·7	95·0	−0·3	69·2	−1·4	82·1	−0·9	25·8	99·1	2nd	61·1	30th	38·0
	X.—Bombay.																						
19	Deesa	466	29·490	+·031	29·919	29·563	28th	29·374	1st	·189	75·1	97·2	+0·3	63·6	−3·2	80·4	−1·5	33·6	101·8	2nd	55·9	26th	45·9
	Bhuj	395	29·574	+·046?	29·923	29·676	28th	29·447	1st	·229	80·0	96·9	+0·8	70·3	−0·6	83·6	+0·1	26·6	101·0	1st	64·0	25th & 26th.	37·0
	Jamnagar	61	29·902		29·908	29·957	11th	29·804	1st	·153	83·1	94·7		69·1		81·9		25·6	99·1	19th	63·2	27th	35·9
	Dwarka	37?	29·930	+·021	29·913	29·984	28th	29·838	1st	·146	79·9	88·9	+2·2	75·8†	+0·3†	82·3†	+1·3	13·1	95·8	14th	68·7	25th	27·1
	Rajkot	429	29·531*	+·028*	29·913*	29·591	28th	29·432	1st	·159	78·7	95·6	+0·3	66·5	−1·6	81·1	−0·7	29·1	99·6	1st	59·8	24th	39·8
	Veraval	*18*	29·932	+·019	29·893	29·987	11th	29·846	1st	·141	79·3	88·9	−0·4	72·6	+0·3	80·7	−0·1	16·3	99·1	21st	65·8	24th	33·3
	Bhavnagar Para	55	29·904	−·002?	29·905	29·967	28th	29·805	1st	·162	79·0	96·1	0	70·2	−2·0	83·1	−1·0	25·9	100·0	1st	60·9	23rd	39·1
	Surat	39	29·920	+·023	29·902	29·982	28th	29·828	1st	·154	80·8	95·7	+2·7	72·5	+1·7	84·1	+2·2	23·2	98·9	20th	62·6	30th	35·3
	Ahmadabad	163	29·786†	†+·015?	†29·901?	29·866	28th	29·670	1st	·196	79·4	97·6	+0·9	71·9	−0·2	84·7	+0·3	25·7	100·6	15th & 16th.	66·7	28th	33·9
28	Bombay	37	29·911	+·013	29·888	29·976	28th	28·839	1st	·137	86·1	88·9	+1·4	77·3	+0·8	83·1	+1·1	11·6	92·5	20th	72·0	11th	20·5
	Ratnagiri	110	29·810	+·006	29·858	29·864	9th & 28th.	29·750	23rd	·114	81·3	89·3	+1·1	74·7	+0·7	82·1	+0·9	14·6	97·8	21st	67·9	30th	29·9
	Goa	199	?	?	?	?	?	?	?	?	78·7	85·6	+0·3	77·1	+1·6	81·4	+0·9	8·5	91·1	20th 21st & 22nd.	70·1	30th	21·0
	Marmagao	*60*	29·871	+·001	29·866	29·946	9th	29·804	23rd	·142	78·6	85·2	−0·1	75·2	−0·4	80·5	−0·3	10·7	89·5	15th & 20th.	72·2	30th	17·3
	Karwar	44	29·894	+·008	29·873	29·962	9th	29·820	23rd	·142	76·9	85·7	+0·3	74·0	+0·6	79·9	+0·5	11·7	91·7	20th	67·0	30th	24·7

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

* Mean of 30 days.
† " 29 "

B—*continued.*

in India, etc., in October, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May, to 31st Oct., 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period, 1st May, to 31st Oct., 1912.	Heaviest rainfall during month.	Station.
26	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																																VI.—Punjab.
9	2	1	1	1		2	13	2	N 81° W	N 83° W	1·3	1·7	−0·4	43	+11	54	+ 4	·443	+·021	0·2	−0·6	0	0·3	−0·3	0	0·29	−0·29	29·48	21·36	+5·12	0	Delhi.
11			5	1	8	4	2		S 5° E	S 31° W				37	+15	45	− 5	·380	−·020	0·7	0	0	0·4	−0·4	0	0·11	−0·11	10·64	11·87	−1·23	0	Sirsa.
7			4	11	1		3	5	S 45° E		3·5			26		67		·492		0		0	0·6	−0·6	0	0·29	−0·29	19·11	20·77	−1·66	0	Patiala.
16	2		5	7	1				S 67° E	N 10° W	1·2	0·8	+0·4	37	+33	70	0	·513	+·003	0·2	−0·3	0	0·4	−0·4	0	0·23	−0·23	26·48	24·28	+2·20	0	Ambala.
31									(a)	S 55° E	0	0·8	−0·8			51	−10	·406	−·052	0·1	−0·9	0	0·4	−0·4	0	0·28	−0·28	21·10	23·32	−2·22	0	Ludhiana.
21	1			4	3	1	1		S 11° E	S 83° E	1·1	1·2	−0·1	17	+ 5	58	+ 1	·431	−·002	0·1	−0·4	0	0·4	−0·4	0	0·16	−0·16	10·39	15·93	−5·54	0	Lahore.
17	1	3	6	2			1	1	N 73° E	N 54° E	0·8	1·0	−0·2	27	− 5	62	+ 3	·437	+·003	0·3	−0·4	0	0·6	−0·6	0	0·19	−0·19	12·57	24·71	−12·14	0	Sialkot.
23	5	2						1	N 6° E	N 5° W	1·1	1·0	+0·1	23	+ 9	53	− 9	·344	−·047	0·7	−0·3	0	1·1	−1·1	0·11	0·39	−0·28	15·26	24·22	−8·94	0·09	Rawalpindi.
10		9	12						N 71° E	N 48° E	2·2	2·8	−0·6	62	+19	41	− 4	·326	−·025	0·3	0	1	0·2	+0·8	0·10	0·03	+0·37	8·26	10·38	−2·12	0·40	Khushab.
2	1	1	5	11	9	2			S 36° E	S 41° E	3·5	3·0	+0·5	66	+30	34	−12	·294	−·111	0·2	−0·4	0	0	0	0	0·02	−0·02	5·53	8·22	−2·69	0	Montgomery.
21	3	1		3	2	1			S 62° E	S 40° E	0·9	1·1	−0·2	7	−14	51	− 5	·427	−·035	0·3	−0·1	0	0·1	−0·1	0	0·01	−0·01	5·05	5·03	+0·02	0	Multan.
																																VII.—North-West Frontier Province.
29	1							1	N 24° W	S 40° W	0·9	1·7	−0·8	7	− 7	63	+ 7	·402	+·019	0·8	−0·1	1	0·4	+0·6	0·26	0·12	+0·14	4·28	5·62	−1·34	0·18	Peshawar.
25	2	4							N 31° E	N 34° E	0·6	0·8	−0·2	20	− 5	66	+ 9	·462	+·055	0·2	−0·3	0	0·1	−0·1	0	0·04	−0·04	5·80	6·09	−0·29	0	D. I. Khan.
																																VIII.—Sind.
29				1	1				S 24° E	N 41° E	0·6	1·5	−0·9	7	− 4	50	+ 8	·542	+·104	0	−0·3	0	0	0	0	0	0	1·16	2·40	−1·24	0	Jacobabad.
1	5			2	9	10		4	S 41° W	S 56° W	4·1	6·3	−2·2	43	+14	58	+ 5	·559	+·064	0·4	−0·2	0	0	0	0	0	0	4·73	6·24	−1·51	0	Hyderabad.
7	2	3		2		4	9	4	N 77° W	N 50° W	5·7	6·9	−1·2	37	+ 8	74	+ 8	·719	+·060	1·4	+0·2	0	0	0	0	0	0	3·17	6·19	−3·02	0	Karachi.
																																IX.—Rajputana.
6			1	4	6	6	7	1	S 34° W	S 48° W	2·8	3·6	−0·8	49	+ 2	45	− 2	·429	−·020	0·8	−0·1	2	0·3	+1·7	1·64	0·08	+1·56	6·71	10·28	−3·57	1·50	Bikaner.
14	1	6	1		4	4	1		S 41° E		1·3			7		42	+ 1	·381		1·0		2	0·2	+1·8	0·56	0·11	+0·45	17·12	12·51	+4·61	0·43	Jodhpur.
15	5	3					1	5	N 6° W	N 42° W	2·1*	2·3	−0·2	30	−17	47	− 3	·427	−·018	1·2	+0·1	0	0·5	−0·5	0	0·26	−0·26	29·05	22·44	+6·61	0	Jaipur.
24					1	2	3	1	S 72° W	S 82° W	1·7	2·0	−0·3	17	−12	58	− 1	·437	−·027	1·2	+0·2	1	0·5	+0·5	0·32	0·22	+0·10	13·15	19·60	−6·45	0·32	Ajmer.
28	1						1	1	N 45° W		0·9			10		46	− 1	·451		1·7		0	0·4	−0·4	0	0·31	−0·31	24·00	26·83	−2·83	0	Kotah.
																																X.—Bombay.
3	1	8	11	2			2	4	N 58° E	S 77° E	4·2	4·8	−0·6	49	+13	64	+14	·558	+·071	1·4	+0·1	1	0·3	+0·7	2·14	0·21	+1·93	23·49	23·56	−0·07	2·02	Deesa.
7	3	2				1	6	12	N 48° W	N 62° W	4·4	5·0	−0·6	59	+10	57	− 3	·573	−·032	3·0	+1·9	0	0·4	−0·4	0	0·24	−0·24	20·26	13·61	+6·65	0	Bhuj.
	1	14	2			1	6	7	N 1° E		5·8			49		62		·704		0·1		0	0	0	0	0·01	−0·01	29·90	18·86	+11·04	0	Jamnagar.
1	10	3		1	1	1	7	7	N 34° W		6·2			59		73	0	·736		1·9		0	0·1	−0·1	0	0·04	−0·04	22·71	13·70	+9·01	0	Dwarka.
3	3	3	3		1	1	5	7	N 9° W	N 5° W	4·5	4·2	+0·3	40	+ 1	61	− 6	·595	−·063	2·3	+1·1	1	1·0	0	0·15	0·39	−0·24	31·64	26·01	+5·63	0·12	Rajkot.
11	8	4	1				1	6	N 6° W	N 20° E	1·9	4·5	−2·6	49	−16	69	+ 3	·682	+·020	1·4	−0·9	0	0·5	−0·5	0	0·37	−0·37	27·83	17·48	+10·35	0	Veraval.
10	6	1	1				6	7	N 38° W	N 73° W	1·5	5·0	−3·5	48	+ 3	63	− 1	·627	−·023	2·9	+1·4	0	0·4	−0·4	0	0·24	−0·24	39·11	19·97	+19·14	0	Bhavnagar Para.
1	7	8	8	2	5				N 67° E	N 53° E	2·3	3·2	−0·9	53	+35	69	− 4	·736	+·018	2·0	0	1	1·9	−0·9	1·20	1·43	−0·23	53·90	40·73	+13·17	1·20	Surat.
4	2	11	2				2	10	N 2° E	N 8° E	3·0	2·4	+0·6	56	+23	51	− 5	·520	−·041	1·3	−0·4	0	0·5	−0·5	0	0·35	−0·35	38·21	29·20	+9·01	0	Ahmadabad.
	1	13	13	4					N 73° E	N 81° E	5·3*	6·6	−1·3	86	+18	82	0	·845	0	5·4	+2·0	2	2·5	−0·5	0·65	1·84	−1·19	50·43	71·23	−20·80	0·50	Bombay.
8	5	5	6	5	1			1	N 69° E	S 68° E	5·8	4·5	+1·3	43	+ 3	76	− 2	·804	−·001	5·7	+2·0	3	4·7	−1·7	1·12	3·71	−2·59	89·21	100·38	−11·17	0·56	Ratnagiri.
	4	11	12	1		1		2	N 57° E	N 80° E	4·2	3·0	+1·2	69	+13	85	0	·819	−·034	6·7	+2·7	8	6·3	+1·7	2·42	4·11	−1·69	110·00	96·77	+13·23	0·65	Goa.
10	3	7	7			1		3	N 44° E	S 67° E	4·6*	4·5	+0·1	43	+14	89	− 1	·870	−·020	5·8	+1·8	5	6·0	−1·0	1·45	3·91	−2·46	91·96	91·79	+0·17	0·40	Marmagao.
25	5				1				N	N 48° E	1·1	1·8	−0·7	13	−34	87	− 2	·814	+·001	4·1	+0·1	5	7·1	−2·1	3·94	5·64	−1·70	101·41	119·95	−18·54	1·50	Karwar.

* Uncorrected for scale error.

(a) Indeterminate.

Table

(2) Abstract of observations taken at 8 hrs. at 220 stations

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay—*concld.*																						
26	Malegaon	1,430	28·527	+·019	29·905	28·609	28th	28·429	1st	·180	78·4	95·0	+4·4	68·4	+2·6	81·7	+3·5	26·6	100·9	3rd	57·1	22nd	43·8
	Ahmadnagar	2,154	27·815	+·018	29·882	27·884	23th	27·733	1st	·151	76·5	91·1	+3·0	67·4	+2·8	79·3	+2·9	23·7	98·1	3rd	56·5	29th	41·6
	Poona	1,846	28·112	+·015	29·987?	28·191	28th	28·040	1st	·151	72·4	89·5	+1·0	67·2	+0·7	78·4	+0·9	22·3	97·0	3rd	55·8	31st	41·2
	Sholapur	1,590	28·350	+·011	29·878	28·433	28th	28·256	1st	·177	76·9	91·3	+1·4	69·9	+1·8	80·6	+1·6	21·4	98·3	2nd	60·1	29th, 30th & 31st	38·7
	Bijapur	*1,948*	27·990	+·010	29·866	28·058	28th	27·916	1st	·142	75·5	88·1	−0·1	68·9	+1·1	78·5	+0·5	19·2	93·2	2nd	59·3	29th	33·9
	Belgaum	2,539	27·399	+·008	29·847	27·455	28th	27·343	23rd	·112	72·5	82·4	−0·7	65·6	+0·6	74·0	−0·1	16·8	86·3	28th	57·0	29th & 30th.	29·3
	XI—Central India.																						
20	Neemuch	1,624	28·331	+·020	29·910	28·422	28th	28·192	1st	·230	75·5	91·9	+1·5	63·1	−1·4	77·5	+0·1	28·8	96·4	3rd	55·0	25th	41·4
	Indore	1,823	28·138	+·030	29·902	28·222	28th	28·024	1st	·198	77·5	90·5	+2·6	63·2	−0·4	76·8	+1·1	27·3	93·1	3rd	54·6	22nd & 29th	38·5
21	Nowgong	754	29·196	+·037	29·925	29·280	19th	29·042	1st	·238	71·1	87·4	−2·9	63·1	−2·0	75·2	−2·5	24·3	90·0	3rd & 27th,	55·5	30th	34·5
	Sutna	1,041	28·903	+·036	29·921	28·984	28th	28·750	1st	·234	71·3	88·8	+0·9	63·9	−1·8	76·4	−0·5	24·9	91·3	10th, 13th & 14th.	56·7	27th & 28th.	34·6
	XII.—Central Provinces.																						
22	Buldana	2,132	27·835		29·877	27·914	28th	27·737	1st	·177	78·8	89·5		69·3		79·4		20·2	92·9	3rd	63·6	28th	29·3
	Akola	925	29·025	+·027	29·903	29·105	28th	28·919	1st	·186	78·6	95·3	+4·0	67·5	+1·3	81·4	+2·7	27·8	97·7	3rd	55·0	29th	42·7
	Amraoti	1,215	28·749*	+·043*	29·888*?	28·815	19th	28·651	1st	·164	78·1	91·5	+0·8	69·4	+1·2	80·5	+1·1	22·1	93·8	3rd & 4th,	61·3	28th	32·5
23	Khandwa	1,041	28·911	+·032	29·916	28·994	28th	28·792	1st	·202	77·2	94·0	+2·9	65·9	−0·4	80·0	+1·3	28·1	96·7	16th	53·1	30th	43·6
	Hoshangabad	1,006	28·960	+·030	29·936	29·028	28th	28·818	1st	·210	72·2	90·6	+1·0	65·0	−1·9	77·8	−0·5	25·6	96·1	2nd	56·9	29th	39·2
	Saugor	1,807	28·1391	+·022‡	29·891‡?	28·222	19th	27·995	5th	·227	76·8	89·6	+2·0	66·3	+0·6	77·9	+1·3	23·3	94·3	11th	60·1	28th	34·2
	Jubbulpore	1,327	28·605	+·016	29·907	28·692	28th	28·460	1st	·232	70·1	88·8	+1·4	62·6	−1·4	75·7	0	26·2	91·8	10th	53·8	28th	38·0
	Seoni	2,033	27·933	+·038	29·906	28·004	28th	27·802	1st	·202	75·3	86·9	+0·3	63·1	−1·1	75·0	−0·4	23·8	89·6	4th & 10th,	56·5	21st, 26th & 29th.	33·1
	Nagpur	1,017	28·932	+·038	29·907	29·009	28th	28·809	1st	·200	76·2	91·6	+1·5	67·8	−0·6	79·7	+0·5	23·8	91·6	3rd	57·8	27th	36·8
24	Pendra	2,123?	27·914		29·900	27·994	20th	27·778	1st	·216	74·2	85·6		63·8		74·7		21·8	87·8	4th, 5th & 14th,	57·2	21st	30·6
	Raipur	970	28·972	+·030	29·903	29·057	28th	28·839	1st	·218	75·0	89·6	+1·4	69·4	−0·3	79·5	+0·5	20·2	91·7	2nd, 5th & 14th.	60·6	27th	31·1
	Chanda	*634*	29·297	+·015	29·884	29·372	28th	29·177	1st	·195	76·6	91·4	+1·3	66·5	−2·0	79·0	−0·3	24·9	95·0	17th	57·5	29th	37·5
	Jagdalpur	1,813	28·1251		29·886‡	28·202	28th	27·971	31st	·231	73·7	87·0		66·5		76·7		20·5	91·2	2nd & 3rd.	57·1	29th	34·1
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	28·066	+·003	29·887	28·141	28th	27·969	1st	·172	79·8	92·5	+2·0	69·6	+3·4	81·0	+2·7	22·9	95·5	3rd	58·7	22nd & 29th.	37·2
	Nizamabad	1,248	28·684		29·876	28·764	28th	28·582	1st	·172	77·5	91·9	+3·0	68·4	+0·1	80·1	+1·5	23·5	95·4	1st & 2nd.	55·7	29th	39·7
	Bidar	*2,165*									79·3	86·6		69·6		78·1		17·0	90·5	3rd	64·4	31st	26·1
28	Gulbarga	1,503	28·447	+·020	29·889	28·531	28th	28·343	1st	·188	77·1	91·8	+1·8	69·7	+0·7	80·8	+1·3	22·1	95·5	2nd, 5th & 7th.	57·3	29th	38·2
	Raichur	*1,311*	28·622	+·021	29·874	28·690	28th	28·529	1st	·161	78·1	90·5	+1·5	72·1	+0·1	81·4	+0·8	18·4	94·5	16th	63·1	30th & 31st.	31·4
	Hyderabad (Deccan)	1,690	28·242	+·013	29·867	28·314	28th	28·158	1st	·156	75·8	89·4	+1·8	69·6	+1·5	79·5	+1·7	19·8	93·3	3rd	59·2	29th	34·1
	Hanamkonda	877	29·055	+·010	29·879	29·128	28th	28·952	31st	·176	79·0	90·1	0	70·9	−0·2	80·5	−0·1	19·2	92·5	3rd & 17th.	62·2	29th	30·3
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·543	+·005	29·855	27·600	9th	27·493	22nd & 23rd.	·107	73·5	83·8	−0·8	68·2	+0·4	76·0	−0·2	15·6	87·1	2nd, 5th & 17th.	62·8	30th	24·3
	Hassan	3,149	26·845	+·017	29·867	26·898	9th	26·780	22nd	·118	69·8	80·4	−0·9	64·9	+0·6	72·7	−0·1	15·5	83·9	17th	56·3	30th	27·6
	Bangalore	3,021	26·962	+·006	29·859	27·021	9th	26·901	30th	·120	70·3	81·1	−0·3	65·5	+0·3	73·3	0	15·6	84·8	8th	58·3	30th	28·5
	Mysore	2,518	27·445	+·001	29·865	27·499	9th	27·367	22nd	·132	72·5	83·1	−1·0	67·0	0	75·1	−0·5	16·1	86·0	8th	59·0	30th	27·0

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

* Mean of 28 days.
‡ " " 30 "

B—*continued.*

in India, etc., in October, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct., 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period, 1st May to 31st Oct., 1912.	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	56	57
																																X.—Bombay—*concld.*
15	1	2	1	1	1	4	4	2	S 82° W	N 61° W	3·5	4·2	−0·7	17	−22	59	−4	·581	+·001	1·3	−1·8	3	2·6	+0·4	1·54	1·95	−0·41	12·58	21·71	−9·13	1·01	Malegaon.
7	5	3	2	4	1	1		8	N 4° E	N 36° E	3·9	5·8	−1·9	127	−5	57	−11	·518	−·082?	2·7	0	6	3·0	+3·0	2·74	1·89	+0·85	9·82	20·50	−10·62	0·97	Ahmadnagar.
18							13		W	S 69° E	6·2	4·6	+1·6	42	+35	79	+8	·622	+·021	1·0	−2·9	10	5·1	+4·9	8·05	3·88	+4·17	21·58	25·47	−3·89	3·12	Poona.
2	2	11	4	2			1	9	N 21° E	N 68° E	8·2	6·0	+2·2	53	+30	67	+4	·625	+·044	4·0	−0·4	7	4·5	+2·5	4·27	3·41	+0·86	14·72	27·28	−12·56	1·54	Sholapur.
15	1	6		4		1	2	2	N 34° E	N 77° W	3·7	2·9	+0·8	13	+5	71	−3	·635	−·025	3·5	−0·5	9	4·5	+4·5	3·81	3·04	+0·77	12·00	18·56	−6·56	0·72	Bijapur.
11	2	6	6	3	1	1	1		N 77° E	N 53° E	6·3	7·0	−0·7	37	+19	80	0	·636	+·011	5·4	+0·9	8	7·8	+0·2	3·20	5·03	−1·83	69·24	45·65	+23·59	1·02	Belgaum.
																																XI.—Central India.
18			2		3	3	5		S 45° W	N 2° E	2·8	4·4	−1·6	27	+9	49	0	·425	−·030	2·4	+1·3	0	0·7	−0·7	0·01	0·32	−0·21	23·44	27·65	−4·21	0·01	Neemuch.
18	2	3	1	1	1		1	4	N	N 18° E	1·0	1·6	−0·6	17	−8	48	−14	·459	−·083	1·1	−0·3	1	1·9	−0·9	0·30	1·08	−0·78	25·83	31·75	−5·92	0·25	Indore.
14	1	1			1	3	11		S 84° W	S 67° W	1·8	1·1	+0·2	40	+15	74	+5	·575	+·008	1·2	−0·6	0	1·5	−1·5	0	1·11	−1·11	43·60	40·88	+2·72	0	Nowgong.
20						1	10		S 86° W	N 27° W	0·9	2·8	−1·9	37	−12	76	+10	·596	+·026	0·8	−0·8	0	2·2	−2·2	0	2·24	−2·24	39·36	41·45	−2·09	0	Sutna.
																																XII—Central Provinces.
	2	4	5	7	2	1	4	6	N 76° E		4·0	3·8	+0·2	13		48		·468		1·6		1	2·8	−1·8	0·76	2·25	−1·49	20·90	32·98	−12·08	0·76	Buldana.
3	1	7	8	3	2	3	2	2	N 83° E	N 53° E	4·0	2·6	+1·4	31	+13	50	−14	·504	−·066	3·2	+0·7	0	2·6	−2·6	0·08	2·08	−2·00	18·88	30·58	−11·70	0·06	Akola.
4	1	10	11		1		2	2	N 60° E	N 63° E	3·9	2·8	+1·1	56	+24	56	−5	·540	−·022	3·3	+0·8	0	2·5	−2·5	0·03	1·93	−1·90	21·44	31·54	−10·10	0·03	Amraoti.
6		3	4	5	1	4	3	5	S 11° E	N 2° E	1·7	2·3	−0·6	5	−6	53	−9	·507	−·034	1·9	0	0	1·9	−1·9	0	1·07	−1·07	15·74	28·62	−12·88	0	Khandwa.
		15	4	4	2	6			N 84° E	N 79° E	1·4	1·2	0	43	+25	65	−6	·523	−·066	3·2	+1·1	0	2·0	−2·0	0	1·33	−1·33	37·33	47·19	−9·86	0	Hoshangabad.
4		4	4	3	4	5	7		S 14° W	S 27° W	2·6	2·3	+0·3	23	+9	48*	−12	·442*	−·068	1·6	+0·1	0	1·8	−1·8	0	0·98	−0·99	31·86	43·63	−11·77	0	Saugor.
13		1	1	7	8	1			S 25° E	S 27° E	0·9	1·4	−0·5	46	+10	72	−3	·540	−·066	1·1	−0·9	0	2·2	−2·2	0	1·63	−1·63	40·38	52·65	−12·27	0	Jubbulpore.
12	6	7	2	1	1		1	1	N 32° E	N 9° E	1·9	2·0	−0·1	40	+17	55	−11	·483	−·082	1·1	−1·2	0	2·9	−2·9	0·03	1·76	−1·73	42·32	49·08	−6·76	0·03	Seoni.
6	8	11	2					4	N 21° E	N 7° E	2·2	2·8	−0·6	69	+40	56	−9	·556	−·039	2·4	−0·4	0	2·8	−2·8	0	1·92	−1·92	45·72	46·09	−0·37	0	Nagpur.
10	8	1				1		11	N 26° W		1·6			59		57		·486		2·5		0	2·9	−2·9	0·04	2·46	−2·42	35·61	45·61	−10·00	0·04	Pendra.
6	7	10	3			1	2	2	N 21° E	N 27° E	1·5	2·8	−1·3	52	+35	71	−1	·618	−·036	1·5	−1·9	1	3·3	−2·3	0·53	1·99	−1·46	45·07	47·14	−2·07	0·50	Raipur.
28	1		1				3		N 63° W	N 14° E	1·0	1·7	−0·7	7	−11	74	+2	·694	+·031	1·0	−1·6	1	2·6	−1·6	0·13	1·69	−1·56	41·87	50·00	−8·13	0·13	Chanda.
11	9	3		2	1	1	1	3	N 2° W		2·6			33		80		·672		1·9		4			1·97			51·94			0·92	Jagdalpur.
																																XIII—Hyderabad.
1	4	5	9	8		1	1	2	N 80° E		7·0			49		50	−6	·504		3·7		2	2·6	−0·6	1·20	1·70	−0·50	15·84	26·66	−10·82	0·99	Aurangabad.
26	1		2	1		1			S 79° E		2·5			6		65	−8	·615		2·7		0	2·5	−2·5	0	1·75	−1·75	30·93	38·10	−7·17	0	Nizamabad.
9	1	6	1	10		1		3	S 3° E		5·3			28		62		·629		5·1		2	3·6	−1·6	1·55	3·07	−1·52	29·10	33·94	−4·84	1·42	Bidar.
4	2	8	11	1	2		1	2	N 67° E	N 72° E	5·8	6·1	−0·3	53	+30	61	−9	·572	−·071	1·6	−2·0	3	3·6	−0·6	2·05	3·06	−1·01	23·53	30·60	−7·07	1·06	Gulbarga.
	2	9	5	4	1	2	4	4	N 45° E	S 79° E	4·6	5·3	−0·7	27	+21	70	−1	·684	+·011	4·4	+1·0	4	3·6	+0·4	1·11	3·25	−2·14	16·49	26·31	−9·82	0·31	Raichur.
30		1							N 45° E	S 68° E	1·8	2·8	−1·0	3	−5	71	−4	·632	−·036	3·6	0	3	4·5	−1·5	0·53	3·23	−2·70	20·26	28·11	−7·85	0·23	Hyderabad (Deccan).
29	2			2	2	1		4	N 72° W		2·7			7		69	−1	·694		3·2		1	3·2	−2·2	0·28	1·90	−1·62	23·31	32·01	−8·70	0·28	Hanamkonda.
																																XIV.—Mysore.
4		4	6	4		4	5	4	E	S 45° W	2·8	4·1	−1·3	3	−11	78	+2	·647	+·002	6·0	−0·1	10	6·8	+3·2	7·65	4·53	+3·12	27·52	21·46	+6·06	2·06	Chitaldrug.
6	1	4	7	2	1	2	5	3	N 56° E	N 53° E	3·2	1·8	+1·4	10	−13	85	+3	·621	−·005	7·5	+0·4	16	9·7	+6·3	14·29	6·99	+7·30	36·44	29·67	+6·77	2·35	Hassan.
	2	6	7	1		2	11	2	N 20° W	N 1° E	4·1	3·4	+0·7	20	+17	86	+3	·637	+·010	7·1	+1·0	11	9·4	+1·6	5·91	6·28	−0·37	39·89	29·91	+9·98	1·51	Bangalore.
	3	5	5	1	1	6	5	2	N 34° W	S 72° W	4·4	5·2	−0·9	7	−11	82	−1	·658	−·001	8·1	+1·1	11	9·5	+1·5	6·24	7·04	−0·80	23·21	25·64	−2·43	1·40	Mysore.

* Mean of 29 days.

Table

(2) Abstract of observations taken at 8 hrs. at 220 stations

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of between mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras.																						
30	Mangalore	65	29·869	−·009	29·865	29·936	8th	29·805	22nd	·131	78·9	85·6	−1·2	74·5	+0·6	80·0	−0·3	11·1	88·3	19th	69·9	30th	18·4
	Calicut	27	29·902	−·013	29·858	29·971	8th	29·849	21st	·122	77·7	83·8	−2·4	74·9	+0·4	79·3	−1·0	8·9	86·8	28th	68·1	30th	18·7
	Cochin	9	29·929	−·006	29·866	29·987	8th & 10th.	29·873	21st	·114	78·4	85·4	−0·8	74·8	+0·2	80·1	−0·3	10·6	88·7	28th	71·7	2nd	17·0
	Trivandrum	198	29·745*	+·005*	29·874*	29·807	8th	29·681	30th	·126	77·5	83·1	+0·4	74·7	+1·9	78·9	+1·1	8·4	85·5	4 days	72·0	7th	13·5
31	Pamban	37	29·870	−·011	29·835	29·918	8th	29·810	5th	·108	80·9	87·7	+0·6	77·3	0	82·5	+0·3	10·4	92·2	11th	74·8	20th	17·4
	Madura	447	29·479	+·015	29·830	29·532	11th	29·423	5th	·109	79·9	89·8	−1·5	74·7	+0·7	82·2	−0·4	15·1	95·0	6th	71·1	26th	23·9
	Pudukkottai	318	29·606		29·857	29·655	28th	29·558	5th, 21st & 30th.	·097	79·1	88·7		73·9		81·3		14·8	94·5	1st	66·4	26th	28·1
	Negapatam	31	29·872	−·011	29·832	29·933	11th	29·803	5th	·130	80·7	87·7	−0·7	75·6	−0·3	81·6	−0·5	12·1	94·2	11th	71·2	31st	23·0
	Trichinopoly	255	29·670	+·006	29·859	29·726	13th	29·603	5th	·123	79·7	90·0	−1·0	74·4	+0·1	82·2	−0·5	15·6	96·1	5th	71·3	30th & 31st.	24·8
	Coimbatore	1,341	28·574*	−·011*	28·853*	28·626	10th	28·514	30th	·112	75·2	85·4	−2·9	69·5	−1·1	77·5	−2·0	15·9	90·0	1st	63·3	30th & 31st.	26·7
	Salem	940	29·017	+·010	29·896	29·073	13th	28·966	22nd	·107	77·5	88·8	−0·8	72·0	+0·9	80·4	+0·1	16·8	93·0	18th	64·3	30th	28·7
	Cuddalore	37	29·879	+·006	29·846	29·947	28th	49·787	30th	·160	79·6	87·9	−0·2	75·3	+0·6	81·6	+0·2	12·6	91·3	8th	68·2	31st	26·1
	Vellore	707	29·209		29·857	29·267	28th	29·138	5th	·129	77·9	88·1		72·2		80·2		15·9	94·2	1st	65·0	31st	29·2
	Madras	22	29·891	−·003	29·845	29·958	10th	29·779	30th	·179	81·2	90·5	+1·5	75·6	+0·5	83·0	+1·0	14·9	98·5	8th	68·5	31st	30·0
32	Cuddapah	433	29·483	+·001	29·855	29·548	28th	29·421	31st	·127	79·6	91·5	−0·4	73·2	−1·0	82·4	−0·7	18·3	97·2	3rd, 8th & 10th.	62·8	31st	34·4
	Bellary	1,475	28·447	+·004	29·861	28·569	28th	28·367	1st	·142	76·6	90·2	+0·5	71·6	+0·5	80·9	+0·5	18·6	95·0	16th	62·3	29th	31·7
	Kurnool	923	28·991	+·001	29·858	29·061	28th	28·927	1st	·134	77·6	92·0	+1·1	72·9	+1·9	82·4	+1·5	19·1	96·2	16th & 17th	62·6	29th & 30th.	33·6
33	Nellore	66	29·840	+·005	29·841	29·928	28th	29·739	30th	·189	80·6	?	?	75·2	−0·6	?	?	?	?	?	70·1	29th	?
	Masulipatam	15	29·906	+·018	29·856	29·984	28th	29·753	31st	·231	80·8	89·1	+0·2	75·9	−0·1	82·5	+0·1	13·2	93·8	1st & 9th	71·2	23rd & 29th.	22·6
	Cocanada	26	29·898	+·019	29·861	29·957	11th	29·683	31st	·304	81·0	88·6	+0·7	75·9	+0·1	82·3	+0·4	12·7	93·7	9th	70·6	23rd, 28th & 29th.	23·1
	Waltair (Vizag.)	*226*	29·697	+·019	29·864	29·788	11th	29·432	31st	·356	81·4	87·5		76·8		82·1		10·7	90·1	6th & 17th	71·4	21st & 28th.	18·7
	Calingapatam	19	29·903		29·861	29·960	11th	29·642	31st	·348	79·9	89·3		76·2		82·7		13·1	93·8	16th	67·8	28th	26·0
	Gopalpur	72	29·892	+·023	29·866	29·983	11th	29·676	31st	·307	78·9	89·0	+1·4	74·8	+0·6	81·9	+1·0	14·2	93·2	16th	68·0	28th & 29th.	25·2
	Bay Islands.																						
1	P. V. Fraser	8	29·911		29·863	30·020	11th	29·735	31st	·285	83·8												
	Port Blair	58	29·869	+·009	29·857	29·937	8th	29·788	4th	·149	79·7	85·8	−1·1	76·0	−1·3	80·9	−1·2	9·8	83·2	6 days	67·5	27th	20·7
	Slipper Island	90	29·834		29·859	29·911	10th	29·722	5th	·189	81·6	85·9		78·2		82·0		7·7	88·1	14th & 15th	74·1	31st	14·0
	Kashmir.																						
13	Muzaffarabad	2,475	27·563		30·074	27·725	17th	27·319	1st	·406	58·5	86·3		52·7		69·5		33·6	94·1	2nd	49·9	24th & 30th.	44·2
	Srinagar	5,204	24·985	0	24·956	25·107	13th	24·827	1st	·280	47·1	73·4	+3·7	39·2	−0·6	56·3	+1·5	34·2	81·1	2nd	33·1	20th, 21st & 26th.	48·0
	Gulmarg †	*8,569*	21·922		21·890	21·975	10th	21·861	1st	·114	48·7	65·3		36·2		50·7		29·1	68·7	1st	33·3	6th & 10th.	35·4
	Dras	*10,059*	20·908	+·024	20·876	20·995	21st	20·793	4th	·202	35·6	56·0		26·1		41·1		29·9	68·0	5th	21·0	21st, 26th & 30th.	47·0
	Leh	*11,503*	19·809	+·029	19·777	19·900	21st	19·729	8th	·171	40·8	60·6	+2·0	30·7	+0·8	45·6	+1·4	29·9	72·9	2nd	25·0	30th	47·9
	Skardu	*7,505*	22·997	+·035	22·967	23·115	19th & 21st.	22·846	5th	·269	47·4	67·3	+0·9	40·8	−0·8	54·0	+0·1	26·5	79·5	2nd	33·6	22nd & 31st.	45·9
	Gilgit	4,890	25·271		25·244	25·416	21st	25·072	1st	·344	58·1	77·0	+3·1	52·3	−0·8	64·7	+1·1	24·7	89·2	1st	46·2	20th & 31st.	43·0

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 30 days. † Mean of 10 days.

B—*continued.*

in India, etc., in October, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct., 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period, 1st May to 31st Oct., 1912.	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	56	57
																																XV.—Madras.
3	3	2	19	2		1		1	N 81° E	S 89° E	3·6	1·6	+2·0	66	+26	85	− 2	·816	+·002	6·0	+0·1	14	9·8	+ 4·2	16·93	6·91	+10·02	142·38	122·13	+20·25	2·81	Mangalore.
16	1	2	2	7		2		1	S 62° E	N 76° E	2·7	5·4	−2·7	23	−21	91	+ 5	·867	+·031	7·0	+1·3	16	10·9	+ 5·1	12·41	9·70	+ 2·71	133·53	105·14	+27·39	2·53	Calicut.
5	2	7	12	3				2	N 71° E	N 31° E	4·5*	3·2	+1·3	62	+ 8	87	+ 2	·841	−·010	7·1	+1·4	21	13·0	+ 7·0	26·15	13·06	+13·09	134·25	97·26	+36·99	5·81	Cochin.
15	9	2					1	4	N 10° W	N 14° W	2·7*	3·7	−1·0	43	− 5	86	+ 2	·810	0	8·3	+1·5	21	11·9	+ 9·1	20·90	10·49	+10·41	73·00	47·21	+25·79	5·95	Trivandrum.
9	3	6	1	3	5	1	2	1	N 89° E	S 68° W	5·2	6·3	−1·1	13	− 9	82	+ 2	·860		4·3		10	9·7	+ 0·3	7·75	9·65	− 1·90	11·06	13·01	− 1·95	4·35	Pamban.
5	3	5	2				8	8	N 84° W	N 14° W	2·9	1·8	+1·1	49	−12	82	+ 8	·827	+·071	7·2	+1·4	15	10·8	+ 4·2	7·26	8·51	− 1·25	25·04	24·13	+ 0·91	1·24	Madura.
2	8	3			2	1	15		N 30° W		3·9			71		80		·789		7·6		15	9·0	+ 6·0	14·17	5·60	+ 8·57	26·64	23·60	+ 3·04	2·20	Pudukkottai.
	1	8			2	5	11	4	N 71° W	N 85° W	6·6	3·1	+3·2	43	+ 3	81	0	·847	−·015	6·1	−0·3	14	10·1	+ 3·9	7·92	10·84	− 2·92	13·79	23·35	− 9·56	1·14	Negapatam.
10	2	2				3	13	1	N 82° W	N 77° W	1·7*	2·8	−1·1	48	+12	82	+ 2	·821	+·018	5·5	−0·8	13	9·5	+ 3·5	8·43	7·15	+ 1·28	21·15	21·80	− 0·65	2·27	Trichinopoly.
16	1	2	1		4	5	1	1	S 33° W	S 4° E	3·0	2·0	+1·0	17	− 8	89	+ 2	·777	+·003	5·5	−0·2	13	9·9	+ 3·1	7·37	6·63	+ 0·74	16·14	14·68	+ 1·46	1·61	Coimbatore.
18		2	2				9		N 76° W	S 40° W	1·8	1·8	0	20	+ 9	83	+ 2	·785	+·004	6·8	+0·9	11	10·2	+ 0·8	6·88	6·66	+ 0·22	26·38	32·35	− 5·97	1·44	Salem.
5	4	1	1			8	5	7	N 74° W	N 69° W	3·3	1·6	+1·7	49	+ 2	87	− 1	·887	−·022?	6·2	+0·2	14	10·7	+ 3·3	11·66	11·62	+ 0·04	27·34	28·47	− 1·13	3·46	Cuddalore.
27							4		W		1·5			13		86		·818		4·0		12	7·5	+ 4·5	11·10	6·98	+ 4·12	21·09	32·34	− 9·25	2·05	Vellore.
5	4	1			4	3	7	7	N 75° W	N 83° W	3·5*	3·5	0	43	+11	83	0	·884	+·011	5·0	−0·7	10	10·6	−0·6	11·00	11·27	− 0·27	21·75	28·42	− 6·67	4·44	Madras.
2	4		3	4	2	3	3	10	N 57° W	N 72° E				27	+ 5	77	+ 2	·787	+·009	4·2	−0·7	5	6·4	− 1·4	2·95	5·08	− 2·13	18·03	26·25	− 8·17	1·01	Cuddapah.
4	2	3	3	4	2	1	5	7	N 38° W	N 62° W	2·3	3·1	−0·8	13	+ 6	75	+ 7	·688	+·053	4·5	−1·2	8	6·4	+ 1·6	6·65	3·98	+ 2·67	18·46	16·67	+ 1·79	2·12	Bellary.
10	1	1	2	4	1	4	6	2	S 53° W	N 66° W	2·5*			20	+13	73	0	·693	−·014	3·7	−0·4	4	4·9	− 0·9	1·52	3·30	− 1·78	17·03	24·28	− 7·25	0·55	Kurnool.
7	5	4			5	1	1	8	N 31° W	N 68° W	2·5*	3·2	−0·7	33	+15	80	− 1	·838	−·042	5·9	+0·4	9	8·1	+ 0·9	14·42	8·32	+ 6·10	30·94	21·05	+ 9·89	5·99	Nellore.
5	8	3	2	1	1		1	10	N 12° W	N 1° E	3·5	3·4	+0·1	49	+ 9	83	− 1	·866	−·016	4·3	−0·9	9	8·4	− 0·6	10·25	7·96	+ 2·29	40·66	32·44	+ 8·22	3·80	Masulipatam.
10	3	12					1	5	N 15° E	N 11° W	4·2	5·5	−1·3	53	− 8	78	+ 1	·836	+·036	5·1	+0·3	7	8·2	− 1·2	3·80	7·99	− 4·19	24·22	31·13	− 6·91	1·35	Cocanada.
1	5	12				8	4	1	N 13° W	N 74° W	4·9			30	−15	74	− 1	·789	−·021	5·7	+0·9	7	6·7	+ 0·3	3·50	6·45	− 2·95	28·35	30·08	− 1·73	0·94	Waltair (Vizag.).
2	14	3	1				1	10	N 12° W		5·9			79		84		·849		3·5		4	4·8	− 0·8	4·21	4·43	− 0·22	64·42	29·15	+35·27	2·23	Calingapatam.
2	12	11		1	2	2		1	N 21° E	N 23° W	4·0	5·8	−1·8	56	−19	85	+ 3	·835	+·016	3·4	−1·1	3	6·9	− 3·9	3·33	8·29	− 4·96	33·93	38·42	− 4·49	2·52	Gopalpur.
																																Bay Islands.
	3	12	2		3	7	2	2	N 22° E					19		77		·889		4·3		4			4·59			30·71			2·40	P. V. Fraser.
10	1		1	1	6	3	3	6	S 64° W	S 68° W	7·2	4·6	+2·6	30	+12	87	− 2	·889	−·016	5·5	−0·9	13	15·4	+ 2·6	12·51	10·89	+ 1·65	86·95	96·07	− 9·12	2·42	Port Blair.
2	3	1	6	5	9	4	1		S 29° E		5·8			46		83		·897		4·5		11	10·3	+ 0·7	7·07	6·53	+ 0·54	71·63	70·38	+ 1·25	3·20	Slipper Island.
																																Kashmir.
2		3	1	10	1	13		1	S 1° E					46		71		·314		0		2			1·28			36·79			1·00	Muzaffarabad.
14		1	1	6	4	3	1	1	S 14° E	S 51° E	1·5	2·2	−0·7	30	+ 8	78	−10	·257	−·025	1·0	−1·4	1	2·5	− 1·5	0·24	1·08	− 0·84	7·53	12·54	− 5·01	0.18	Srinagar.
9								1	N 45° W		4·1			10		56		·195		0·4		0			0			13·79†			0	Gulmarg.
30							1		W		3·0			3		69	0	·141		0·6		1	1·4	− 0·4	0·25	0·42	− 0·17	5·88	6·82	− 0·94	0·24	Dras.
30					1				S	S 83° W	2·8	1·5	+1·3	3	−10	41	−12	·103	−·019	0·9	−1·5	0	0·1	− 0·1	0	0·17	− 0·17	1·24	1·82	− 0·58	0	Leh.
26		1	1	1	2				S 6° E		2·5			10		53	−16	·168		1·9		0	0·1	− 0·1	0·08	0·06	+ 0·02	4·01	3·73	+ 0·28	0·07	Skardu.
26					4	1			S 53° W		0·4			17		57‡	+10	·274‡	+·046	1·4	−2·0	0	0·6	− 0·6	0	0·25	− 0·25	1·75	3·00	− 1·25	0	Gilgit.

† Rainfall from 3rd May to 10th October 1912. * Uncorrected for scale error. ‡ Mean of 26 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 220 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Baluchistan.																						
15	Fort Sandeman		25·496		25·465	25·577	17th	25·395	4th	·182	61·6	84·4		49·9		67·2		34·5	90·4	4th	42·1	26th	48·3
	Quetta	5,502	24·757	+·029	24·717	24·819	18th	24·644	1st	·175	53·6	76·5	+1·9	37·7	—0·6	57·1	+0·7	38·8	81·1	3rd	33·7	14th & 18th.	47·4
	Chaman	4,311	25·801	+·002	25·763	25·869	13th	25·668	1st	·201	65·8	80·2	+1·4	52·5	—0·4	66·3	+0·5	27·7	85·8	1st, 2nd & 3rd.	45·8	15th	40·0
	Kalat	6,630	23·836		23·798	23·889	18th	23·744	1st	·145	39·3	72·8		27·1		50·4		46·7	79·0	3rd	22·7	15th	56·3
	Dalbandin	2,779	27·213		29·955	27·317	13th	27·081	1st	·236	66·1	91·1		53·2		72·2		37·9	97·8	29th	45·8	14th	52·0
	Pasni		29·943		29·903	30·022	18th	29·828	1st	·194	73·3	90·9		69·8		80·4		21·1	100·5	17th	65·0	24th	35·5
	Panjgur		26·818		26·776	26·902	13th	26·703	1st	·199	58·5	84·9		55·1		70·0		29·8	90·8	1st	49·0	14th & 15th.	41·8
	Robat		26·863		26·821	26·985	11th	26·723	4th	·262	68·3	91·7		61·1		76·4		30·6	99·0	1st	50·8	14th	48·2
	Hill Stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*																					
	Para Chinar	6,000	24·539		24·515	24·628	17th	24·407	5th	·221	61·7	75·8		48·2		62·0		27·6	82·7	3rd	44·1	26th & 31st.	38·6
	Cherat	*4,956*	25·802	+·049	25·770	25·905	11th	25·665	1st	·240	66·1	78·0	—0·6	57·0	—0·2	67·5	—0·4	21·0	86·2	1st & 2nd	46·9	12th	39·3
	Drosh				?						57·4	81·2		54·3		67·8		26·9	88·7	1st	49·1	13th	39·6
	Murree	6,323	23·938	+·019	23·906	24·009	20th	23·836	1st	·173	57·7	68·9	—0·4	55·6	+2·3	62·3	+0·9	13·3	75·1	1st	49·2	12th & 28th,	25·9
	Simla	7,232	23·204	+·034	23·166	23·283	11th	23·110	1st	·173	55·9	63·5	+1·1	51·9	+0·9	57·7	+1·0	11·6	68·9	2nd	47·9	25th	21·0
	Sarain		23·239		23·201	23·311	11th	23·140	1st	·171	45·7	63·9		42·6		53·3		21·3	70·6	2nd	36·6	17th	34·0
	Kalabagh		20·195		20·157	20·274	11th	20·125	26th	·149	41·9	49·2		36·0		42·6		13·2	58·8	2nd	32·1	16th, 19th & 25th.	26·7
	Chakrata	7,022	23·382	+·042	23·342	23·472	11th	23·283	5th	·189	56·4	68·2	+2·0	50·4	—0·5	59·3	+0·7	17·8	71·7	1st	45·7	18th & 21st,	26·0
	Mukteswar	7,592	22·922	+·002	22·881	23·004	11th	22·828	5th	·176	56·0	66·3	+0·1	48·7	—1·3	57·5	—0·6	17·6	71·5	1st, 2nd & 7th.	43·0	31st	28·5
	Darjiling	7,376	23·083	—·008	23·038	23·171	20th	22·987	1st & 4th.	·154	56·1	62·8	+2·3	50·5	+0·7	56·7	+1·5	12·3	66·8	14th	44·2	26th	22·6
	Shillong	4,920	25·209		25·161	25·292	20th	25·096	1st	·196	62·4	70·9		54·9		62·9		16·0	73·9	4 days	48·2	30th	27·7
	Cherrapunji	4,309	25·763		25·714	25·837	19th	25·626	1st	·211	66·3	71·4		59·8		65·6		11·6	77·2	22nd	52·6	23rd	24·6
	Maymyo	3,545	26·503	+·036	26·448	26·581	31st	26·354	1st	·227	66·3	75·0	—1·9	61·5	+2·0	68·2	+0·1	13·5	79·5	3rd, 13th & 14th.	56·6	29th	22·9
	Pachmarhi	3,528	26·526	+·034	26·473	26·580	13th	26·409	1st	·171	71·1	80·3	+2·2	57·6	—2·1	68·9	+0·1	22·7	82·0	4 days	50·1	22nd & 29th.	31·9
	Mount Abu	3,945	26·138	+·026	26·088	26·218	28th	26·046	1st	·172	71·4	79·4	+0·6	64·3	0	71·8	+0·3	15·1	82·2	1st & 2nd	60·9	6th	21·3
	Mercara	3,781	26·230	—·006	26·163	26·291	9th	26·167	22nd	·124	65·9	75·4	—0·4	62·4	+0·2	68·9	—0·1	13·0	78·5	15th, 26th & 27th.	55·0	30th	23·5
	Ootacamund	*7,397*	23·069		23·005	23·122	9th	23·002	30th	·120	57·2	64·6		50·6		57·6		14·0	69·0	25th	39·2	30th	29·8
	Kodaikanal	7,688	22·836	—·007	22·771	22·890	8th	22·763	30th	·127	55·9	62·1	—0·6	51·7	+0·4	56·9	—0·1	10·4	66·0	11th & 18th.	46·5	31st	19·5
	Extra India.																						
	Singapore (a)	10	29·935		29·866	30·039	8th	29·828	17th	·211	82·0	87·5		75·1		81·3		12·4	90·6	18th	72·6	31st	18·0
	Penang (a)	20	29·900		29·845	29·985	8th	29·807	27th	·178	81·5	88·1		74·0		81·1		14·1	90·5	28th	73·0	9 days	17·5
	Trincomalee	99	29·807	?	29·835	29·862	10th	29·734	5th	·128	77·8	88·7	+0·3	75·3	—0·2	82·0	+0·1	13·4	94·0	3rd & 6th	72·0	9th	22·0
	Colombo	24	29·909	—·023	29·859	29·987	8th	29·862	21st	·125	76·8	85·7	0	74·2	—1·2	80·0	—0·6	11·5	87·5	11th	71·0	10th	16·5
	Minicoy	7	29·957			30·027	8th	29·899	21st	·128													
	Amini Divi	*13*	29·929	—·001	29·870	29·996	9th	29·870	21st & 22nd,	·126	81·3	87·4	+2·2	77·8	+1·3	82·6	+1·7	9·6	92·5	23rd	72·3	20th	20·2
	Gyantse	13,120	17·196		17·157	17·284	19th & 20th.	17·106	25th	·178	39·5	62·7		22·7		42·7		40·0	73·5	1st & 2nd	10·0	28th	63·5
	Pharijong	14,400									33·3	46·2		19·7		33·0		26·5	56·4	1st	8·0	31st	48·4
	Gangtok	5,660?	24·592		24·547	24·684	17th	24·538	4th & 5th.	·146	60·6	71·2		55·1		63·2		16·1	75·5	12th	49·1	26th	26·4
	Gartok (c)†	15,100?	17·552			17·625	3rd	17·525	5 days	·100	15·8	46·4		8·7		27·6		37·7	67·1	7th	0·4	25th	66·7

(a) 9 hrs. observations. † Mean of 25 days.

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 5,200 feet.

(c) Aneroid corrected.

B—continued.

in India, etc., in October, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct. 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period, 1st May to 31st Oct. 1912.	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	56	57
																																Baluchistan.
21						4	6		S 71° W		2·4			30		32		·178		0·1		0			0·03			4·10			0·03	Fort Sandeman.
29			1					1	N 23° E	N 59° W	1·0	1·4	−0·4	2	−1	36	−8	·152	−·039	0	−0·4	0	0·2	−0·2	0	0·09	−0·09	1·00	1·91	−0·91	0	Quetta.
25				2	2	1	1		S 4° W	S 45° E	2·6	5·8	−3·2	13	−41	29	+6	·188	+·007	0	−0·6	0	0·2	−0·2	0	0·07	−0·07	0·41	0·29	+0·12	0	Chaman.
6				5	14	6			S 2° W	S 11° E	1·0			72	+26	46		·111		0·1		0	0·2	−0·2	0	0·04	−0·04	1·28	1·41	−0·13	0	Kalat.
2	1	2	14	6	2	1	1	2	S 79° E		3·7			56		41†		·265†		0		0			0			0·46			0	Dalbandin.
14				1			3	3	N 72° W		3·0			13		70		·637		2·4		0			0			1·25			0	Pasni.
4	2	18	5		1			1	N 50° E		4·0			72		49		·242		0·1		0			0			1·92			0	Panjgur.
6		1	2	2	10	1	9		S 27° W		1·6			43		37		·256		0·1		0			0			0			0	Robat.
																																Hill Stations excluding Kashmir and Baluchistan.
																							1·9			0·80			4·52			Chitral.
28			1				2		W		0·9			3		37		·201		0·4		1	2·0	−1·0	0·55	0·78	−0·23	15·40	13·78	+1·62	0·55	Para Chinar.
7	10	1			3	3	4	3	N 14° W	N 11° W	4·9	7·4	−2·5	33	−18	36	0	·220	−·004	0·6	−0·3	2	0·9	+1·1	0·34	0·29	+0·05	11·56	13·59	−2·03	0·19	Cherat.
26	3			1		1			N		1·3			5		36		·172		0·5		1	2·3	−1·3	0·14	1·25	−1·11	0·34‡	6·50	−6·16	0·14	Drosh.
9	12	1	1		2	1		5	N 10° W	N 27° W	3·2	4·5	−1·3	43	+24	46	+4	·219	+·015	0·9	−0·4	1	2·3	−1·3	0·43	1·27	−0·84	32·14	39·42	−7·28	0·43	Murree.
																46	−3	·208	0	0·7	−0·1	0	1·3	−1·3	0	0·87	−0·87	47·62	51·28	−3·66	0	Simla.
																78		·245		0·6		0	1·4	−1·4	0	1·12	−1·12	40·22	40·34	−0·12	0	Sarain.
12	9			5	1			4	N 8° E		3·0			23		60		·162		1·5		1	1·0	0	0·15	1·49	−1·34	55·08	‖ 55·00	+0·08	0·10	Kalabagh.
11	10	7		2	1				N 27° E	N 39° E	1·7	4·5	−2·8	46	+14	67	+7	·311	+·027	0·8	−0·2	0	1·2	−1·2	0	0·82	−0·82	66·24	57·62	+8·62	0	Chakrata.
15		1	2			1	8	4	N 71° W		3·7			30		55	−1	·246		1·0		1	1·4	−0·4	0·12	1·70	−1·58	43·55	41·99	+1·56	0·12	Mukteswar.
26		3		1		1			N 52° E	N 73° E	0·5	2·4	−1·9	7	−25	80	−9	·334	−·016	4·2	−1·5	8	4·3	+3·7	6·34	4·49	+1·85	103·57	113·43	−9·86	2·81	Darjiling.
27			2	2					S 67° E		0·6			10		79		·418		4·0		12	9·8	+2·2	10·15	6·07	+4·08	73·24	75·05	−1·81	2·89	Shillong.
15	1	6	2		2	5			S 83° E		2·7			9		78		·497		4·5		11	8·7	+2·3	36·93	14·52	+22·41	325·14	362·20	−37·06	7·57	Cherrapunji.
20		4		3		4			S 45° E		1·4			10		95	+6	·616		5·7		11	12·0	−1·0	9·56	7·15	+2·41	48·41	50·47	−2·06	2·05	Maymyo.
16		3	6	3	1			2	N 87° E	N 34° E	1·4	2·3	−0·9	28	+17	56	+1	·424	0	0·1	−2·5	0	3·0	−3·0	0	1·91	−1·91	69·96	72·37	−2·41	0	Pachmarhi.
7	4	4	1		4	4	2	5	N 52° W	N 27° W	3·7	3·6	+0·1	20	+2	46	+2	·348	+·011	1·7	+0·6	3	0·6	+2·4	1·08	0·59	+0·49	43·87	59·50	−15·63	0·42	Mount Abu.
18		5	7					1	N 67° E	N 27 E	1·7	3·1	−1·4	37	+12	93	+5	·588	+·005	7·2	+0·6	17	13·3	+3·7	15·31	8·62	+4·69	126·94	119·62	+7·32	3·06	Mercara.
6	2	3	12	5	1		1	1	N 89° E		2·6			51		83		·390		7·5		19	14·6	+4·4	11·27	8·71	+2·56	41·95	44·10	−2·15	1·30	Ootacamund.
2	2	8	3	1	1	2	5	7	N 12° W		10·0			30		87	+3	·391		7·8		22	15·8	+6·2	10·73	10·93	−0·20	36·15	39·67	−3·52	1·85	Kodaikanal.
																																Extra India.
15				3		11		2	S 40° W		*			33						6·5		13	11·8	+1·2	10·34	7·32	+3·02	48·89	40·12	+8·77	2·87	Singapore (a)
	1	18	1	4				7	N 36° E		5·5			60								14	18·1	−4·1	10·77	16·93	−6·16	69·38	64·65	+4·73	3·40	Penang. (a)
2		1				25	3		S 49° W	S 45° W	4·7*	6·2	−1·5	86	+11	86	+2	·827	−·059	6·1	+2·7	14	10·8	+3·2	10·92	7·61	+3·31	25·17	22·35	+2·82	2·61	Trincomalee.
16		3	1			6	3	2	S 83° W	S 41° W	3·4*	5·4	−2·0	17	−25	92	+12	·839	−·016	7·4	+1·2	23	15·9	+7·1	18·08	14·94	+3·14	67·81	46·52	+21·29	3·94	Colombo.
	2	1				2	10	16	N 59° W	N 78° W	4·8	5·4	−0·6	81	+24					7·8	+2·4	11	11·3	−0·3	10·54	8·22	+2·32	48·95	46·74	+2·21	2·59	Minicoy.
2	6	2		1		3	5	12	N 45° W			6·3 (g)		58		82	0	·877	−·009	6·4	+0·3	7	9·1	−2·1	4·70	5·98	−1·28	§34·29	47·24	−12·95	1·13	Amini Divi.
21			3	6		1			S 54° E			0·8		26		74		·179 (s)		0		0			0			6·69			0	Gyantse.
27			1	3					S 56° E		8·0			10		73s		·228		1·4		0			0·26			16·35			0·05	Pharijong.
27	1	3							N 34° E		1·2			13		83		·443		1·0		9	9·1	−0·1	11·90	5·34	+6·56	118·68	112·30	+6·38	4·03	Gangtok.
22				1	1	1			S		4·4			8						1·2		0			0			1·28			0	Gartok.

* Uncorrected for scale error. † Mean of 30 days. ‖ Normal rainfall since 1st June. (g) Mean of 27 days. (s) " " 15 " ‡ Rainfall since 6th August, 1912. § Rainfall for May wanting.

Table

(2) Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India—*concld.*																						
	Kashgar (c)	4,255																					
	Kabul										53·2	82·4	+7·2?	51·7	+10·3	67·1	+8·7?	30·7	90·2	1st	45·6	25th	44·6
	Meshed	3,104	26·933		30·094	27·166	8th	26·740	25th	·426	53·0	76·6		42·6	—2·1	59·6		34·0	87·4	1st	31·6	13th	55·8
	Jask	13	29·951	+·015	29·917	30·037	29th	29·795	4th	·242	76·7	90·9	+0·2	74·1	—1·4	82·5	—0·6	16·8	94·3	4th & 18th.	69·8	14th. 15th & 22nd.	24·5
	Muscat	20	29·965	+·015	29·934	30·029	13th & 29th.	29·816	5th	·213	84·4	95·1	+9·3	79·5	—1·6	87·3	+3·9	15·6	102·3	6th	75·1	4 days	27·2
	Bahrein	18	29·984		29·955	30·035	21st	29.907	4th	·128	82·1	87·3		74·9		81·1		12·4	92·3	19th	67·7	26th	24·6
	Bushire	14	29·961	+·016	29·937	30·020	29th	29·842	1st	·178	77·8	87·7	—0·1	72·1	+0·9	79·9	+0·4	15·6	92·8	3rd	67·0	23rd	25·8
	Busrah	25	29·953		29·947	30·055	21st	29·823	1st	·232	78·4	94·2		71·5		82·9		22·7	104·9	1st	63·1	21st	41·8
	Kerman		24·834			25·120	9th & 29th	24·540	4th	·580	54·9	83·9		41·0		62·5		42·9	90·4	5th	35·9	9th & 12th.	54·5
	Ispahan (b)	*5,817*	24·399			24·530	8th	24·240	4th	·290	57·9	76·8	—0·6	47·8	+3·4	62·3	+1·4	29·0	84·9	3rd	42·2	9th & 22nd.	42·7
	Tehran (b)	*4,002*	25·858			26·050	8th	25·725	3rd & 26th	·325	63·9	77·0	—0·5	55·4	+1·3	66·2	+0·4	21·6	86·0	3rd	44·9	21st	41·1
	Bagdad	127	29·841	+·017	29·947	29·994	20th	29·695	28th	·299	68·2	92·7	—0·1	62·8	+0·5	77·7	+0·2	29·9	103·3	1st	52·4	22nd	50·9
	Beirut																						
	Aden	94	29·898	+·025	29·924	29·952	17th	29·808	5th	·144	81·7	89·6	—0·6	77·6	—0·1	83·6	—0·3	12·0	96·1	7th	73·9	30th	22·2
	Zanzibar	72	30·042	+·026	30·040	30·120	3rd	29·951	27th	·169	78·4	84·4	+1·3	75·4	+0·1	79·9	+0·7	9·0	86·2	23rd	73·7	1st & 20th.	12·5

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 3,000 feet.

(b) Aneroid uncorrected.

(c) " corrected.

B—*concluded.*

at 220 stations in India, etc., in October, 1912—concluded.

Wind direction.												Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Number of winds from																																		
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		Resultant direction	Normal direction.	Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct. 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period, 1st May to 31st Oct. 1912.	Heaviest rainfall during month.	
25	26	27	28	29	30	31	32	33		34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																																	Extra India—*concld.*
										*	N 38° W		1·2											0·1			0·02			2·26			Kashgar.
2		1	2	4	14	4	3	1		S 3° W	S 10° E				58	+46	77		·310		1·4	+0·9	0	0·7	−0·7	0	0·36	−0·36	0	1·86	− 1·86	0	Kabul.
28				1	1	1				S		0·7			8		57		·233		1·2		0	1·0	−1·0	0·13	0·39	−0·26	0·82	2·23	− 1·41	0·07	Meshed.
5	9	4	4	1				80		N 6° E	N 56° E	5·0	7·7	−2·7	56	+23	70	+ 5	·639	−·100	0·1	−0·4	0	0·2	−0·2	0	0·04	−0·04	0	0·10	− 0·10	0	Jask.
8	1		3				10	9		N 62° W	N 76° W	3·3	2·7	+0·6	49	+21	53	−10	·664	−·091	0	−0·3	0	0·1	−0·1	0	0·07	−0·07	0·26	0·24	+ 0·02	0	Muscat.
	2		2	2	1	5	11	8		N 83 W		3·7			55		73		·800		0·9		0	0·1	−0·1	0	0·01	−0·01	0	0·11	−0·11	0	Bahrein.
3	5	9	9	2			1	2		N 52° E	N 67° E	4·8	4·5	+0·3	56	− 2	77	+15	·736	+·113	1·1	+0·1	0	0·2	−0·2	0	0·10	−0·10	0	0·13	− 0·13	0	Bushire.
4		3		3	5	3	9	4		S 68° W		2·5			36		62		·599		2·1		1	0·2	+0·8	0·12	0·08	+0·04	0·12	0·73	− 0·61	0·10	Busrah.
23	3	1	1					3		N 4° W		2·7			20		52		·224		0		0			0			0			0	Kerman
21	1					2	6	1		N 88° W	N 74° W	1·4	2·1	−0·7	26	+2	50	−5	·242	−·024	1·5	0	0	0·4	−0·4	0	0·17	−0·17	0·22	0·50	−0·28	0	Ispahan.
11		17	1		1	1				N 50° E	N 19° E	2·1	2·1	0	52	+29	44	+ 2	·258	+·018	2·4	+0·5	0	1·0	−1·0	0·20	0·30	−0·10	1·08	1·18	−0·10	0·08	Tehran.
9	1	1	1	4	2		2	11		N 45° W	N 6° W	5·2	2·0	+3·2	26	− 7	56	+ 1	·389	−·014	2·9	+2·3	0	0·3	−0·3	0·14	0·08	+0·06	0·14	0·36	− 0·22	0·07	Baghdad.
																																	Beirut.
9	8	14								N 29° E	N 78° E	9·5	9·3	+0·2	69	+ 1	69	+ 1	·746	+·005	1·4	−0·7	0	0·1	−0·1	0	0·08	−0·08	0·02	0·58	− 0·56	0	Aden.
5					10	12	4			S 34° W	S 20° E	3·9	3·7	+0·2	74	+ 2	81	− 1	·784	−·100	5·2	−0·8	2	5·6	−3·6	0·93	3·67	−2·69	12·56	23·48	−10·92	0·40	Zanzibar.

Table C.—Abstract of observations taken at 8 hrs. at 65 fourth and fifth class stations in India, etc., in October, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at p. 8 of the Review for January, 1912.

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Balek	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bishnath	73·5	86·3	...	68·3	...	77·3	...	18·0	91·4	15th	60·7	29th	30·7	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	75·5	86·9	...	67·3	...	77·1	...	19·6	90·3	14th & 15th.	58·7	30th	31·6	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	68·9	85·6	...	66·9	...	76·3	...	18·7	90·3	14th	59·7	28th	30·6	...	...	...	...	...	...	...	...	...	...	...
	Dikom	71·8	84·8	...	66·9	...	75·9	...	17·9	91·4	14th	59·0	30th	32·4	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	73·4	84·1	...	68·9	...	76·5	...	15·2	87·9	6th	62·2	27th, 28th & 29th.	25·7	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	76·0	88·6	...	72·3	...	80·5	...	16·3	93·4	22nd	67·8	30th	25·6	...	...	...	...	...	...	...	...	...	...	...
	Jorehat	72·8	85·1	...	69·3	...	77·2	...	15·8	89·1	14th	62·8	27th	26·3	...	...	...	...	...	...	...	...	...	...	...
	Lumding	73·2	85·5	...	69·3	...	77·4	...	16·2	89·7	15th	62·4	30th	27·3	...	...	...	...	...	...	...	...	...	...	...
	Messa	80·5	90·2	...	67·9	...	79·1	...	22·3	94·6	14th	59·0	27th	35·6	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	69·5	83·8	...	66·3	...	75·1	...	17·5	86·1	15th	58·0	31st	28·1	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	75·2	89·6	...	69·9	...	79·7	...	19·7	93·5	20th	61·9	26th	31·6	...	...	...	...	...	...	...	...	...	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	82·1	89·0	...	72·7	...	80·9	...	16·3	98·7	30th	65·4	27th	33·3	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	82·9	91·0	...	72·4	...	81·7	...	18·6	96·0	21st	66·6	26th	29·4	...	...	...	...	...	...	...	...	...	...	...
	Pabna	80·1	90·1	...	74·7	...	82·4	...	15·4	94·8	14th	69·4	17th	25·4	...	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	79·1	87·8	...	63·9	...	75·9	...	23·9	90·1	6 days	55·9	28th, 29th & 31st.	34·2	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	74·5	87·5	...	66·9	...	77·2	...	20·6	90·1	7 days	59·0	27th	31·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C.

at 65 fourth and fifth class stations in India, etc., in October, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May, to 31st Oct., 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period, 1st May to 31st Oct., 1912	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Balek.
...	...	...	...	...	95	...	·786	...	...	...	9	7·0	+2·0	4·42	5·29	−0·87	75·83	76·37	−0·54	1·30	Bishnath.
...	...	...	...	...	82	...	·728	...	...	...	11	7·2	+3·8	5·48	3·55	+1·93	77·64*	68·62	+9·02	1·06	Borjuli.
...	...	...	...	...	...	...	...	...	...	...	...	8·0	...	...	8·32	...	...	87·03	...	...	Chandkhira.
...	...	...	...	...	96	...	·679	...	...	...	8	6·8	+1·2	4·18	4·72	−0·54	83·97	75·12	+8·85	1·36	Doom Dooma.
...	...	...	...	...	85	...	·693	...	...	...	9	7·5	+1·5	5·12	5·49	−0·37	87·31	81·38	+5·93	1·70	Dikom.
...	...	...	...	...	91	...	·749	...	...	...	7	6·3	+0·7	2·36	2·79	−0·43	55·61	53·85	+1·76	0·69	Golaghat.
...	...	...	...	...	92	...	·814	...	...	...	11	9·0	+2·0	12·18	9·49	+2·69	26·86	97·72	−70·86	4·55	Hailakandi.
...	...	...	...	...	97	...	·779	...	...	...	8	7·0	+1·0	5·85	3·91	+1·94	70·74	62·74	+8·00	1·88	Jorehat.
...	...	...	...	...	93	...	·755	...	...	...	6	...	...	3·72	...	...	36·54	...	...	1·31	Lumding.
...	...	...	...	...	81	...	·838	...	...	...	6	6·0	0	2·27	3·09	−0·82	62·07	74·57	−12·50	0·72	Messa.
...	...	...	...	...	92	...	·667	...	...	...	8	5·5	+2·5	5·90	3·65	+2·25	69·32	62·66	+6·66	1·52	Panerihat.
...	...	...	...	...	91	...	·799	...	...	...	10	8·3	+1·7	5·83	7·88	−2·05	66·73	78·51	−11·78	0·94	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	8	6·1	+1·9	3·64	6·04	−2·40	80·16	76·58	+3·58	1·39	Comilla.
...	...	...	...	...	77	...	·835	...	...	...	6	7·7	−1·7	4·34	5·42	−1·08	53·89	67·86	−13·97	2·14	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	8	5·4	+2·6	10·48	4·55	+5·93	62·90	59·82	+3·08	3·98	Faridpur.
...	...	...	...	...	75	...	·837	...	...	...	7	7·0	0	4·43	6·06	−1·63	53·86	57·90	−4·04	1·98	Goalundo.
...	...	...	...	...	82	...	·848	...	...	...	5	4·8	+0·2	7·16	4·82	+2·34	53·54	53·57	−0·03	2·34	Pabna.
...	...	...	...	...	...		...	...	...		6	4·6	+1·4	4·03	4·69	−0·66	45·64	57·88	−12·24	1·97	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	1	4·1	−3·1	0·28	3·14	−2·86	33·34	49·47	−16·13	0·28	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	1	3·9	−2·9	1·41	3·85	−2·44	46·89	49·13	−2·24	1·35	Malda.
...	...	...	...	...	...	...	...	...	...	...	6	3·6	+2·4	4·78	4·19	+0·59	80·62	75·05	+5·57	1·33	Rangpur.
...	...	...	...	...	...	...	...	...	...	...	...	6·5	...	...	5·07	...	... (g)	145·00	...	...	Dam Dim.
...	...	...	...	...	74	...	·743	...	...	...	6	6·3	−0·3	6·6	5·86	+0·80	96·50	141·16	−44·66	3·03	Kalchini.
...	...	...	...	...	83	...	·712	...	...	...	8	7·3	+0·7	5·05	7·46	−2·41	137·63	150·34	−12·71	1·50	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	5	4·8	+0·2	6·75	6·03	+0·72	120·41	137·77	−17·36	4·01	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	6	4·5	+1·5	4·77	3·94	+0·83	53·53	50·39	+3·14	1·45	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	3	4·0	−1·0	1·03	2·73	−1·70	56·53	49·83	+6·70	0·70	Bankura.
...	...	...	...	...	...	...	...	...	...	...	2	3·6	−1·6	0·94	2·31	−1·37	38·60	48·06	−9·46	0·72	Raniganj.

* Rainfall from 8th to 14th not included.
† " from August to October, 1912.
(g) " from 17th to 30th July not included.

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	V.—United Provinces of Agra and Oudh.																								
9	Balia	77·	93·1	...	67·0	...	80·1	...	26·1	97·6	1st	60·8	27th	36·8	...	...	...	...	...	...	...	...	...		...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	XII.—Central Provinces.																								
23	Chhindwara	72·2	87·3	...	60·8	...	74·1	...	26·5	89·9	4th	52·4	27th	37·5	...	5	4	1	...	...	9	8	4	N 73° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
32	Anantapur	77·8	89·4	...	71·4	...	80·4	...	18·0	93·8	16th	61·1	30th	32·7	...	...	...	...	...	...	...	...	...		...
33	Guntur	80·9	92·1	...	74·0	...	83·0	...	18·1	97·2	1st	67·1	29th	30·1	...	...	...	...	...	...	...	...	...		...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...		...
	Kashmir.																								
13	Jammu	75·4	90·2	...	64·9	...	77·6	...	25·3	96·1	7th	60·2	24th	35·9	...	22	9	...	...	...	...	...	...	N 12° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	Kargil	46·6	70·0	...	38·5	...	54·2	...	31·5	86·7	1st	33·4	22nd & 31st	53·3	...	9	1	10	10	...	1	...	...	N 83° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...

C—*continued.*

at 65 fourth and fifth class stations in India, etc., in October, 1912—continued.

Wind velocity.			Wind steadiness		Hygrometry, 8 hrs.				Cloud.		Rainfall.										
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity, at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct., 1912.	Normal rainfall of period, 1st May to 31st Oct.	Departure from normal of period 1st May to 31st Oct., 1912.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	..	...	...	...	...	...	...	...	1	4·0	—3·0	0·18	2·83	—2·65	40·08	48·39	—8·31	0·18	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	0	2·6	—2·6	0·08	2·05	—1·97	40·08	46·15	—6·07	0·05	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	0	2·6	—2·6	0·09	2·88	—2·79	40·28	46·86	—6·58	0·09	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	0	2·6	—2·6	0	2·67	—2·67	41·24	53·47	—12·23	0	Motihari.
...	...	...	...	...	...	...	...	...	...	...	0	2·4	—2·4	0·04	2·27	—2·23	32·48	39·52	—7·04	0·04	Chapra.
...	...	...	...	...	...	...	...	...	...	...	2	3·0	—1·0	1·38	2·40	—1·02	33·66	41·73	—8·07	1·00	Arrah.
...	...	...	...	...	...	...	...	...	...	...	0	2·6	—2·6	0	2·11	—2·11	28·20	39·51	—11·31	0	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	68	...	·647	...	...	...						No	rain	gauge.			Balia.
...	...	...	...	...	...	...	...	...	...	...	0	0·5	—0·5	0	0·56	—0·56	30·95	28·68	+ 2·27	0	Meerut.
...	...	...	...	...	...	...	...	...	...	...	0	1·2	—1·2	0	0·89	—0·89	57·10	77·77	—20·67	0	Dehra Dun.
																					IX.—Rajputana.
...	...	—	...	...	...	...	...	...	...	...	1	0·2	+0·8	0·13	0·14	—0·01	25·10	22·71	+ 2·39	0·10	Udaipur.
																					XII.—Central Provinces.
0·9	...	...	45	...	66	...	·530	...	0·4	...	0	...	...	0·03	...	...	34·45	...	...	0·03	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	12	8·9	+3·1	12·01	6·65	+5·36	15·67	10·96	+ 4·71	3·75	Tinnevelly.
...	...	...	...	...	78	...	·743	...	7·5	...	10	...	...	4·14	...	...	23·95	...	...	0·73	Anantapur.
...	...	...	...	...	82	...	·863	...	4·7	...	5	...	...	2·38	...	...	19·34	...	...	0·66	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	18	15·7	+2·3	14·41	11·16	+3·25	100·17	69·73	+30·44	3·42	Car Nicobar.
																					Kashmir.
...	...	...	94	...	58	...	·539	...	0·1	...	0	...	...	0	...	...	21·51	...	...	0	Jammu.
...	...	...	...	...	...	...	...	...	...	...	1	4·6	—3·6	0·72	1·76	—1·04	14·83	22·80	—7·97	0·66	Sonamarg.
...	...	...	55	...	52	...	·170	...	0·8	...	0	...	...	0	...	...	4·27	...	...	0	Kargil.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor.

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	74·8	84·8	...	66·8	...	75·8	...	18·0	89·9	21st	62·5	29th	27·4	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	64·9	70·2	...	59·1	...	64·7	...	11·1	78·3	22nd	54·3	26th	24·0	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim	...	...	...	...	...	...	...	...	...		...	...	...	...	...		...	...	...	...	...	...	...	...
	Poo	...	67·0	...	45·8	...	55·4	...	23·2	75·1	2nd	37·2	17th	37·9	14	...	...	6	4	1	1	5	...	S 31° E	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	..	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...
	Pishin	...	77·8	...	39·9	...	58·8	...	37·9	83·4	3rd	35·0	15th	48·4	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	92·6	...	79·2	...	85·9	...	13·4	101·4	1st	68·0	23rd	33·4	...	...	...	...	...	...	...	...	...	...	...
	Birjand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...
	Chumbi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah (d)	56·5	75·8	...	46·7	...	61·3	...	29·1	85·5	1st	39·5	21st	46·0	...	...	...	...	...	...	...	...	...	...	...
	Koweit	...	92·8	...	72·4	...	82·6	...	20·4	101·4	19th	66·4	23rd & 25th	35·0	3	5	...	6	...	4	1	11	1	N 81° W	...
	Maidan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	90·4	...	70·1	...	80·3	...	20·3	95·8	3rd	61·5	20th	34·3	...	...	...	...	6	...	2	...	20	S 51° W†	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	84·6	...	53·6	...	69·1	...	31·0	92·3	1st	44·0	14th & 18th	48·3	7	5	...	...	...	...	...	2	17	N 39° W	...

† Wind variable 3.

(d) Mean of 30 days.

C—*concluded.*

at 65 fourth and fifth class stations in India, etc., in October, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 31st Oct., 1912.	Normal rainfall for period, 1st May to 31st Oct.	Departure from normal of period, 1st May to 31st Oct., 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill Stations, exclusive of Kashmir.
...	...	...	...	...	70	...	·606	...	...	...	7	4·8	+2·2	11·64	5·14	+6·50	132·01	130·40	+1·61	6·18	Panighatta.
...	...	...	...	...	79	...	·482	...	...	...	7	5·3	+1·7	6·14	5·69	+0·45	151·10	144·57	+6·53	2·26	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	15	...	...	13·53	...	...	128·85	...	...	1·89	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Lachung.
...	...	...	...	...	...	...	...	...	...	...	13	...	...	9·65	...	...	* 135·62	...	...	1·92	Ringim.
...	...	...	19	...	...	...	...	...	1·8	...	0	0·8	−0·8	0	0·39	−0·39	3·44	3·51	−0·07	0	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	1·2	...	...	0·52	...	...	9·03	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Bakloh.
...	...	...	...	...	...	...	...	...	0	...	0	0·2	−0·2	0	0·07	−0·07	1·81	0·50	+1·31	0	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	1·2	...	1	...	...	0·25	...	...	0·25	...	...	0·18	Ahwaz.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Birjand.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Chumbi.
...	...	...	...	...	54	...	·233	...	...	...	4	...	...	1·06	...	...	1·26	...	...	0·39	Kirmanshah.
...	...	...	19	...	...	...	...	...	1·1	...	0	...	...	0·05	...	...	0·05	...	...	0·04	Koweit.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Maidan.
...	...	...	45	...	...	...	...	...	...	...	1	...	...	0·30	...	...	0·30	...	...	0·30	Muhammerah.
...	...	...	...	...	...	...	...	...	...	...	3	4·8	−1·8	0·60	2·80	−2·20	10·37	33·05	−22·68	0·26	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	5·6	...	...	4·29	...	...	26·07	...		Prison Island.
7·8	...	...	68	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Seistan.

* Rainfall since 1st June.

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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.

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

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

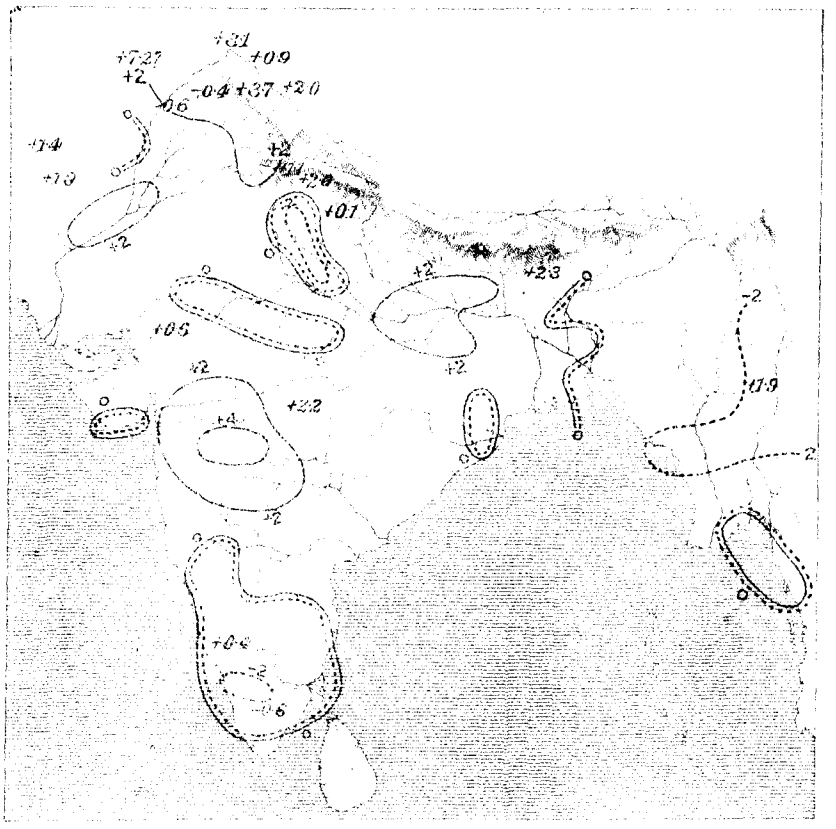


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.

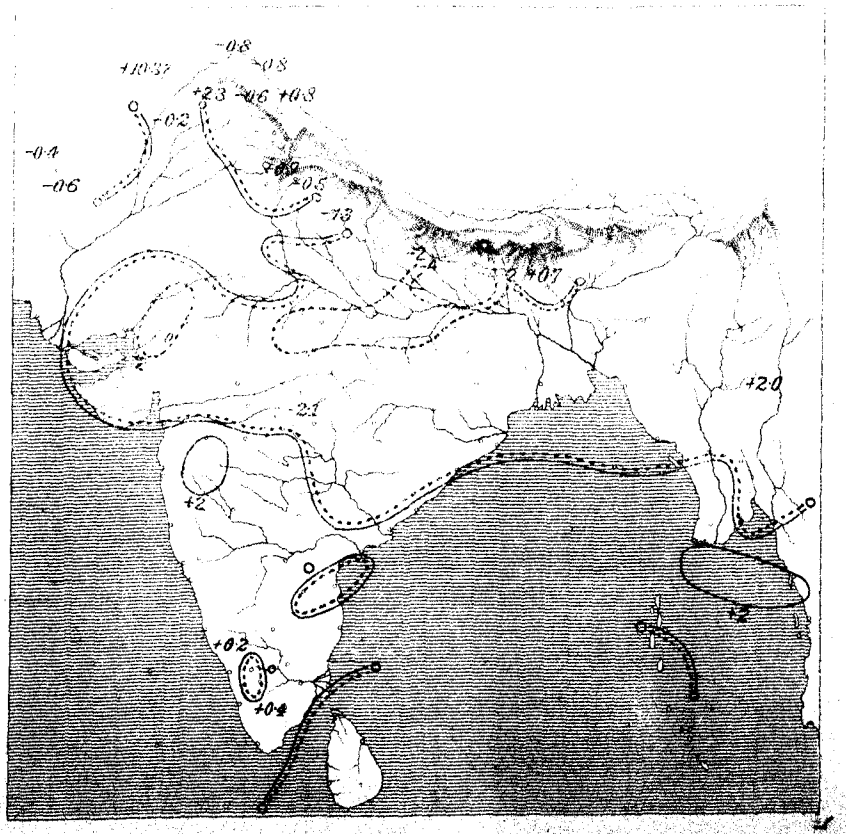


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

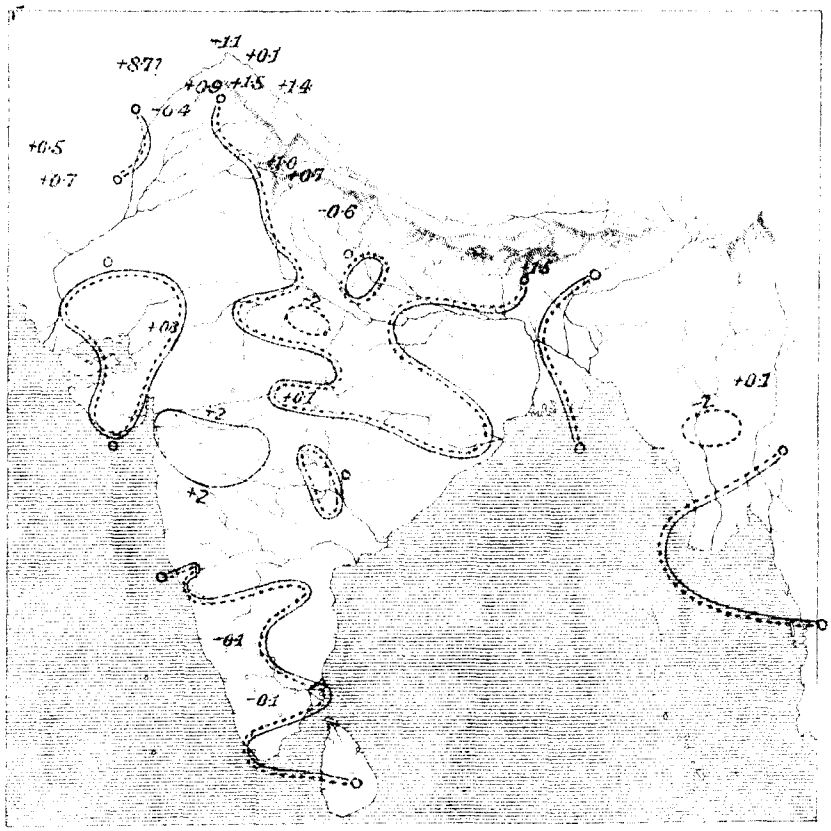


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

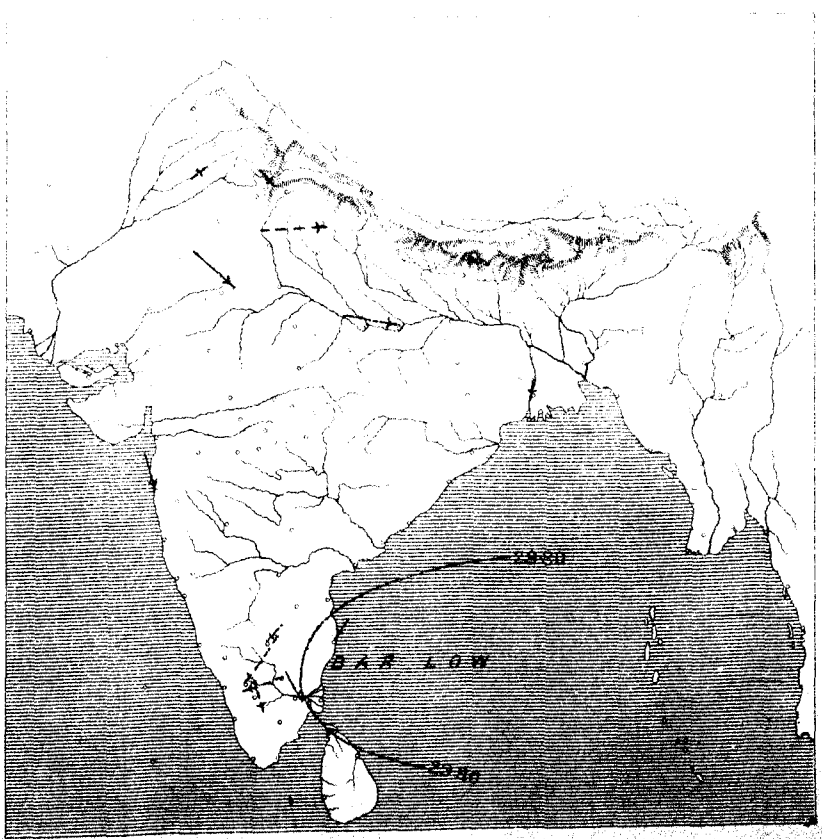


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

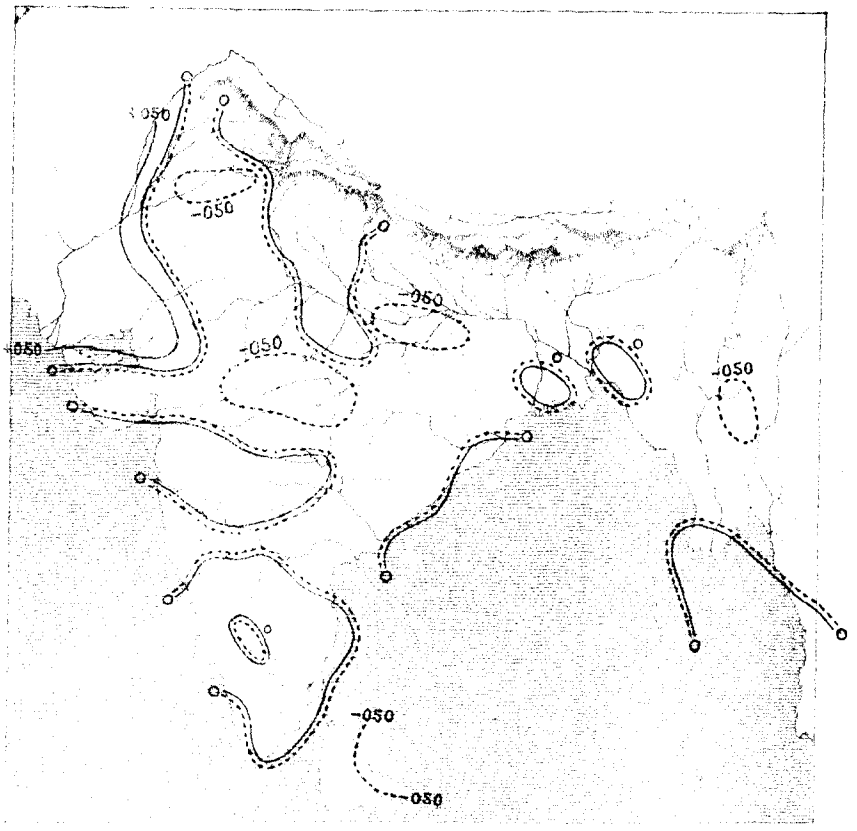


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.

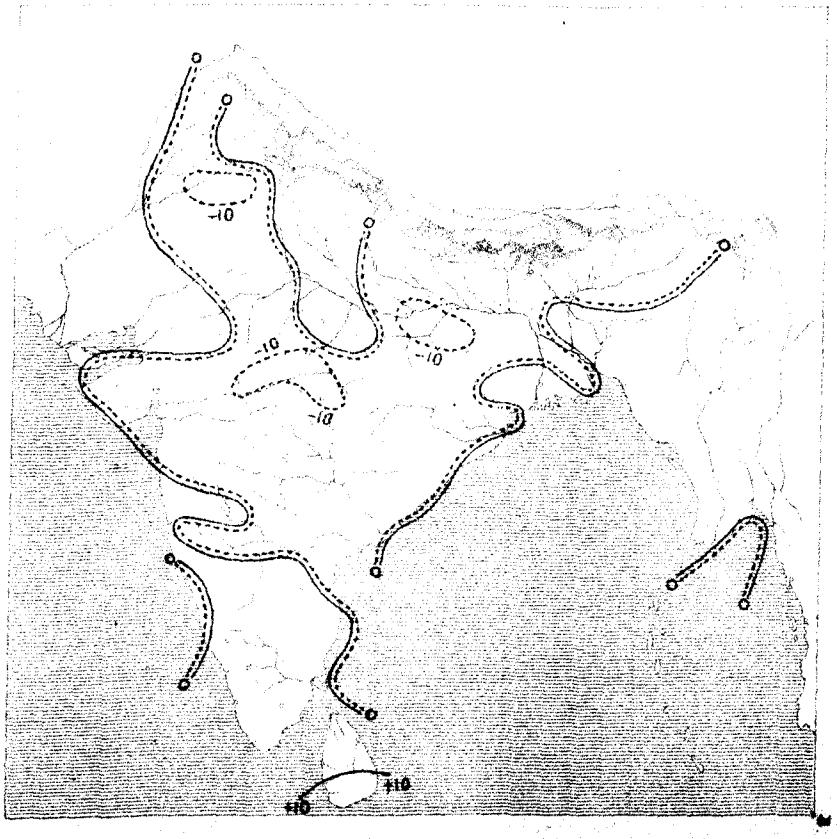


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 HRS.

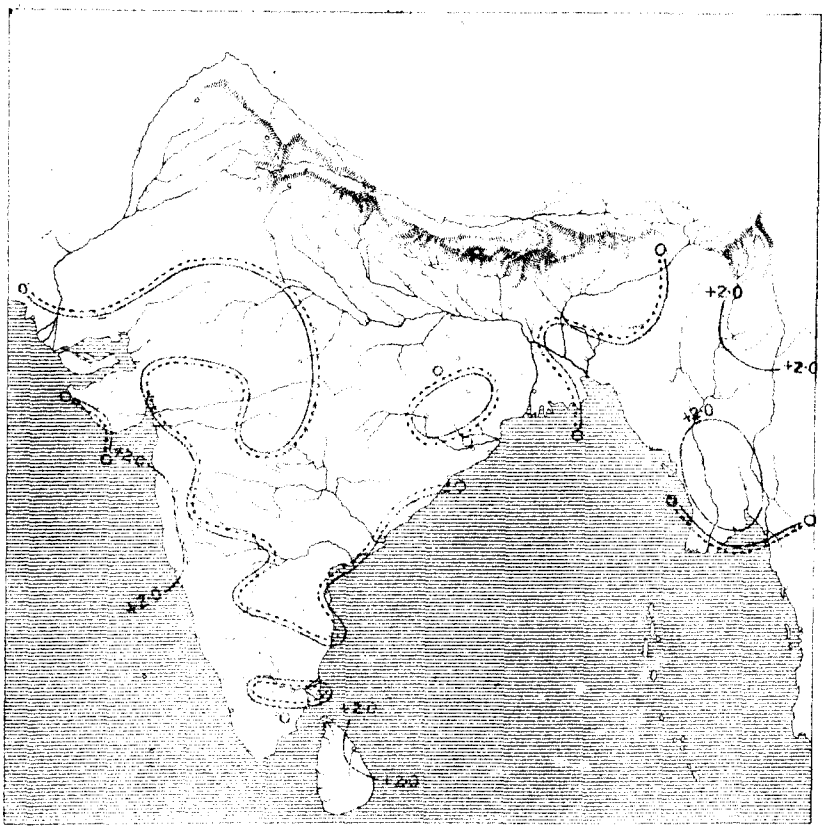
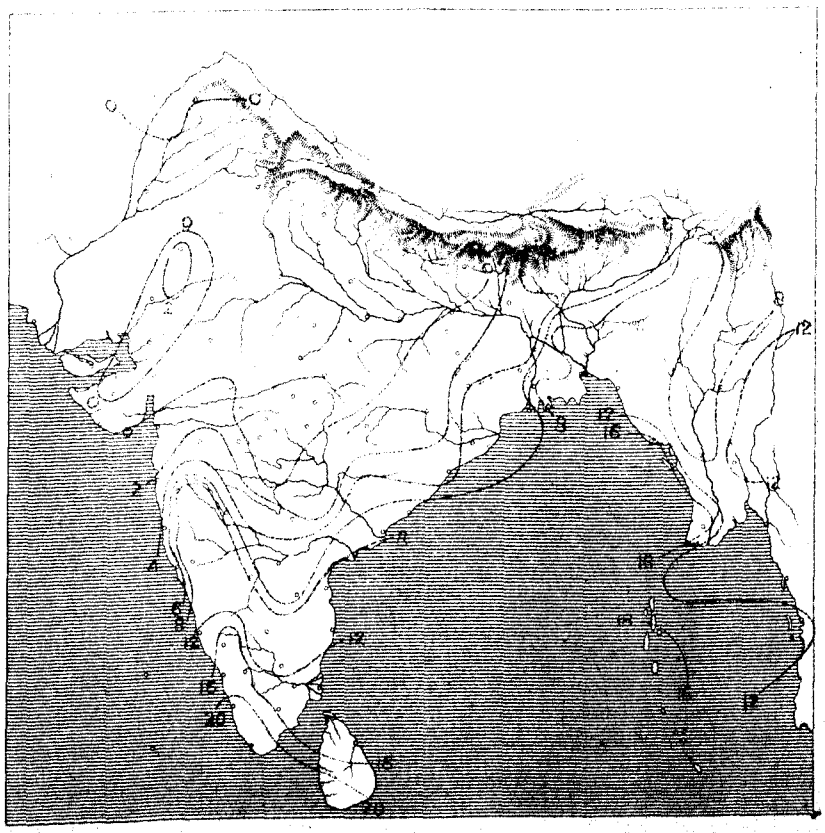
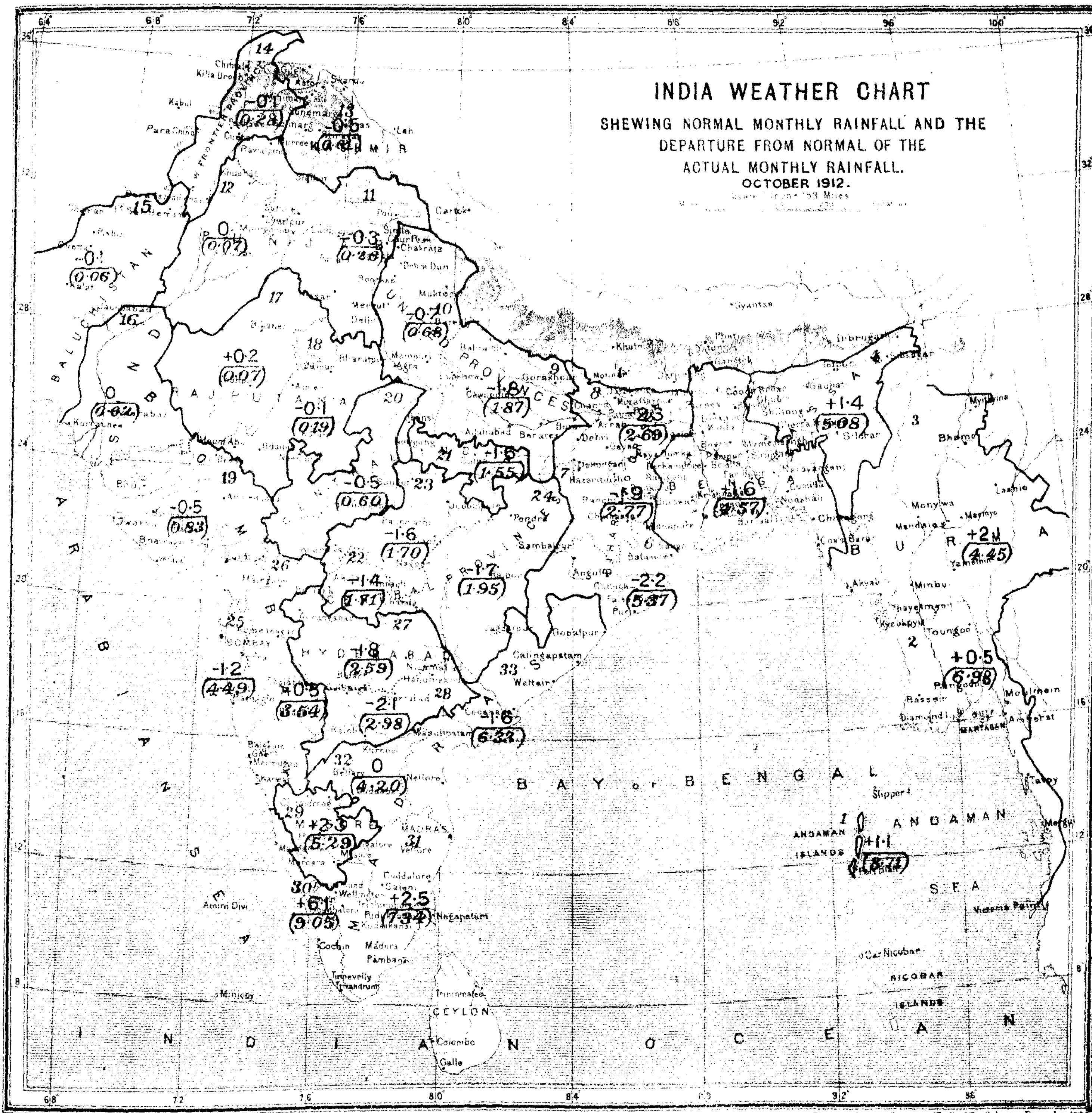


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)



LITHO. BY S.G.M.



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Engraved at the Survey of India Office, Calcutta, December 1904.

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 monthly 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
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

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METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, NOVEMBER, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of November, 1912, is based on observations taken daily at 8 hrs. at 220 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 18 stations. In the rainfall summary the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review, have been utilized. The brief notes on solar, seismic and magnetic disturbances have been supplied by the chief observatories.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. (*a*) At the beginning of the month dry weather prevailed throughout the Indian region with the exception of north-east India and the greater part of Burma where moderate to heavy rain was falling in connection with a cyclonic storm from the Bay. The dissipation of the disturbance on the 2nd synchronised with the appearance of the first cold weather depression of the present winter season over Sind. This disappeared however on the 5th after giving a few thundershowers in Rajputana and the United Provinces. During the next six days no rain fell anywhere outside of Burma, but on the 12th the area of rainfall was transferred to the south of the Peninsula where a break had held since the end of October. During the third week two depressions appeared over the south of the Bay and passed westwards across Ceylon into the Arabian Sea. The second of the two apparently developed into a storm on the 20th, and travelling up the west coast of the Peninsula crossed inland between Bombay and Surat about noon on the 22nd, doing some damage in the Bombay harbour. Thereafter, it advanced rapidly eastward along the head of the Peninsula as a shallow depression and disappeared over Bengal on the 25th. The disturbance was remarkable in striking the west coast to the south of Gujarat and for the burst of rain which it gave to practically the whole of the Peninsula, the Central Provinces, Central India, the United Provinces and north-east India. Some precipitation occurred also in Kashmir and the east Punjab owing partly to the action of this disturbance and partly to an independent depression of the cold weather type. In the Simla Hills snow fell as low as 6,500 feet on the 24th.

During the last five days of the month the weather was dry generally except for a few showers in the extreme south.

(*b*) The rainfall for the month as a whole was unusually heavy for the time of year in Bengal, Chota Nagpur, Bihar, the United Provinces East, Gujarat, Central India, the Central Provinces West, and the Konkan, the amounts recorded being four to sixteen times the normal; the proportional excess was large also in Lower Burma, Assam, Orissa, the United Provinces West, the Punjab East and North, the Bombay Deccan, Madras South-east and the Madras Deccan. The only area where a considerable defect occurred was the Bay Islands.

(*c*) Of the other climatic elements the quantity of cloud was decidedly low in Kashmir, Baluchistan, the North-West Frontier Province, Sind and the Punjab and very high in Burma, Bengal and Central India; while humidity was much above the normal in Baluchistan and somewhat in defect in Kashmir. Temperature was 4° lower than usual in Baluchistan and about normal elsewhere.

The precipitation which occurred over northern India in the beginning of the fourth week initiated a period of low temperature lasting from the 23rd to the end of the month.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar observations.*—The weather was not very favourable for solar observations. There were 7 days in which no observation was possible and 3 other days in which prominences could not be observed.

Sunspots.—Only one small spot was observed during the month, this was on the 18th about latitude 2° south. On the two days preceding and following the 18th no observation of the sun could be made, but on the 21st there was no spot on the sun.

Prominences.—Thirty-three large and three eruptive prominences were observed during the month; also two metallic prominences were recorded, on the 2nd at latitude — 19° east, and on the 7th at + 34° east. Four of the large prominences attained to heights of 2 minutes and over. The highest was photographed on the 12th at latitude — 18° west and was four minutes in height.

Magnetic disturbances.—Moderate magnetic disturbances were recorded on the 14th and 15th, 22nd, 26th, and 27th of the month. The disturbance of the 14th and 15th appears to be a continuation of the long series of moderate disturbances which have occurred at approximate intervals of a synodic rotation of the sun since May 12.

Seismological records.

TABLE 1.

No.	Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maxima. G. M. T.	End. G. M. T.	Duration. G. M. T.	Maximum amplitude.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
70	Nov. 7	7 57·8	8 33·8	8 45·3	10 29·0	2 31·2	2·2 = 1·1	

J. EVERSHED,
Director,
Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of November 1912 the traces showed 10 calm days, 18 days of small and 2 days of moderate disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 3rd, 12th, 13th, 21st and 25th.

The following table represents the magnetic character of each day during the month.

TABLE 2.

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

C = calm; S = small; M = moderate; G = great; V. G. = very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follow :—

Easterly declination . . .	0° 49′ 47″
Horizontal force	0·36873 C.G.S. unit.
Vertical force	0·16410 „ „
Inclination	23° 59″·5
Inclination (observed) . . .	23° 58′·7
Horizontal force range . .	0·00043 „ „
Horizontal force summed range .	0·00250 „ „
Declination range . . .	1′·2
Declination summed range . .	6′·8

(NOTE.—Summed range means sum without regard to sign of the 24 ordinates of the diurnal inequality.)

List of seismic disturbances.

TABLE 3.

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	h. m.	h. m.	h. m.	mm.	h. m.
Nov. 7	8 5·0	8 41·6	9 25·1	2·6	1 20·1
„ 28	21 2·3	very small	disturbance;	phases ill-	defined.

All times given above denote G. M. T. Sensibility to tilt 1 mm. = 0″·37.

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

CALCUTTA OBSERVATORY.

5. *List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. Commencement. G. M. T.	L. W. Commencement. G. M. T.	Maximum. G. M. T.	End. G. M. T.	Duration. G. M. T.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
Nov. 3	6 17·2	...	6 25·3	6 43·1	0 25·9	0·50	
„ 7	7 53·5	8 3·1	8 29·6	9 50·4	1 56·9	6·50*	* Measured from base line.
„ 19	15 6·1	...	15 13·2	16 2·9	0 56·8	0·75	

Sensibility 1 mm.=0·38″ of tilt.

C. W. PEAKE,
Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. *List of earthquakes recorded by the Omori-Ewing seismographs.*

TABLE 5.

Date.	Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of maximum amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
Nov. 2nd A	3 5·9	3 10·7	3 15·5	3 17·0	3 33	0 27	2·0	
„ 2nd B	?	3 10·2	3 13·7	3 17·0	3 36	?	2·0	
„ 7th A	7 52·5	8 2·8	8 24·8	8 26·3	9 3	0 10	11·0	
„ 7th B	?	?	8 24·0	8 31·3	9 14	?	13·5	
„ 15th A	17 20·9	17 21·3	17 21·6	17 21·7	17 24	0 3	1·0	
„ 15th B	17 21·0	17 21·3	17 21·5	17 21·7	17 23	0 2	1·0	
„ 28th A	20 56·8	20 57·5	20 58·2	20 58·4	21 13	0 16	2·5	
„ 28th B	20 56·7	20 57·5	20 58·0	20 59·1	21 9	0 12	1·5	

November 2nd A. Tremors from 4·16 hrs. to about 4·29 hrs. with max. Amp. of 1·0 mm. at about 4·23 hrs.
„ 2nd B. „ can be seen at about above times, but beginning and end not well marked.
„ 3rd A. „ from about 21·35 hrs. to about 21·59 hrs. with max. Amp. of 1·0 mm. at about 21·46·9 hrs. B. instrument stopped.
„ 4th A. „ from about 6·17 hrs. to about 6·33 hrs. with Max. Amp. of 1·0 mm. at about 6·29 hrs.
„ 4th B. Similar times as above.
„ 7th A. Tremors with a Max. Amp. 1·5 mm. at 18·49 hrs.
„ 7th B. „ from 17·44 hrs. to 18·58 hrs. Max. Amp. 1·0 mm. at 18·48·9 hrs.
„ 19th A. „ from 15·3 hrs. to 15·29 hrs.
„ 19th B. „ „ 13·9 hrs. to 15·29 hrs.
„ 30th A. „ „ 2·59 hrs. to 3·5 hrs.
„ 30th B. „ „ 2·59 to 3·2 hrs.

All times are given in G. M. T.
A=E—W component.
B=N—S component.
Magnification of both instruments was 15.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes tha were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquake.		Duration.	Intensity Rossi Forel scale.	No. of shocks.
	Nov.	h.	m.	sec.		
Drosh	4th	15	0	7	6	1
„	11th	9	45	20	6	1
Meshed	12th	16	0	20	3	1
Shillong	12th	23	55	3	6	2
„	14th	11	14	1	3	1
Lahore	15th	17	21	40	6	2
Ludhiana	15th	17	25	8	5	3
Sialkot	15th	17	29	8	5	11?
Drosh	15th	17	31	3	6	1
Khushab	15th	17	40	4	4	1
Drosh	17th	8	42	3	6	1
Ghora Gali (Murree)	21st	8	8	1	3	1
Drosh	25th	21	5	5	6	1
Ghora Gali (Murree)	28th	20	45	110	6	1
Dera Ismail Khan	28th	20	55	90	5	2
Cherat	28th	20	56	9	5	3
Kohat	28th	20	57	30	7	1
Rawalpindi	28th	20	57	20	7	2
Drosh	28th	21	0	32	8	2
Lahore	28th	21	0	30	6	2
Skardu	28th	21	0	4	6	2
Srinagar	28th	21	4	60	5	2
Mansehra (Hazara Dist.)	28th	21	15	180	7	2
Khushab	28th	21	21	3	3	1
Drosh	28th	23	5	3	6	1

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·36
Minimum	1·24
Mean	1·32
Number of days of observation	14

G. C. SIMPSON,
Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. Pressure was high both at Zanzibar and Seychelles. At Zanzibar the wind blew more from the east than usual, while at Seychelles it came more from the south, but the departures from normal were not large. Rainfall was below the normal at both stations, Zanzibar receiving 5·70 inches and Seychelles only 4·41 inches out of the average amount of 8·64″ and 10·41″ respectively.

TABLE 7.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	+·017	+·005	+·016
Actual mean wind direction .	S 77 E	S 72 E	S 25 E
Normal mean wind direction .	S 84 E	S 45 E	S 56 E
Actual mean wind velocity (miles per diem).	260	79	99
Normal mean wind velocity (miles per diem).	234	82	127
Rainfall departure from normal.	−0·72	−2·94	−6·00

Depressions and cyclonic storms.

9. The cyclonic storm which had reached the head of the Bay at the end of the last month crossed the coast near Puri at about midnight between the 31st of October and the 1st of November, then passed into north-east India and dissipated during November 2nd. The storm was accompanied along its path by heavy rain and high winds, and caused considerable apprehension in Calcutta until it had passed well inland to the west of that port. Considerable damage was done both to crops and property, many houses in the Dacca district being blown down or stripped of their roofs.

On the morning of November 12th the weather became disturbed over the south of the Bay between the Andamans and Madras. For several days the disturbance appears to have been only an area of squally weather, but on the 17th a shallow depression passed from the Bay over Ceylon into the Arabian Sea. This had no sooner passed away than on the morning of the 19th another depression appeared over Ceylon and followed its predecessor into the south of the Arabian Sea. During this period of disturbed weather in the south of the Bay, heavy rainfall was experienced in the Madras Presidency. On the morning of the 13th Madras reported six inches, on the 14th Coimbatore three inches, on the 17th Negapatam nine inches, on the 18th Cuddalore eight inches, on the 19th, 20th and 21st many stations reported between one and four inches. This heavy rain caused destructive floods in the rivers of the extreme south, particularly in the Gadilam, the Ponnaiyar and the Cauvery. Considerable anxiety was also caused by the filling to overflowing of several large tanks, particularly the one in the neighbourhood of Madurantakam.

The two depressions which passed over Ceylon appear to have united into a cyclonic storm in the south of the Arabian Sea during the 20th, and this then moved rapidly northwards and struck the coast just north of Bombay at about noon on the 22nd. The rapidity of motion of the storm, and the path it took were very abnormal, as usually at this time of year storms take about four days to cross the Peninsula and sweep on a wide curve up the Arabian Sea to the Kathiawar coast. This storm however crossed Ceylon on the 19th and in three days had reached the coast north of Bombay, far to the east of the usual track. The storm did considerable damage in Bombay harbour, five lives and 27 small vessels being lost and considerable damage done to merchandise by the rain. After passing inland the storm moved rapidly across the head of the Peninsula and was shown as a shallow depression over the east of the Central Provinces on the morning of the 23rd; it gave fairly abundant rain over a wide track of country.

Pressure.

10. With the exception of Chakrata pressure was below the normal at all the hill stations and in consequence vertical pressure gradient was greater than usual practically everywhere. The mean pressure of the month was either normal or in small defect, but the largest deficiency was only −·017″ in Burma.

TABLE 8.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
	"
Burma	—·017
Assam	—·011
Bengal	—·013
Bihar and Orissa	—·001
United Provinces	+·002
Punjab	+·009
North-West Frontier Province	—·015
Sind	—·003
Rajputana	—·011
Bombay	—·003
Central India	+·002
Central Provinces	+·001
Hyderabad	—·007
Mysore	—·005
Madras	—·004

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure. B	Departure of pressure difference. B—A.
	"		"	"
Quetta	—·021	Jacobabad	—·009	+·012
Leh	—·042	Lahore	+·013	+·055
Murree	—·015	Peshawar	—·021	—·006
Simla	—·006	Ludhiana	+·015	+·021
Chakrata	+·017	Roorkee	+·025	+·008
Darjiling	—·031	Dhubri	—·011	+·020
Mount Abu	—·008	Deesa	0	+·008
Pachmarhi	—·001	Khandwa	+·005	+·006
Kodaikanal	—·021	Madura	+·009	+·030

Temperature.

11. Until the 20th there were no large departures from normal temperature, but as the storm passed up the Arabian Sea and into northern India, from the 20th to the 25th, there were large fluctuations in temperature over the central parts of the country. During the 20th mean temperature was over 12° in excess in the north of the Peninsula, and 8° in excess on the following day. The rain associated with the depression changed this excess into an equally large defect which continued over north-west India, with slight variations in intensity, for the remainder of the month. The mean temperature for the whole month however did not vary to any large extent from the normal, the largest departure of any sub-division being a defect of 4·4° in Baluchistan.

TABLE 10.

SUB-DIVISION.	ACTUAL TEMPERATURE.					DEPARTURE FROM NORMAL OF		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	85·7	77·1	81·3	8·7	14·3	—0·4	—1·1	+0·7
2. Lower Burma	86·0	73·0	79·5	13·0	23·5	—0·5	+1·4	—1·9
3. Upper Burma	85·6	67·5	76·6	18·1	30·0	—1·2	+2·4	—3·6
4. Assam	79·4	62·1	70·8	17·3	28·0	—1·7	+0·9	—2·6
5. Bengal	81·4	64·4	72·9	17·0	29·9	—1·1	+0·2	—1·3
6. Orissa	82·5	63·8	73·1	18·8	35·0	—0·9	—0·5	—0·4
7. Chota Nagpur	79·9	57·8	68·9	22·1	40·5	—2·0	—0·4	—1·6
8. Bihar	80·2	59·3	69·8	20·8	36·2	—1·9	—0·7	—1·2

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
9. United Provinces, East	81·0	55·2	68·3	25·7	41·5	—1·9	—0·6	—1·3
10. Do. do., West	80·1	53·8	67·0	26·2	45·1	—2·8	+0·3	—3·1
11. Punjab, East and North	79·8	49·9	64·9	29·9	49·4	—1·9	+0·5	—2·4
12. Do., South-west	82·5	50·9	66·7	31·6	51·4	—1·3	—0·1	—1·2
13. Kashmir	56·8	29·2	43·0	27·6	49·0	—0·3	—1·9	+1·6
14. North-West Frontier Province	77·9	46·5	62·2	31·4	51·3	—1·7	+0·5	—2·2
15. Baluchistan	70·9	39·3	55·1	31·5	55·4	—3·5	—5·4	+1·9
16. Sind	85·8	58·6	72·2	27·2	47·9	—0·4	—0·3	—0·1
17. Rajputana, West	85·5	55·9	70·7	29·7	52·3	—3·7	—2·1	—1·6
18. Do., East	82·2	56·1	69·1	26·1	48·8	—3·9	+0·6	—4·5
19. Gujarat	88·7	62·3	75·5	26·4	45·9	—1·0	—0·9	—0·1
20. Central India, West	81·8	54·7	68·2	27·1	48·7	—2·1	+0·1	—2·2
21. Do., East	79·1	54·3	66·7	24·9	45·1	—2·5	+0·7	—3·2
22. Berar	85·6	60·3	73·0	25·3	43·1	+0·5	+0·1	+0·4
23. Central Provinces, West	82·1	56·9	69·5	25·2	45·9	—1·4	+0·3	—1·7
24. Do., East	82·5	58·4	70·5	24·1	44·1	+0·5	0	+0·5
25. Konkan	86·8	71·8	79·3	15·0	27·1	—1·1	+0·3	—1·4
26. Bombay Deccan	85·3	60·5	72·9	24·8	40·9	—0·3	+1·0	—1·3
27. Hyderabad, North	84·9	61·6	73·3	23·3	39·8	—0·2	+1·3	—1·5
28. Do., South	85·7	63·9	74·8	21·9	36·4	0	—0·3	+0·3
29. Mysore	80·1	62·5	71·3	17·7	28·4	—0·8	+0·1	—0·9
30. Malabar	86·0	73·6	79·8	12·4	19·3	—0·8	+0·1	—0·9
31. Madras, South-east	86·0	71·8	78·9	14·1	24·3	—0·1	+0·2	—0·3
32. Do. Deccan	87·2	65·8	76·5	21·3	33·9	—0·6	—0·5	—0·1
33. Do. Coast, North	83·9	69·9	76·9	14·0	26·8	—0·7	—0·2	—0·5

TABLE 11.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	—0·7	+1·8	+0·5
Assam	—1·7	+0·9	—0·4
Bengal	—1·1	+0·2	—0·5
Bihar and Orissa	—1·7	—0·6	—1·1
United Provinces	—2·2	—0·3	—1·3
Punjab	—1·7	+0·3	—0·7
North-West Frontier Province	—1·7	+0·5	—0·6
Sind	—0·4	—0·3	—0·3
Rajputana	—3·8	—0·1	—2·0
Bombay	—0·8	+0·1	—0·3
Central India	—2·3	+0·4	—0·9
Central Provinces	—0·7	+0·2	—0·2
Hyderabad	—0·1	+0·3	+0·1
Mysore	—0·8	+0·1	—0·3
Madras	—0·5	0	—0·2

Winds.

12. In north-west India the wind directions were somewhat abnormal but the variations were very irregular. In the United and Central Provinces the average wind strength for the month was well above the normal, while in Burma, Sind and Central India it was below.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	—0·6	—13
Assam	—0·1	+ 4
Bengal	+0·1	— 9
Bihar and Orissa	+0·7	— 5
United Provinces	—0·1	+ 3
Punjab	0	+ 4
North-West Frontier Province	—0·4	+ 1
Sind	—0·7	+ 1
Rajputana	+0·1	+ 1
Bombay	—0·1	— 6
Central India	—0·5	—10
Central Provinces	+0·6	+ 6
Hyderabad	0	— 3
Mysore	+0·2	—19
Madras	+0·1	— 5

Humidity and cloud.

13. Humidity, both absolute and relative, was nearly normal everywhere, but there were some fairly large departures from normal in the amount of cloud. Large excess of cloud occurred nearly everywhere except in north-west India where the skies were unusually clear.

TABLE 13.

Division.	Hygrometry; 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	88	+ 5	·742	+·052	4·8	+1·0
Assam	91	0	·582	+·008	4·6	+0·6
Bengal	84	— 1	·611	—·025	2·8	+0·8
Bihar and Orissa	78	0	·509	—·018	2·1	+0·3
United Provinces	70	— 1	·405	—·013	1·6	+0·5
Punjab	65	+ 3	·303	+·006	1·0	—0·6
North-West Frontier Province.	69	+ 4	·271	+·001	1·1	—1·0
Sind	58	+ 5	·386	+·025	0·6	—0·9
Rajputana	49	— 1	·285	—·036	1·4	—0·3
Bombay	64	0	·513	—·011	2·0	+0·5
Central India	62	+ 3	·359	—·010	1·9	+0·8
Central Provinces	60	— 4	·388	—·039	2·0	+0·5
Hyderabad	59	— 5	·462	—·061	2·7	—0·1
Mysore	79	+ 4	·571	+·015	5·3	+0·5
Madras	80	+ 1	·722	—·007	4·7	+0·4

Rainfall.

The aggregate rainfall of the month in the plains of India was 113 per cent. in excess of the normal. The excess was not entirely general, for the Punjab South-west, the North-West Frontier Province, Sind, Rajputana, Berar, Hyderabad North and Malabar had short supplies, the deficit being small however in absolute amount. In the region of excess, rainfall was unusually heavy for the time of year in Bengal (+445 per cent.), Chota Nagpur (+549 per cent.), Bihar (+1506 per cent.); the United Provinces East (+633 per cent.), Central India West (+1014 per cent.) and the Central Provinces West (+531 per cent.).

Weather was unusually dry in Baluchistan, but in Kashmir the usual amount of precipitation occurred.

TABLE 14.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
1. Bay Islands	9·5	9·3	4·57	7·75	−3·18	−41
2. Lower Burma	4·4	2·4	3·22	1·61	+1·61	+100
3. Upper Burma	2·9	2·1	1·27	1·19	+0·08	+ 7
4. Assam	2·7	1·5	1·88	0·90	+0·98	+109
5 Bengal	2·8	0·8	3·65	0·67	+2·98	+445
6. Orissa	1·3	1·5	3·54	1·34	+2·20	+164
7. Chota Nagpur	2·5	0·6	2·27	0·35	+1·92	+549
8. Bihar	3·2	0·3	2·89	0·18	+2·71	+1506
9. United Provinces, East	2·1	0·2	1·10	0·15	+0·95	+633
10. Do., West	0·7	0·3	0·31	0·12	+0·19	+158
11. Punjab, East and North	1·0	0·3	0·46	0·13	+0·33	+254
12. Do., South-west	0	0·2	0	0·11	—0·11	—100
13. Kashmir	1·2	1·0	0·40	0·41	—0·01	— 2
14. North-West Frontier Province	0·1	0·6	0·02	0·47	−0·45	−96
15. Baluchistan	0	1·1	0·02	0·50	−0·48	−96
16. Sind	0	0·2	0	0·09	—0·09	—100
17. Rajputana, West	0·3	0·3	0·12	0·19	—0·07	−37
18. Do., East	0·5	0·4	0·14	0·19	−0·05	−26
19. Gujarat	1·1	0·4	1·27	0·28	+0·99	+354
20. Central India, West	1·9	0·4	2·34	0·21	+2·13	+1014
21. Do., East	1·6	0·6	1·42	0·29	+1·13	+390
22. Berar	1·3	0·9	0·48	0·58	−0·10	−17
23. Central Provinces, West	1·2	0·6	2·27	0·36	+1·91	+531
24. Do., East	1·1	0·8	0·55	0·54	+0·01	+ 2
25. Konkan	2·6	1·4	3·90	0·87	+3·03	+348
26. Bombay Deccan	2·2	1·5	2·19	0·89	+1·30	+146
27. Hyderabad, North	1·4	1·5	0·80	0·90	—0·10	—11
28. Do., South	2·3	2·1	1·40	1·14	+0·26	+23
29. Mysore	4·7	3·2	2·41	2·11	+0·30	+14
30. Malabar	6·0	5·2	3·73	3·87	—0·14	− 4
31. Madras, South-east	10·2	7·6	11·17	6·44	+4·73	+73
32. Do., Deccan	5·9	2·9	4·68	1·88	+2·80	+149
33. Do., Coast, North	3·8	3·2	3·88	3·22	+0·66	+20

TABLE 15.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	2·18	1·39	+0·79	+57
Assam	1·88	0·90	+0·98	+109
Bengal	3·65	0·67	+2·98	+445
Bihar and Orissa	2·95	0·48	+2·47	+515
United Provinces	0·73	0·13	+0·60	+462
Punjab	0·36	0·12	+0·24	+200
North-West Frontier Province	0·02	0·47	−0·45	−96
Sind	0	0·09	−0·09	−100
Rajputana	0·13	0·19	−0·06	−32
Bombay	2·20	0·69	+1·51	+219
Central India	2·16	0·24	+1·92	+800
Central Provinces	1·17	0·49	+0·68	+139
Hyderabad	1·12	1·03	+0·09	+9
Mysore	2·41	2·11	+0·30	+14
Madras	7·57	4·71	+2·86	+61
Mean of India	2·11	0·99	+1·12	+113

Snowfall.

I.—BALUCHISTAN.

15. There was a light fall of snow on the hills around Quetta on the 16th.

II.—AFGHANISTAN.

The first fall of snow of the winter season on the mountains surrounding Kabul occurred on the 11th October, but it was light. It was followed by a heavier fall from the 15th to the 18th November. Another but very slight fall took place on the 25th.

III.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Wano.*—No snow fell in this district.

(*b*) *Kurram.*—Some snow fell on the Sufed Koh and lower hills on the 17th.

(*c*) *Chitral.*—No snow fell.

IV.—KASHMIR.

Snow to a total depth of about 14 inches occurred at Sonamarg, while slight falls took place at Kargil and Dras.

V.—PUNJAB.

(*a*) *Kangra.*—In the Kulu hills snowfall began about the usual time and was normal in quantity.

(*b*) *Kilba* (*Simla Hills*).—On the hills surrounding Kilba light snow fell on the 23rd, 24th and 25th. The snowline came down to 8,000 feet on the 24th. In the upper parts of the valley the falls were general above 7,500 feet.

VI.—UNITED PROVINCES.

(*a*) *Garhwal.*—Snowstorms occurred on the higher elevations from the 22nd to the 24th. The fall on the 23rd was heavy.

(*b*) *Almora*—The total snowfall during the month amounted to 20 feet in Malla Darma, 10 feet in Byans, 6⅔ feet in Malla Danpur and 5 feet in Malla Johar and Chaudas. The snowline descended to a distance of about half a mile from the perpetual snows.

VII.—SIKKIM.

The British Trade Agent at Yatung has kindly furnished the following information :—

At Yatung snow to a depth of 4 inches fell on the 1st, 9 inches on the 2nd and 4 inches again on the 23rd.

" There have been several deaths of Tibetans on the road between Yatung and Phari, near Dotha, owing to avalanches. Two Government Dâk runners were also killed at Dotha, as well as some Tibetans, caused by the Dâk huts collapsing whilst they were asleep.

Telegraph communication was also interrupted for some days owing to the wire having been broken and buried in the snow. Two Military buildings at Yatung, *viz.*:—M. I. stable, and Commissariat godown collapsed on the night of the 1st of November 1912, due to the weight of the snow on the roofs, but no lives were lost ; a little damage however was done to the Commissariat stores.

The Jelap pass has been impassable for traffic, and has only recently opened.

The Tibetans declare that this has been the severest winter they have experienced for the last ten years."

SUMMARY.

16 (*a*) So far as can be judged from the available information the snowfall of the month was much in excess of the normal in Tibet, Sikkim and parts of Afghanistan, and probably in defect in the North-West Frontier Province.

(*b*) In the Punjab Himalayas and the Kumaon hills the snowfall was on the whole either normal or slightly above it.

G. C. SIMPSON.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 18 stations in India, etc., in November, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

Tabl

Abstract of observations taken at 10 hrs. and 16 hrs. a

Number of subdivision.	Station.	Elevation of barometer 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 gravity, 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-bul Mean minimum.	Mean 10 hrs.	Mean 16 hrs.	Mean of three
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
5	Calcutta . .	21	30·001	29·893	·108	29·943	−·021	29·915	81·7	64·1	17·6	87·1	56·7	30·4	76·8	79·0	72·9	+0·5	62·2	68·1	68·1	66
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad . .	309	29·752	29·640	·112	29·686	+·005	29·965	81·6	55·7	25·9	89·2	45·5	43·7	74·0	79·5	68·6	+ 1·1	53·5	61·6	62·6	59
	VI.—Punjab.																					
11	Lahore . .	702	29·344	29·252	·092	29·290	+·004	29·989	80·7	49·2	31·6	89·6	38·6	51·0	68·8	77·9	64·9	+ 1·7	46·8	58·0	62·2	55
	IX.—Rajputana.																					
18	Jaipur . .	1,431	28·615	28·518	·097	28·557	−·005	29·964	82·3	54·5	27·8	92·2	40·5	51·7	74·9	79·8	68·4	− 0·5	48·4	58·6	59·6	55
	X.—Bombay.																					
25	Bombay . .	37	29·955	29·853	·102	29·900	−·013	29·877	86·9	74·0	12·9	92·4	68·4	24·0	80·0	83·5	79·7	+ 0·4	68·6	71·8	74·2	71
	XIV.—Mysore.																					
29	Bangalore . .	3,021	26·999	26·897	·102	26·947	0	29·809	79·1	61·9	17·2	82·8	55·5	27·3	74·0	76·3	70·5	+ 0·9	60·5	65·7	65·7	64
	XV.—Madras.																					
31	Pudukkottai .	318	29·650	29·524	·126	29·587		29·838	86·0	72·6	13·3	92·1	68·7	23·4	81·1	82·8	79·3			73·3	73·2	
	Madras . .	22	29·959	29·860	·099	29·911	−·015	29·862	85·3	72·3	13·0	92·2	67·6	24·6	81·1	81·3	78·8	+ 0·9	71·6	76·2	75·9	74
	Hill stations excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	23·194	23·143	·051	23·159	−·006	23·121	53·9	42·2	11·7	61·1	33·0	28·1	49·4	49·3	47·5	− 2·6	35·1	40·2	41·8	39
	Sarain . .		23·240	23·179	·061	23·199		23·161	53·1	32·3	20·3	60·3	26·3	34·0	45·3	43·7	42·2			39·3	38·9	
	Kalabagh . .		20·176	20·119	·057	20·137		20·109	41·5	28·2	13·3	45·3	26·1	19·2	39·1	38·7	34·9			32·4	32·4	
	Mukteswar . .	7,592	22·921	22·860	·061	22·881		22·848	55·3	38·8	16·5	63·3	31·8	31·5	49·6	51·8	47·1		31·2	40·6	43·5	38
	Katmandu . .	4,388	25·750	25·650	·100	25·697	−·001	25·651	70·4	45·2	25·2	76·4	39·1	37·3	58·4	65·5	57·3	− 0·5	43·3	53·1	56·7	51
	Ootacamund .	7,327	23·078	23·009	·069	23·040		22·979	63·3	46·0	17·2	67·7	35·5	32·2	59·9	57·5	54·6		45·0	53·8	53·9	50
	Kodaikanal . .	7,688	22·849	22·787	·062	22·816		22·753	61·0	49·1	11·9	70·3	43·9	26·4	58·1	55·5	52·9		47·0	54·4	54·1	52
	Dodabetta . .	8,539?	22·086	22·020	·066	22·050		21·990	56·9	45·6	11·3	63·3	40·4	22·9	53·8	52·4	51·2		41·3	50·0	50·3	47
	Extra India.																					
	Diego Garcia .																					
	Seychelles . .	15	29·992	29·896	·097	29·958	+·016†	29·882	83·5	76·8	6·7	86·3	74·1	12·2	81·2	81·9	80·2	+2·6†	70·5	75·2	75·1	73
	Mauritius . .	181				29·909	+·028	30·038									73·5	−1·4				67

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 500 feet.

1.

8 stations in India, etc., in November, 1912.

Vapour tension in inches of mercury.					Humidity.					Cloud.				Wind direction. Total number of 10 hrs. and 16 hrs. Number of winds from											Wind steadiness.		Wind velocity.		Rainfall.			
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.	Number of sub-division.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·538	·575	·544	·552	−·026	89	62	55	69	− 5	2·1	2·5	2·3	−0·2	1	12	5		1		5	4	32	N 37° W	N 12° W	72	58	77*	60	3·34	3·17	Calcutta.	5
																															V.—United Provinces of Agra and Oudh.	
·387	·390	·349	·375	−·027	86	47	36	56	− 8	2·0	1·9	2·0	+0·7	22	3	5	4		1	2	15	8	N 56° W	N 51° W	29	24	35	55	1·61	1·21	Allahabad.	9
																															VI.—Punjab.	
·294	·348	·355	·333	+·017	83	49	38	57	0	0·8	0·9	0·9	−0·6	33	3	1	2	4	3		1	13	N 34° W	N 42° W	15	18	18	31	0·19	0·19	Lahore.	11
																															IX.—Rajputana.	
·272	·297	·265	·278	−·019	64	35	26	42	− 5	1·4	2·2	1·8	+0·3	9	8	7	8	8	3	4	2	11	N 33° E	N 24° W	18	35	53*	65	0·05	0·04	Jaipur.	18
																															X.—Bombay.	
·628	·673	·718	·698	−·018	75	66	63	72	− 1	1·6	2·0	1·8	+0·1		1	13	16	2		1	9	18	N 11° E	N 18° E	35	51	156*	230	3·62	2·46	Bombay.	25
																															XIV.—Mysore.	
·515	·540	·516	·524	−·015	92	65	59	72	− 3	4·8	5·3	5·1		2	2	22	23	2	1	1	3	4	N 63° E	N 60° E	63	68	109	120	1·42	0·73	Bangalore.	29
																															XV.—Madras.	
	·718	·693				68	64			5·6	6·3	6·0		6	13	30	2	3	2		1	3	N 35° E		65		131		8·88	2·30	Pudukkottai.	31
·765	·837	·822	·808	+·012	96	79	78	85	+ 1	5·4	5·5	5·5	−0·4		25	18	7	2	2	2	2	2	N 34° E	N 27° E	49	62	103	156	21·81	5·79	Madras.	
																															Hill stations excluding Kashmir and Baluchistan.	
·133	·157	·189	·160	−·011	51	46	54	54	+ 3	2·1	3·4	2·7	+0·4																1·81	1·03	Simla.	
	·182	·191				61	67			2·5	3·4	2·9																	0·53‡	0·22	Sarain.	
	·129	·130				56	57			3·4	3·7	3·6																	0·24	0·14	Kalabagh.	
·102	·161	·197	·153		45	47	53	48		2·3	3·6	3·0		19		1	7	6	2	3	19	3	S 65° W		22		96		1·42	0·97	Mukteswar.	
·261	·343	·359	·321	−·015	86	71	59	76	+ 1	2·6	2·9	2·7	+0·1	54			3				3			N 81° W	(a)	42	9*	14	2·29	0·96	Katmandu.	
·296	·352	·377	·342		93	69	80	81		5·4	7·9	6·7		3	7	11	17	8	4	2	3	5	N 72° E		40		74*		7·47	2·02	Ootacamund.	
·310	·396	·408	·370		87	81	92	89		6·2	8·6	7·4			8	5	9	8	3		7	20	N 9° W		28		235		11·29	2·72	Kodaikanal.	
·221	·322	·345	·296		71	78	87	79		6·5	8·8	7·7		2	9	21	12	7	5		1	3	N 61° E		56		189		8·58	2·52	Dodabetta.	
																															Extra India.	
																															Diego Garcia.	
·661	·796	·779	·745	−·091	72	74	72	73	−10	5·4	5·4	5·4	−1·5†	6	2		4	26	6	2	7	7	S 25° E	S 56° E	35	14	93*	127	4·41	1·85	Seychelles.	
			·583	−·017				71	+ 2			5·5	−0·5										S 77° E	S 84° E			260*	234	1·05		Mauritius.	

* Uncorrected for scale error. † Departure from old normal. ‡ Indeterminate.

§ Rain and snow water.

Table B.—Abstract of observations taken at 8 hrs. at 220 stations in India, etc., in November, 1912.

(1) Provincial means.

(2) Data of stations.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January, 1912.)

(1) Provincial means based on the material in Table B (2) except that the statement of rainfall depends on the complete data of about 2,000 stations.

		Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
	Pressure departure from normal.	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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	—·017	85·8	—0·7	70·6	+1·8	78·2	+0·5	15·2	26·2	—0·6	—13	83	+ 5	·742	+·052	4·8	+1·0	2·18	1·39	+0·79
Assam	—·011	79·4	—1·7	62·1	+0·9	70·8	—0·4	17·3	28·0	—0·1	+ 4	91	0	·582	+·008	4·6	+0·6	1·88	0·90	+0·98
Bengal	—·013	81·4	—1·1	64·4	+0·2	72·9	—0·5	17·0	29·9	+0·1	— 9	84	— 1	·611	—·025	2·8	+0·8	3·65	0·67	+2·98
Bihar and Orissa	—·001	80·8	—1·7	60·3	—0·6	70·6	—1·1	20·5	36·9	+0·7	— 5	78	0	·509	—·018	2·1	+0·3	2·95	0·48	+2·47
United Provinces of Agra and Oudh.	+·002	80·6	—2·2	54·6	—0·3	67·7	—1·3	26·0	43·1	—0·1	+ 3	70	— 1	·405	—·013	1·6	+0·5	0·73	0·13	+0·60
Punjab	+·009	80·5	—1·7	50·2	+0·3	65·4	—0·7	30·4	49·9	0	+ 4	65	+ 3	·303	+·006	1·0	—0·6	0·36	0·12	+0·24
North-West Frontier Province	—·015	77·9	—1·7	46·5	+0·5	62·2	—0·6	31·4	51·3	—0·4	+ 1	69	+ 4	·271	+·001	1·1	—1·0	0·02	0·47	—0·45
Sind	—·003	85·8	—0·4	58·6	—0·3	72·2	—0·3	27·2	47·9	—0·7	+ 1	58	+ 5	·386	+·025	0·6	—0·9	0	0·09	—0·09
Rajputana	—·011	83·5	—3·8	56·0	—0·1	69·7	—2·0	27·5	50·2	+0·1	+ 1	49	— 1	·285	—·036	1·4	—0·3	0·13	0·19	—0·06
Bombay	—·006	87·2	—0·8	64·1	+0·1	75·7	—0·3	23·1	39·7	—0·1	— 6	64	0	·513	—·011	2·0	+0·5	2·20	0·69	+1·51
Central India	+·002	80·5	—2·3	54·5	+0·4	67·5	—0·9	26·0	46·9	—0·5	—10	62	+ 3	·359	—·010	1·9	+0·8	2·16	0·24	+1·92
Central Provinces	+·001	83·1	—0·7	58·2	+0·2	70·6	—0·2	24·9	44·7	+0·6	+ 6	60	— 4	·388	—·039	2·0	+0·5	1·17	0·49	+0·68
Hyderabad	—·007	85·4	—0·1	62·9	+0·3	74·1	+0·1	22·5	37·9	0	— 3	59	— 5	·462	—·061	2·7	—0·1	1·12	1·03	+0·09
Mysore	—·005	80·1	—0·8	62·5	+0·1	71·3	—0·3	17·7	28·4	+0·2	—19	79	+ 4	·571	+·015	5·3	+0·5	2·41	2·11	+0·30
Madras	—·004	85·6	—0·5	70·8	0	78·2	—0·2	14·7	25·3	+0·1	— 5	80	+ 1	·722	—·007	4·7	+0·4	7·57	4·71	+2·86

Table

(2) Abstract of observations taken at 8 hrs. at 22

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·807		29·885	29·900	1st	29·723	9th	·177	77·3	84·9		73·7f		79·3f e		11·2	88·6	1st	68·2	24th	20·4
	Mergui	65	29·901	+·008	29·897	29·981	2nd	29·798	10th	·183	76·7	86·0e	—1·4e	68·7?	—1·0?	77·3?	—1·2?	17·3	90·0	1st	60·8	25th	29·2
	Tavoy	19	29·951	—·020?	29·904	30·040	2nd	29·830	10th	·210	75·2	87·1	—0·8	70·2	+1·7	78·7	+0·5	16·9	91·0	20th	60·8	25th	30·2
	Moulmein	94	29·891	+·005	29·924	29·972	1st	29·727	10th	·245	74·7	87·2	—1·2	71·5	+0·4	79·3	—0·4	15·7	90·5	1st & 20th	65·3	24th	25·2
	Rangoon	18	29·963	—·005	29·919	30·037	23rd	29·795	10th	·242	76·5	87·0	—0·6	73·0	+0·7	80·0	+0·1	14·0	91·0	10th	70·0	4 days	21·0
	Bassein	27?	29·917	—·003	29·910	30·018	23rd	29·803	10th	·215	76·7	85·9	—0·3	73·6	+2·1	79·7	+0·9	12·3	89·2	21st	70·9	24th	18·3
	Diamond Island	41	29·924	—·008	29·900	29·984	23rd	29·780	10th	·204	80·8	85·9	+0·4	78·6	+3·4	82·3	+1·9	7·3	88·4	19th	75·9	11th	12·5
	Toungoo	164	29·817	—·006	29·926	29·888	1st	29·656	10th	·232	74·8	87·1	—0·2	71·4	+1·4	79·2	+0·6	15·7	94·5	20th	61·9	30th	29·6
	Kyaukpyu	18	29·949		29·907	30·021	23rd	29·811	10th	·210	78·3	84·3		73·1		78·7		11·2	88·0	1st	65·4	21st & 22nd.	22·6
	Akyab	20	29·959	—·011	29·920	30·019	20th	29·825	10th	·194	74·1	84·3	—0·8	71·5	+0·1	77·9	—0·3	12·8	89·9	10th	61·0	21st	25·9
3	Thayetmyo	121	29·849	—·024	29·913	29·921	1st	29·709	10th	·212	75·4	87·2	—0·8	69·7	+2·4	78·5	+0·8	17·5	89·9	29th & 21st.	60·9	25th	29·0
	Minbu	165	29·817	—·050	29·928	29·882	1st	29·697	10th	·185	74·7	86·1	—2·5	70·3	+2·1	78·2	—0·2	15·8	89·3	9th & 20th	64·0	30th	25·3
	Yamethin	657	29·299	—·060	29·917	29·362	1st	29·186	10th	·176	73·3	87·2	—1·6	69·1	+2·1	78·2	+0·3	18·1	91·3	19th	61·5	30th	29·8
	Mandalay	250	29·719	—·037	29·922	29·738	1st	29·625	10th	·163	74·4	88·7	+3·0?	69·3	+2·1	79·5	+2·5?	20·4	92·7	5 days.	61·1	30th	31·6
	Monywa	280	29·723		29·953	29·772	12th	29·623	10th	·149	73·7	86·4		69·7		78·1		16·7	90·3	9th	63·6	30th	26·7
	Lashio	3,820	27·214	—·023	27·160	27·289	2nd	27·159	10th	·130	62·1	?	?	58·6	+4·3	?	?	?	?	?	49·0	29th & 30th.	?
	Bhamo	381	29·647	—·004	29·994	29·712	1st	29·561	16th	·151	67·0	82·0	+0·2	62·2	+3·0	72·1	+1·6	19·8	86·4	8th, 9th & 12th.	52·1	30th	24·3
	Myitkyina	458	29·542		29·975	29·628	1st	29·469	10th	·159	65·5	80·4		62·2		71·3		18·2	86·2	8th	53·0	30th	33·2
	II.—Assam.																						
4	Dibrugarh	353	29·679		30·010	29·739	1st	29·611	11th	·128	63·0	78·7		60·4		69·6		18·3	83·4	12th	55·1	30th	28·3
	Sibsagar	333	29·719	—·011	30·025	29·795	1st	29·654	11th	·141	63·9	76·7	—1·6	60·4	+0·6	68·5	—0·4	16·3	80·6	8th & 14th	55·0	22nd	25·7
	Tezpur	252	29·805		30·026	29·859	20th	29·740	11th	·119	65·1	80·1		61·5		70·8		18·6	88·6	6th	55·8	29th	31·1
	Gauhati	195	29·858		30·016	29·922	21st	29·787	10th	·135	66·3	79·9		61·5		70·7		18·4	84·8	12th	57·1	21st, 28th & 29th.	27·7
	Dhubri	115	29·908	—·011	29·981	29·984	20th	29·827	10th	·157	67·8	77·1	—2·7	64·0	+0·5	70·6	—1·1	13·1	81·0	13th	60·1	27th, 28th & 30th.	20·9
	Silchar	104	29·907	—·012	29·966	29·992	20th	29·786	10th	·206	70·0	84·1	—0·7	64·9	+1·3	74·5	+0·3	19·2	91·8	12th	58·3	28th	33·4
	III.—Bengal.																						
5	Cox's Bazar	36	29·944		29·920	30·003	19th	29·809	10th	·194	73·7	82·9		68·1		75·5		14·8	87·7	10th	59·2	20th & 21st.	28·4
	Chittagong	87	29·900	—·008	29·935	29·967	19th	29·773	10th	·194	71·5	83·0	0	66·5	+0·7	74·7	+0·3	16·5	87·5	11th & 13th.	59·0	20th & 21st.	28·4
	Noakhali	43	29·953		29·943	30·023	20th	29·813	10th	·210	70·7	81·6		65·3		72·4		16·3	86·8	12th	57·4	27th	29·2
	Barisal	12	29·976	—·014	29·935	30·050	20th	29·794	1st	·256	72·4	81·9	—0·9	64·8	—0·2	73·4	—0·5	17·1	87·8	12th	57·6	20th	30·[illegible]
	Narayanganj	26	29·964	—·013	29·939	30·045	20th	29·827	1st	·218	71·2	82·6	—0·9	65·7	—0·3	74·2	—0·6	16·9	89·0	11th & 12th.	59·8	30th	29·[illegible]

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

f—mean of 28 days.
e— „ 29 „

3.

ations in India, etc., in November, 1912.

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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Nov., 1912.	Normal rainfall for period, 1st May to 30th Nov.	Departure from normal of period, 1st May to 30th Nov., 1912.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																															I.—Burma.
7	15	3	3				1	N 43° E		4·5*			69		83		·777		5·5		11			6·57			167·35			2·68	Victoria Point.
	2		1					N 80° E	N 29° E	2·2	1·2	+1·0	13	−39	84	+ 6	·773	+·023	3·8	−0·5	5	6·0	−1·0	3·69	3·46	+ 0·23	161·82	150·94	+10·88	1·84	Mergui.
				1				(?)	N 29° E	1·0*	0·9	+0·1	3	− 5	86	+ 5	·755	+·017	2·9	−1·1	5	4·0	+1·0	4·30	2·63	+ 1·67	186·40	210·14	−23·74	1·87	Tavoy.
2	12	14		1				N 68° E	N 4° E	2·3	1·8	+0·5	79	+57	89	+ 6	·776	+·026	4·1	+0·4	5	2·7	+2·3	4·11	2·19	+ 1·92	180·64	184·02	− 3·38	1·50	Moulmein.
6	10	5	1	1			2	N 41° E	N 68° E	1·3	2·8	−1·5	56	− 4	89	+ 2	·815	+·047	7·0	+3·8	6	3·1	+2·9	4·55	2·38	+ 2·17	93·88	95·16	− 1·28	2·27	Rangoon.
	3	3						N 67° E	N 56° E	2·0	2·6	−0·6	17	−42	91	+ 5	·845	+·081	3·6	+0·2	5	4·1	+0·9	2·60	3·14	− 0·54	100·34	107·58	− 7·24	0·87	Bassein.
1	15	10		1			1	N 60° E	N 53° E	5·6	6·7	−1·1	72	− 1	86	+ 8	·908	+·118	3·6	−0·5	6	5·2	+0·8	5·47	4·71	+ 0·76	113·77	114·22	− 0·45	1·73	Diamond Island.
2	3	3	4	1	1		2	N 81° E	N 12° W	0·8	1·2	−0·4	20	−32	91	+ 3	·774	+·041	6·7	+2·2	4	2·6	+1·4	2·46	1·74	+ 0·72	83·61	79·34	+ 4·27	0·91	Toungoo.
2	13	4	4	1			2	N 59° E		2·0*			56		83		·806		2·9		4			5·21			162·20			3·22	Kyaukpyu.
8	12	5	1	1			1	N 41° E	N 26° E	1·5	1·7	−0·2	66	−18	93	+ 4	·777	+·032	3·9	+0·2	4	3·5	+0·5	6·87	3·98	+ 2·89	234·11	188·24	+45·87	3·03	Akyab.
	4	1					1	N 42° E	N 4° E	0·9*	2·6	−1·7	13	−42	86	+ 8	·767	+·102	5·2	+2·6	6	2·7	+3·3	1·26	1·67	− 0·41	45·40	35·97	+ 9·43	0·27	Thayetmyo.
1							29	N 44° W	N 48° W	2·7	5·2	−2·5	92	+16	86	+10	·734	+·081	5·8	+3·2	3	2·4	+0·6	2·77	1·81	+ 0·96	34·75	32·37	+ 2·38	1·87	Minbu.
5			1	1			4	N 19° W	N 18° W	1·1	2·2	−1·1	20	−28	88	+ 4	·717	+·042	3·8	+1·7	4	2·6	+1·4	2·36	1·57	+ 0·79	33·22	35·74	− 2·52	0·88	Yamethin.
1	1	1	1				3	N 6° E	N 11° E	1·3	1·5	−0·2	10	−10	83	− 2	·691	+·004	2·5	−1·3	2	3·2	−1·2	0·66	1·72	− 1·06	29·63	31·20	− 1·57	0·50	Mandalay.
18	1						6	N 8° W		1·4			76		87		·728		5·9		3	2·7	+0·3	0·84	2·41	− 1·57	29·53	30·30	− 0·77	0·46	Monywa.
	2	1						N 52° E		1·1*			7		96	+ 5	·530	+·047	8·1	+1·2	8	4·2	+3·8	2·29	2·42	− 0·13	49·44	58·30	− 8·86	0·67	Lashio.
1	4							N 37° E	N 23° E	0·9	1·2	−0·3	17	−22	94	+ 4	·629	+·061	6·5	+2·3	3	2·7	+0·3	0·80	1·64	− 0·84	77·41	67·68	+ 9·73	0·34	Bhamo.
1		1	1				1	N 45° E		0·9			3		88		·555		4·3		2	2·4	−0·4	0·53	1·25	− 0·72	81·29	71·83	+ 9·46	0·25	Myitkyina.
																															II.—Assam.
								(a)		0·4			(a)		95		·538		2·3		2	2·4	−0·4	1·48	1·31	+ 0·17	97·77	86·28	+11·49	1·12	Dibrugarh.
4	4							N 24° E	N 60° E	1·0	1·1	−0·1	27	0	97	− 1	·575	−·001	7·6	+2·4	2	2·1	−0·1	1·38	1·07	+ 0·31	81·26	77·46	+ 3·80	1·25	Sibsagar.
	19	9						N 59° E		2·0			82		86		·529		3·5		1	1·7	−0·7	0·82	0·96	− 0·14	58·43	59·41	− 0·98	0·71	Tezpur.
			2					S 45° E		1·2			3		94		·603		8·4		2	1·0	+1·0	0·92	0·31	+ 0·61	58·91	52·68	+ 6·23	0·70	Gauhati.
1	14	12						N 63° E	N 65° E	3·9	3·7	+0·2	79	+ 2	88	0	·592	0	3·1	+1·2	4	0·5	+3·5	3·71	0·26	+ 3·45	110·35	86·80	+23·55	3·00	Dhubri.
1	1	3	2					N 87° E	N 79° E	0·8	1·2	−0·4	17	+ 9	87	0	·653	+·024	2·9	−1·8	4	1·8	+2·2	2·48	1·40	+ 1·08	96·59	98·80	− 2·21	1·35	Silchar.
																															III.—Bengal.
11	3	4	5				2	N 39° E		2·3*			62		87		·723		3·7		3			2·69			118·72			1·66	Cox's Bazar.
	11		3				1	N 55° E	N 43° E	1·1	2·0	−0·9	37	−36	91	+ 2	·707	+·026	5·0	+1·5	4	1·7	+2·3	5·19	1·82	+ 3·37	86·47	88·68	− 2·21	2·67	Chittagong.
17	4			2			2	N 3° E		1·5			63		91		·682		2·4		3	1·6	+1·4	4·16	1·85	+ 2·31	91·04	109·98	−18·94	2·76	Noakhali.
3	1			1			1	N	N 18° E	0·3	1·2	−0·9	11	−14	82	− 1	·652	−·026	1·6	−0·3	3	1·5	+1·5	10·16	1·30	+ 8·86	80·52	71·59	+ 8·93	9·24	Barisal.
5		2	1			3	6	N 28° W	N 13° E	1·4	1·5	−0·1	33	−10	83	− 2	·633	−·026	2·8	+0·4	3	1·1	+1·9	4·68	0·96	+ 3·72	70·53	61·10	+ 9·53	2·47	Narayanganj.

* Uncorrected for scale error.

(a) Indeterminate.

Tab

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

Number of subdivision.	Station	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
	III.—Bengal—*concld.*																						
	Mymensingh	63	29·941	−·016	29·958	30·013	20th	29·826	10th	·187	69·1	81·9	+0·4	65·5	+1·8	73·7	+1·1	16·4	88·6	12th & 13th.	59·1	27th & 30th.	2
	Bogra	75	29·935	−·011	29·964	30·017	20th	29·818	10th	·199	67·8	79·7	−2·3	63·7	+1·3	71·7	−0·5	16·0	85·2	11th & 13th.	57·2	20th	2
	Dinajpur	123	29·885	−·017	29·967	29·954	20th	29·773	1st	·181	66·7	79·7	−2·7	61·4	+0·4	70·5	−1·1	18·3	85·8	13th	56·0	21st	2
	Jalpaiguri	283	29·744	−·007	29·999	29·852	21st	29·670	2nd & 10th.	·182	68·2	80·3	−1·0	61·9	+1·2	71·1	+0·1	18·4	85·4	7th & 14th	55·4	30th	3
5	Saugor Island	25	29·983	−·012	29·954	30·060	20th	29·645	1st	·415	71·4	81·0	−0·7	66·3	−0·8	73·6	−0·7	14·7	86·7	13th	60·2	27th & 30th.	2
	Midnapore	149	29·850		29·951	29·963	30th	29·430	1st	·533	69·4	82·1		62·7		72·4		19·4	87·8	23rd	53·2	29th	3
	Calcutta	21	29·993	−·011	29·961	30·074	20th	29·655	1st	·419	68·8	81·7	+0·3	64·1	−0·4	72·9	−0·1	17·6	87·1	11th & 13th.	56·5	29th	3
	Jessore	33	29·981	−·004	29·961	30·076	20th	29·756	1st	·320	69·3	81·1	−2·0	63·2	−0·8	72·1	−1·4	17·9	83·0	13th	56·7	20th & 22nd.	3
	Burdwan	99	29·912	−·018	29·963	29·989	21st	29·576	1st	·413	68·1	81·6	−1·6	63·5	−0·8	72·5	−1·2	18·1	87·4	11th	55·8	29th & 30th.	3
	Berhampore	67	29·948	−·015	29·967	30·037	20th	29·694	1st	·343	66·5	80·0	−1·9	63·2	−0·2	71·6	−1·1	16·8	87·1	11th	56·2	30th	3
	IV.—Bihar and Orissa.																						
6	Balasore	50	29·966	−·016	29·962	30·044	29th	29·557	1st	·487	68·5	82·7	−0·9	62·9	−0·1	72·8	−0·5	19·8	87·4	13th	51·6	29th	3
	Hukitala (False Point).	42	29·991	+·012	29·974	30·072	27th	29·645	1st	·427													
	Cuttack	80	29·947	+·005	29·970	30·030	27th	29·653	1st	·377	69·7	81·7	−3·4?	65·1	−1·0	73·4	−2·2?	16·6	85·5	4 days	53·3	30th	3
	Puri	24	29·985		29·948	30·064	20th	29·724	1st	·340	71·9	83·8		68·3		76·0		15·5	88·1	12th&13th	57·6	30th	3
	Angul	455	29·562		29·994	29·647	27th	29·252	1st	·395	69·0	81·6		61·1		71·3		20·5	85·6	16th & 22nd.	48·5	30th	
	Sambalpur	486	29·549	+·001	30·000	29·648	27th	29·303	1st	·345	68·9	82·9	−0·9	61·5	−0·8	72·2	−0·9	21·4	87·1	14th	47·6	30th	3
7	Chaibasa	*733*	29·291	+·017	29·973	29·164	10th	28·842	1st	·322	64·1	81·4	−1·9	59·0	−0·5	70·2	−1·2	22·4	85·1	20th&23rd	46·8	29th&30th	3
	Ranchi	2,128	27·864	−·002	29·985	27·931	27th	27·563	1st	·368	62·7	75·7	−2·1	57·3	−0·3	66·4	−1·2	18·4	81·2	12th&13th	44·9	29th&30th	3
	Purulia	*816*	29·184		29·983	29·271	27th	28·804	1st	·467	65·1	81·4		60·3		70·8		21·1	90·5	1st	49·1	30th	4
	Daltonganj	*730*	29·308		30·037	29·397	27th	29·126	1st	·271	59·4	81·2		54·7		68·0		26·5	87·6	6th	41·5	30th	4
8	Purnea	134	29·902	+·002	29·995	29·991	20th	29·759	1st	·232	67·6	78·5	−3·4	59·6	+0·4	69·1	−1·5	18·9	84·6	4 days	52·3	30th	3
	Monghyr	155	29·878		29·993	29·965	27th	29·714	1st	·252	67·3	78·7		60·8		69·8		17·3	84·7	14th	50·9	30th	3
	Darbhanga	165	29·869	−·004	29·996	29·933	20th	29·751	1st	·182	65·6	80·0	−1·3	58·3	−3·7	69·2	−2·5	21·7	86·6	12th	49·7	30th	3
	Pusa	188	29·840		29·992	29·906	20th	29·715	1st	·191	63·7	80·3		57·4		68·8		22·9	86·1	9th & 12th	49·3	30th	3
	Patna	183	29·848	−·017	29·993	29·922	27th	29·702	1st	·220	67·1	79·1	−2·6	60·6	+0·1	69·9	−1·3	18·5	85·0	11th	51·2	28th	3
	Buxar	239	29·788		29·995	29·877	27th	29·656	1st	·221	64·5	82·2		59·4		70·8		22·8	89·5	13th	48·6	30th	4
	Gaya	372	29·656	−·012	29·995	29·760	13th	29·490	1st	·270	67·9	83·3	+0·1	59·0	−0·7	71·2	−0·3	24·3	89·9	13th&14th	49·2	30th	4
	Naya Dumka	489	29·525	+·006	29·986	29·614	20th	29·264	1st	·350	65·5	79·3	−2·1	59·7	+0·2	69·5	−0·9	19·6	85·4	12th&15th	51·0	30th	3
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·760	−·010	29·987	29·824	27th	29·664	1st	·170	64·5	80·4	−1·2	54·1‡	−5·4‡	68·7‡	−3·3	26·3	87·1	1st	50·8	11th	3
	Benares	267	29·775	+·005	30·007	29·867	27th	29·636	1st	·231	67·5	82·1	0	55·6†	−0·5†	68·8†	−0·3	26·5	88·6	14th	46·1	30th	4
	Allahabad	309	29·735	+·007	30·014	29·830	27th	29·620	1st	·210	64·8	82·1	−1·0	55·6	+0·5	68·9	−0·3	26·5	89·1	4th	45·5	29th & 30th.	4
	Cawnpore	416	29·615	+·003	30·008	29·717	27th	29·478	2nd	·239	62·8	81·2	−2·9	55·0	0	68·1	−1·5	26·2	89·2	3rd	44·9	20th	4

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

† Mean of 29 days.

‡ Mean of 22 days.

3—*continued.*

tations in India, etc., in November, 1912—continued.

Wind direction. Number of winds from: Calm	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Nov., 1912.	Normal rainfall for period, 1st May to 30th Nov.	Departure from normal of period, 1st May to 30th Nov., 1912.	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	56	57
																																III.—Bengal. —*concld.*
26			1					3	N 27° W	N 58° E	0·7	0·8	−0·1	7	−26	90	+ 1	·643	+ ·004	3·2	+0·6	3	0·9	+2·1	5·74	0·73	+ 5·01	89·72	83·70	+ 6·02	3·26	Mymensingh.
20	3	3				1	1	2	N 9° W	N 27° E	0·7	1·0	−0·3	20	−18	84	− 1	·581	−·027	2·9	+1·8	4	0·5	+3·5	5·38	0·65	+ 4·73	83·60	63·26	+20·34	2·98	Bogra.
2	3	12	3	1			6	3	N 17° E	N 21° E	1·9	1·6	+0·3	46	− 9	88	+ 4	·578	+·002	3·1	+1·9	5	0·4	+ 4·6	4·62	0·12	+ 4·50	69·37	64·97	+24·40	3·20	Dinajpur.
17	2	6	1	4					N 67° E	N 20° E	1·4			27	−28	81	− 3	·561	−·001	2·0	+0·8	3	0·4	+ 2·6	2·90	0·10	+ 2·80	104·95	116·66	−11·71	1·96	Jalpaiguri.
	17	7			2	1		3	N 5° E	N 10° E	6·4	5·1	+1·3	69	− 4	81	− 6	·620	−·008	2·9	−0·2	1	1·4	−0·4	2·99	1·37	+ 1·62	48·85	65·77	−16·92	2·96	Saugor Island.
6	8	3	2	2	1			8	N 1° W		1·8			44		77		·551		1·6		2	0·9	+ 1·1	3·27	0·69	+2·58	49·89	52·87	− 2·98	3·13	Midnapore.
3	4	2		2		1	1	17	N 35° W	N	3·3*	1·8	+1·5	62	+17	81	− 1	·574	−·037	2·5	+0·7	2	0·9	+ 1·1	3·34	0·56	+ 2·78	49·53	57·04	− 7·51	3·17	Calcutta.
19	4	2			1		1	3	N 15° W	N 6° W	1·5	1·2	+0·3	23	− 3	80	− 6	·583	−·064	2·3	+0·3	2	1·1	+ 0·9	1·90	1·12	+ 0·78	62·48	58·47	+ 4·01	1·69	Jessore.
6	8	3	1				3	9	N 21° W	N 5° W	1·4	1·2	+0·2	56	+16	77	+ 2	·532	−·027	3·4	+1·1	3	0·9	+ 2·1	3·94	0·66	+ 3·28	47·34	52·66	− 5·32	2·90	Burdwan.
12	8		1			3	2	4	N 34° W	N 13° W	1·1	1·1	0	37	+ 7	83	− 2	·547	−·058	2·2	+0·3	4	0·6	+ 3·4	4·21	0·52	+ 3·69	44·49	51·26	− 6·77	2·03	Berhampore.
																																IV.—Bihar and Orissa.
5	16				1	2		6	N 18° W	N 21° W	1·6	1·5	+0·1	62	− 5	75	− 9	·523	−·077	2·3	−0·5	1	1·2	− 0·2	4·74	0·94	+ 3·80	40·86	55·44	−14·58	4·74	Balasore.
1	2	4	3	2	1	3		14	N 25° W	N 19° W	6·8	4·4	+2·4	37	−43					1·8	−1·5	2	2·2	− 0·2	6·25	2·54	+ 3·71	47·83	58·89	−11·06	6·07	Hukitala (False Point.)
19	2	2				3	3	1	N 65° W	N 45° W	1·4*	1·2	+0·2	13	− 4	79	+ 3	·574	−·007	2·2	−0·2	1	1·7	− 0·7	3·99	1·28	+ 2·71	51·39	55·89	− 4·50	3·99	Cuttack.
1	18	4			1	1	1	4	N 5° W		5·3			73		80		·630		3·0		3	1·8	+ 1·2	4·89	2·91	+ 1·98	67·93	50·72	+17·21	4·32	Puri.
3	1		1	1			8	16	N 56° W		3·6			70		77		·554		2·5		1	0·4	+0·6	3·85	0·13	+ 3·72	39·60	42·47	− 2·87	3·85	Angul.
	12	14	1		1	1		1	N 24° E	N 21° E	3·1	2·0	+1·1	76	+ 1	77	+ 1	·550	−·001	1·8	0	2	0·9	+1·1	0·48	0·93	− 0·45	46·83	63·46	−16·63	0·32	Sambalpur.
19					3	3	2	3	S 64° W	S 77° W	1·4	0·7	+0·7	23	−10	86	+ 5	·526	+·005	2·3	+0·4	3	0·9	+2·1	3·27	0·52	+ 2·75	57·95	47·51	+10·44	2·17	Chaibassa.
8	5	1		1		1	2	12	N 38° W	N 63° W	3·5	2·7	+0·8	53	+35	70	+ 4	·365	−·060	2·0	+0·5	3	0·6	+2·4	2·15	0·22	+ 1·93	44·45	51·73	− 7·28	1·04	Ranchi.
11	1	1					9	8	N 63° W		1·4			50		78†		·481†		1·2		3	0·7	+2·3	3·37	0·23	+ 3·14	46·97	47·15	− 0·18	1·82	Purulia.
19	1	1	7	1		1			N 88° E		1·8			26		89		·451		1·9		3	0·4	+2·6	0·82	0·21	+ 0·61	29·55	38·68	− 9·13	0·27	Daltonganj.
22		4				3			N 45° E	N 50° E	1·7	1·1	+0·6	3	− 8	83	− 3	·579	+·024	2·2	+1·2	6	0·2	+5·8	4·41	0·10	+4·31	65·01	59·02	+ 5·99	1·75	Purnea.
2	2	2	3	1		4	13	3	N 81° W		3·2			43		78		·527		2·3		4			6·14			43·62			2·92	Monghyr.
12			6				11		W	N 48° W	1·3	1·2	+0·1	17	+ 7	85	+ 3	·545	−·007	2·4	+1·7	4	0·3	+3·7	4·42	0·10	+ 4·32	37·34	48·09	−10·75	1·93	Darbhanga.
11	3		2	2	1	4	4	2	S 79° W		2·1			17		85		·500		2·1		4			4·03			39·70			1·30	Pusa.
15	1		3			1	9	1	N 82° W	S 60° W	2·4	1·3	+1·1	23	− 4	74	+ 3	·493	−·014	2·2	+0·9	4	0·4	+3·6	2·78	0·17	+2·61	34·05	44·84	−10·79	1·64	Patna.
4			3	2	2	14	5		S 40° W		2·7			57		72		·429		2·0		2	0·4	+1·6	1·21	0·41	+0·80	30·63	39·05	− 8·42	0·58	Buxar.
12		4		1	2	6	3	1	S 52° W	S 7° E	1·6	1·7	−0·1	17	−16	66	− 5	·449	−·026	2·0	+0·4	4	0·6	+3·4	2·96	0·42	+2·54	23·13	44·18	−21·05	0·96	Gaya.
25		1	1					3	N 9° W		1·2			9		76	− 4	·481		2·4		3	0·6	+2·4	3·71	0·32	+3·39	45·76	52·34	− 6·58	1·89	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
11		1	2	1		2	12	1	S 86° W	N 67° W	1·0	0·7	+0·3	37	+ 7	74	− 2	·451	−·048	1·0	+0·1	2	0·3	+1·7	1·07	0·15	+0·92	41·44	48·50	− 7·06	0·68	Gorakhpur.
8		2	3	2	8	4	3		S 45° W	S 53° W	1·5	1·4	+0·1	37	+15	68	−12	·461	−·018	1·8	+0·4	2	0·6	+1·4	1·04	0·30	+0·74	32·75	37·73	− 4·98	0·79	Benares.
8		3	1		2	16			N 87° W	N 82° W	1·6	1·7	−0·1	46	+21	65	− 7	·407	−·050	2·1	+0·8	2	0·5	+1·5	1·61	0·31	+1·30	28·10	37·19	− 9·09	1·21	Allahabad.
16	1	1	2		1	2	5	2	N 82° W	N 68° W	1·3	1·4	−0·1	17	− 2	74	+ 8	·432	+·021	1·1	+0·2	2	0·3	+1·7	1·28	0·29	+0·90	31·70	34·13	− 2·43	0·78	Cawnpore.

* Uncorrected for scale error.

† Mean of 29 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 220*

Number of sub-division.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	V—United Provinces of Agra and Oudh.—*concld.*																						
	Lucknow	368	29·668	+·006	30·012	29·755	27th	29·545	2nd	·210	64·3	80·5	−2·8	55·7	+2·9	68·1	+0·1	24·8	87·5	1st	46·6	30th	40·9
	Bahraich	401	29·603	−·022	29·984	29·675	27th	29·499	2nd	·176	62·2	79·5	−3·3	55·4	−1·2	67·5	−2·3	24·1	87·6	1st	46·5	30th	41·1
10	Jhansi	824	29·223	+·011	30·037	29·342	27th	29·097	2nd	·245	65·1	81·3	−4·0	55·3	−3·3?	68·3	−3·7?	26·0	91·0	4th	42·5	30th	48·5
	Agra	556	29·489	+·008	30·029	29·616	27th	29·333	2nd	·283	64·6	82·1	−2·3	56·7	+0·8	69·4	−0·7	25·4	92·0	3rd	45·5	30th	46·5
	Mainpuri	516	29·507	+·001	30·010	29·614	27th	29·370	2nd	·244	59·9	81·2	−3·0	53·6	−0·6	67·4	−1·8	27·6	88·3	4th	42·6	29th & 30th.	45·7
	Bareilly	568	29·438	−·006	29·998	29·522	27th	29·302	2nd	·220	59·8	79·4	−1·7	53·7	+0·9	66·6	−0·4	25·7	86·3	1st	43·0	30th	43·3
	Roorkee	899	29·131	+·025	30·048	29·206	27th	28·996	2nd	·210	57·8	75·3	−4·2	49·9	+0·1	63·1	−2·1	26·4	83·0	1st	41·4	19th	41·6
	VI.—Punjab.																						
11	Delhi	718	29·314	+·016	30·033	29·445	27th	29·145	2nd	·300	61·1	78·8	−4·1	56·1	−0·1	67·5	−2·1	22·7	88·5	3rd	45·8	30th	42·7
	Sirsa	662	29·370	+·013	30·038	29·514	27th	29·183	2nd	·331	59·9	81·8	−3·1	50·8	+1·3	66·3	−0·9	31·0	92·3	1st	42·5	29th	49·8
	Patiala	*818*	29·194		30·028	29·315	30th	29·048	2nd	·267	56·2	78·8		51·2		65·0		27·6	87·6	1st	42·5	30th	45·3
	Ambala	892	29·128	+·015	30·036	29·217	27th	29·031	24th	·186	56·9	80·5	−1·8	49·5	−1·4	65·0	−1·6	31·0	89·5	1st	40·9	30th	48·6
	Ludhiana	812	29·209	+·015	30·037	29·318	27th	29·048	2nd	·270	57·4	79·6	−1·0	52·2	+1·3	65·9	+0·1	27·4	89·0	1st	42·0	29th	47·0
	Lahore	702	29·327	+·013	30·048	29·461	27th	29·147	2nd	·314	54·0	81·5	−2·1	48·9	+2·1	65·2	0	32·6	90·9	1st	38·7	29th	52·2
	Sialkot	830	29·192	+·016	30·048	29·309	27th	29·011	2nd	·298	54·8	79·7	−1·2	47·0	−2·9?	63·3	−2·1?	32·7	88·0	1st	34·0	30th	54·0
	Rawalpindi	1,674	28·337	−·004	30·086	28·457	27th	28·151	2nd	·306	50·2	77·6	+0·4	43·2	−0·1	60·4	+0·1	34·4	86·9	1st	31·4	30th	55·5
12	Khushab	612	29·429	+·013	30·052	29·575	27th	29·208	2nd	·367	57·6	81·6	−1·2	48·9	−0·8	65·2	−1·0	32·7	89·4	1st & 2nd	36·4	29th	53·0
	Montgomery	558	29·471	−·003	30·032	29·618	27th	29·257	2nd	·361	58·9	81·8	−2·4	50·6	−0·3	66·2	−1·3	31·2	90·9	2nd	39·0	30th	51·9
	Multan	420	29·620	−·005	30·029	29·782	27th	29·385	2nd	·397	61·1	84·2	−0·2	53·2	+0·8	68·7	+0·3	31·0	92·8	3rd	43·5	30th	49·3
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	28·918	−·021	30·087	29·031	27th	28·728	2nd	·302	49·8	76·6	−0·5	44·6	−0·5	60·6	−0·5	32·0	85·7	1st	32·4	30th	53·3
	D. I. Khan	590	29·456	−·009	30·058	29·600	27th	29·221	2nd	·379	53·9	79·2	−2·9	48·4	+1·4	63·8	−0·7	30·8	87·4	1st	38·1	29th	49·3
	VIII.—Sind.																						
16	Jacobabad	186	29·852	−·009	30·008	30·020	27th	29·602	2nd	·418	61·1	86·0	−0·8	50·5	−0·3	68·2	−0·5	35·5	98·6	1st	40·3	24th	58·3
	Hyderabad	96	29·947	−·001	29·998	30·104	27th	29·738	2nd	·366	66·6	86·6	−1·4	59·2	−0·8	72·9	−1·1	27·4	98·5	3rd	45·0	30th	53·5
	Karachi	13	30·042	+·001	30·006	30·175	27th	29·872	2nd	·303	70·1	84·7	+1·0	66·0	+0·2	75·4	+0·6	18·7	89·0	9th	57·0	28th	32·0
	IX.—Rajputana.																						
17	Bikaner	*771*	29·236	−·010	30·009	29·395	27th	29·052	2nd	·343	62·2	84·7	0?	54·4	−5·0	69·5	−2·5?	30·3	95·5	3rd	42·0	29th & 30th.	53·5
	Jodhpur	780	29·244	−·008	30·015	29·371	27th	29·091	2nd	·280	64·9	86·3	−3·7	57·3	−2·1	71·8	−2·9	29·0	98·0	1st	46·8	29th	51·2
18	Jaipur	1,431	28·592	−·009	30·034	28·684	28th	28·452	2nd	·232	63·9	82·9	−2·9	54·5	−0·7	68·7	−1·8	28·4	92·2	3rd	40·6	30th	51·6
	Ajmer	1,611	28·417	−·012	30·055	28·542	27th	28·263	2nd	·279	57·9	80·0	−3·9	55·1	+4·1	67·5	+0·1	24·9	90·1	3rd	44·2	29th & 30th.	45·9
	Kotah	819?	29·194	−·017	30·001	29·320	27th	29·049	2nd	·271	66·2	83·6	−4·8	58·7	−1·7	71·1	−3·3	24·9	95·6	4th	46·6	30th	49·0

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

3—*continued.*

tations in India, etc., in November, 1912—continued.

Wind direction. Number of winds from Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Nov., 1912.	Normal rainfall for period, 1st May to 30th Nov.	Departure from normal of period, 1st May to 30th Nov., 1912.	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	56	57
																																V.—United Provinces of Agra and Oudh.—*concld.*
26			1				3		W	N 72° W	1·3	1·0	+0·3	7	− 6	69	− 7	·424	−·020	1·6	+0·6	4	0·3	+3·7	2·01	0·10	+1·91	26·85	35·71	−8·86	0·83	Lucknow.
4	4	3	1	1	1	3	7	6	N 55° W	N 2° W	1·1	1·3	−0·2	37	+24	77	0	·431	−·051	2·0	+1·4	4	0·5	+3·5	2·87	0·21	+2·66	34·84	41·88	−7·04	2·28	Bahraich.
13		3	1		1	6	2	4	S 87° W	S 81° W	1·6	1·3	+0·3	20	− 3	55	+ 5	·339	−·007	2·3	+1·4	1	0·3	+0·7	0·62	0·11	+0·51	34·56	35·73	− 1·17	0·58	Jhansi.
19	1	3	1	1	1	2	1	1	N 45° E	N 56° W	1·4	2·0	−0·6	3	−34	57	− 2	·350	+·006	1·6	+0·6	1	0·2	+0·8	0·17	0·07	+0·10	23·84	25·57	− 1·73	0·17	Agra.
12	3	1	1	1	2	2	5	3	N 75° W	N 60° W	0·8	0·6	+0·2	23	+ 4	73	+ 4	·384	+·010	1·0	−0·4	0	0·3	−0·3	0·11	0·15	−0·04	34·06	25·04	+ 9·02	0·05	Mainpuri.
30									*a*	N 7° E	0	0·9	−0·9	*a*		78	+ 1	·410	+·001	1·2	+0·4	1	0·3	+0·7	0·15	0·23	−0·08	40·36	41·85	− 1·49	0·15	Bareilly.
27				1				2	N 45° W	S 81° E	0·6	0·8	−0·2	3	+ 1	76	− 1	·366	+·008	1·6	+0·5	1	0·5	+0·5	0·30	0·22	+0·08	39·30	37·40	+ 1·90	0·24	Roorkee.
																																VI.—Punjab.
7	1	1	1	2	1	2	11	4	N 87° W	N 89° W	1·3	1·5	−0·2	40	+ 2	65	+13	·350	+·063	1·4	0	0	0·3	−0·3	0	0·10	−0·10	29·48	24·46	+ 5·02		Delhi.
5	6		3	4	6		3	3	S 45° E	S 18° W				3	− 8	62	+ 3	·321	+·033	1·2	−0·6	1	0	+1·0	0·80	0·01	+0·79	11·44	11·88	− 0·44	0·80	Sirsa.
5	4	1	3	7			10		N 16° E		2·8*			23		71		·323		1·0		2	0·2	+1·8	0·81	0·08	+0·73	19·92	20·85	− 0·93	0·50	Patiala.
15	5		6	2	1			1	N 64° E	N 34° W	1·6	1·0	+0·6	23	+15	71	− 4	·330	−·025	1·3	+0·2	2	0·3	+1·7	0·42	0·25	+0·17	26·90	24·53	+ 2·37	0·28	Ambala.
30									*a*	S 27° W	0·1	0·7	−0·6	*a*		64	0	·506	−·004	0·8	−1·3	1	0·2	+0·8	0·35	0·08	+0·27	21·45	23·40	− 1·95	0·24	Ludhiana.
22			2	2	1		2	1	S 24° E	N 5° W	0·9	0·9	0	7	+ 6	76	+ 9	·323	+·010	1·4	−0·1	1	0·1	+0·9	0·19	0.05	+0·14	10·58	15·98	− 5·40	0·19	Lahore.
15	2	4	7	1		1			N 70° E	N 42° E	0·7	0·6	+0·1	33	+18	76	+11	·326	+·022	1·0	−0·5	0	0·2	−0·2	0·03	0·03	−0·05	12·60	24·79	−12·19	0·03	Sialkot.
20	5		2		1		1	1	N 3° E	N 50° W	1·2	0·9	+0·3	16	+ 5	70	+ 5	·253	−·005	0·9	−1·2	0	0·4	−0·4	0	0·23	−0·23	15·28	24·45	− 9·17	0	Rawalpindi.
21		3	4	1			1		N 76° E	N 38° E	1·3	2·0	−0·7	20	− 2	46	− 2	·220	−·006	0·9	−0·4	0	0·1	−0·1	0	0·05	−0·05	8·26	10·43	− 2·17	0	Khushab.
7	2	3	7	5	3	1	1	1	S 77° E	S 72° E	2·2	2·1	+0·1	33	+11	51	− 2	·249	−·037	0·6	−1·2	0	0·1	−0·1	0	0·06	−0·06	5·53	8·28	− 2·75	0	Montgomery.
26	2	2							N 23° E	N 72° E	0·9	0·9	0	10	−13	61	− 1	·331	+·007	0·3	−0·9	0	0·1	−0·1	0	0·08	−0·08	5·05	5·11	− 0·06	0	Multan.
																																VII.—North-West Frontier Province.
27					2	1			S 15° W	S 31° W	0·9	1·5	−0·6	10	−10	71	+ 6	·261	0	1·3	−1·4	0	0·5	−0·5	0	0·32	− 0·32	4·28	5·94	− 1·66	0	Peshawar.
23	1	4						2	N 15° E	N 9° E	0·4	0·6	−0·2	17	+13	67	+ 2	·282	+·003	0·9	−0·6	0	0·3	−0·3	0	0·12	− 0·12	5·80	6·21	− 0·41	0	D. I. Khan.
																																VIII.—Sind.
30									(*a*)	N 18° E	0	1·2	−1·2	*a*		61	+ 7	·331	+·034	1·1	−0·6	0	0·1	−0·1	0	0·08	−0·08	1·16	2·48	− 1·32	0	Jacobabad.
2	12				4	3		9	N 35° W	N 10° W	3·6	4·6	−1·0	49	+ 8	54	+ 4	·365	+·025	0	−1·7	0	0·1	−0·1	0	0·08	−0·08	4·73	6·32	− 1·59	0	Hyderabad.
4	7	14	1	1			2	1	N 27° E	N 49° E	5·7	5·5	+0·2	62	− 5	59	+ 3	·463	+·015	0·8	−0·5	0	0·1	−0·1	0	0·05	−0·05	3·17	6·24	− 3·07	0	Karachi.
																																IX.—Rajputana.
12		1	4	6	2	3	2		S 33° E	N 76° W	2·6	2·4	+0·2	33	+14	41	− 7	·233	−·064	0·9	−0·6	0	0·1	−0·1	0	0·05	−0·05	6·71	10·33	− 3·62	0	Bikaner.
11	1	14			1	2	1		N 41° E		1·98			33		39	+ 2	·249		1·5		2	0·2	+1·8	0·61	0·10	+0·51	17·73	12·61	+ 5·12	0·51	Jodhpur.
17		5	4	3		1			N 86° E	N 1° W	2·1*	2·0	+0·1	30	+ 5	52	− 2	·306	−·024	1·3	−0·3	0	0·2	−0·2	0·05	0·15	−0·10	29·10	22·59	+6·51	0·04	Jaipur.
25				2	2	1			S 10° E	N 2° W	1·3	1·2	+0·1	13	−17	64	− 1	·310	−·019	1·2	−0·1	1	0·3	+0·7	0·38	0·16	+0·22	13·53	19·76	− 6·23	0·31	Ajmer.
22	1			2		1	2	2	N 83° W		1·0			9		51	+ 4	·328		2·0		1	0·1	+0·9	0·19	0·02	+0·17	24·19	26·85	− 2·66	0·14	Kotah.

a = Indeterminate.

† Mean of 27 days.
§ " " 29 "

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 220*

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay.																						
19	Deesa	466	29·562	0	29·999	29·670	28th	29·449	2nd	·221	66·8	91·1	−0·4	55·3	−2·4	73·2	−1·4	35·8	98·3	1st	45·0	29th	51·4
	Bhuj	395	29·685	+·001	29·986	29·785	28th	29·579	2nd	·206	70·2	88·4	−0·8	59·2	−3·5	73·8	−2·1	29·2	98·0	1st	46·5	29th&30th	51·5
	Jamnagar	61	29·975		29·983	30·078	27th	29·873	22nd	·205	75·0	88·1		61·9		75·0		26·2	96·3	1st	51·3	30th	45·0
	Dwarka	37?	30·000	−·009	29·983	30·083	29th	29·896	22nd	·187	74·9	85·2	−1·4	69·5†	+1·2†	77·1†	−0·1	15·7	92·8	9th	56·7	30th	36·1
	Rajkot	429	29·589	+·004	29·979	29·669	29th	29·471	22nd	·198	70·9	89·4	−1·0	58·3	−1·0	73·9	−1·0	31·1	96·6	2nd	45·3	30th	51·3
	Veraval	*18*	29·990	−·003	29·951	30·073	29th	29·861	22nd	·212	74·3	86·8	−1·5	67·4	−0·3	77·1	−0·9	19·4	96·1	19th	59·3	25th&26th	36·8
	Bhavnagar Para	55	29·974	−·021	29·976	30·065	29th	29·809	22nd	·256	69·8	89·0	−0·9	61·2	−3·0?	75·1	−1·9?	27·8	98·0	2nd	47·0	30th	51·0
	Surat	39	29·930	+·004	29·953	30·056	8th	29·843	22nd	·213	72·5	90·3	−0·3	64·6	+1·8	77·4	+0·7	25·7	96·9	1st & 17th	55·6	30th	41·3
	Ahmadabad	163	29·864	−·001	29·981	29·952	28th	29·758	22nd	·204	71·4	90·1	−1·3	53·1	−2·3	76·8	−1·8	26·7	98·6	2nd	52·7	30th	45·9
25	Bombay	37	29·917	−·015	29·924	30·024	8th	29·749	22nd	·275	76·3	87·1	+0·2	74·0	+0·7	80·6	+0·5	13·1	92·5	18th	69·5	24th&30th	23·0
	Ratnagiri	110	29·843	−·015	29·893	29·928	8th	29·769	22nd	·159	68·0	89·5	−1·0	71·0	+1·0	80·2	0	18·5	96·3	18th	63·4	30th	32·9
	Goa	199	?	?	?	?	?	?	?	?	74·3	86·1	−1·3	72·0	−0·2	79·0	−0·7	14·1	92·1	19th	63·6	12th	23·5
	Marmagao	*60*	29·905	−·020	29·901	29·985	8th	29·823	20th	·163	75·6	84·6	−2·4	72·7	−0·1	78·7	−1·3	11·9	89·0	19th	68·2	10th	20·8
	Karwar	44	29·928	+·002	29·907	30·009	8th	29·837	20th	·172	72·2	86·6	−0·8	69·3	−0·1	77·9	−0·5	17·3	91·7	19th	61·5	11th	30·2
26	Malegaon	1,430	28·583	−·003	29·989	28·667	8th	28·438	22nd	·229	69·5	87·5	+0·4	58·7	+1·6	73·1	+1·0	28·8	95·4	3rd	47·1	30th	48·3
	Ahmadnagar	2,154	27·858	−·008	29·961	27·944	8th	27·724	22nd	·220	69·3	84·9	−0·4	59·5	+3·3	72·2	+1·5	25·4	90·6	18th	44·5	30th	46·1
	Poona	1,846	28·152	−·011	29·978	28·247	8th	28·021	22nd	·226	66·0	85·3*	−1·0*	59·5	+0·2	72·3*	−0·4	25·8	91·0	19th	51·3	12th&29th	39·7
	Sholapur	1,590	28·409	+·003	29·956	28·490	8th	28·327	22nd	·163	71·3	85·7	−0·3	62·6*	+0·5*	74·7*	−0·1	23·9	91·8	18th	53·1	30th	38·7
	Bijapur	*1,948*	28·045	−·009	29·939	28·114	8th	27·984	22nd	·130	71·9	86·7	+1·1	62·7	+1·7	74·7	+1·4	24·0	93·2	21st	52·3	30th	40·9
	Belgaum	2,562	27·435	−·004	29·910	27·512	8th	27·382	22nd	·130	69·5	80·9	−1·2	60·0	−1·1	70·5	−1·1	20·9	84·8	15th	53·0	10th	31·8
	XI.—Central India.																						
20	Neemuch	1,626	28·398	−·008	30·017	28·497	27th	28·290	2nd	·207	64·8	81·7	−2·8	54·5	−0·4	68·1	−1·6	27·2	91·4	3rd	41·0	30th	50·4
	Indore	1,823	28·131	+·002	30·000	28·278	27th	28·086	22nd	·192	67·3	81·9	−1·3	54·8	+0·7	68·3	−0·3	27·1	90·1	19th	43·1	29th&30th	47·0
21	Nowgong	754	29·287	+·007	30·035	29·492	27th	29·170	2nd	·232	60·8	78·5	−3·8	53·7	+0·5	66·1	−1·7	24·8	86·5	4th	42·0	30th	44·5
	Sutna	1,041	28·989	+·008	30·030	29·088	27th	28·876	1st	·212	62·0	79·8	−1·3	54·8	+0·9	67·3	−0·2	25·0	88·3	6th	42·7	29th&30th	45·6
	XII.—Central Provinces.																						
22	Buldana	2,132	27·879		29·961	27·952	8th	27·736	22nd	·216	71·2	82·5		61·8		72·2		20·7	89·1	20th	50·6	30th	38·5
	Akola	925	29·100	+·010	30·002	29·182	29th	28·994	1st	·188	68·7	88·3	+1·3	57·2	−0·2	72·7	+0·5	31·1	93·7	4 days	42·0	29th	51·7
	Amraoti	1,215	28·808	+·008	29·988	28·886	27th	28·698	1st	·188	70·4	86·0	−0·3	62·0	+0·4	74·0	+0·1	24·0	90·8	6 days	51·8	29th	39·0
23	Khandwa	1,044	28·930	+·005	30·009	29·077	28th	28·873	22nd	·204	67·4	85·9	−0·9	56·5	+0·3	71·2	−0·3	29·4	94·7	19th	44·6	30th	50·1
	Hoshangabad	1,006	29·034	+·005	30·033	29·122	29th	28·922	1st	·200	63·1	83·0	−1·3	56·8	−0·5	69·9	−0·9	26·2	89·6	20th	45·9	29th	43·7
	Saugor	1,867	28·196	−·013	29·993	28·284	28th	28·097	1st	·187	65·6	79·9	−2·1	57·8	+0·8	68·9	−0·7	22·1	88·3	4th & 19th	45·1	29th	43·2
	Jubbulpore	1,327	28·672	−·019	30·002	28·760	28th	28·545	1st	·215	61·7	80·1	−1·8	55·0	+1·9	67·6	+0·1	25·1	87·8	20th&21st	40·8	29th	47·0
	Seoni	2,033	27·988	+·005	30·008	28·055	27th	27·852	1st & 23rd.	·203	65·7	78·9	−2·4	55·9	+0·5	67·4	−0·9	23·0	86·6	20th	41·5	29th	45·1
	Nagpur	1,017	29·003	+·007	29·999	29·085	29th	28·867	1st	·218	68·0	84·9	−0·1	59·6	−0·7	72·3	−0·4	25·3	90·6	19th	44·3	30th	46·3
24	Pendra	2,128?	27·969		30·000	28·039	27th	27·805	23rd	·234	65·4	78·4		55·7		67·0		22·7	83·8	20th & 21st	42·7	30th	41·1

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

* Mean of 29 days.
† " " 28 "

B—*continued.*

stations in India, etc., in November, 1912—continued.

Wind direction. Number of winds from: Calm.	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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Nov., 1912.	Normal rainfall for period, 1st May to 30th Nov.	Departure from normal of period, 1st May to 30th Nov., 1912	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	56	57
																																X.—Bombay.
3		14	11			1		1	N 63° E	N 81° E	5·5	5·3	+0·2	69	+ 6	49	+ 8	·333	+·033	1·5	+0·3	1	0·2	+0·8	0·31	0·12	+0·19	23·80	23·68	+ 0·12	0·21	Deesa.
16	1	4		1		4	2	2	N 57° W	N 34° W	2·9	4·0	−1·1	10	−25	51	− 8	·401	−·051	1·7	+0·7	0	0·2	−0·2	0	0·10	−0·10	20·26	13·71	+ 6·55	0	Bhuj.
	1	18	6			4		1	N 55° E		5·5			67		91		·798		0		0	0	0	0	0	0	29·00	18·86	+11·04	0	Jamnagar.
1	7	14	3	1		1	1	2	N 31° E		7·0			66		71	0	·621		1·9		0	0	0	0	0	0	22·71	13·70	+ 9·01	0	Dwarka.
8	2	6	5	1		2	1	5	N 28° E	N 48° E	4·1	3·7	+0·4	30	−17	48	− 7	·371	−·066	1·8	+0·8	1	0·3	+0·7	0·22	0·23	−0·01	31·86	26·24	+ 5·62	0·20	Rajkot.
8	10	7	1	1				3	N 15° E	N 22° E	1·7	4·2	−2·5	56	−14	60	+ 5	·511	+·033	1·3	−0·3	0	0·1	−0·1	0·01	0·28	−0·27	27·84	17·76	+10·08	0·01	Veraval.
12	2	3	1			1	3	8	N 35° W	N 60° W	1·5	4·7	−3·2	37	−16	62	− 4	·455	−·031	2·5	+1·3	1	0·2	+0·8	0·44	0·19	+0·25	39·55	20·16	+19·39	0·38	Bhavnagar Para.
2	5	9	9	2	1	1		1	N 60° E	N 55° E	2·7	3·4	−0·7	56	+ 3	70	+ 6	·559	+·051	1·5	+0·2	2	0·3	+1·7	3·59	0·12	+3·47	57·49	40·85	+16·64	3·07	Surat.
6		22	1					1	N 44° E	N 55° E	3·5	3·1	+0·4	73	+12	43	− 7	·340	−·064	1·6	−0·2	1	0·3	+0·7	0·25	0·15	+0·10	38·46	29·35	+ 9·11	0·25	Ahmadabad.
		13	15	1	1				N 74° E	N 73° E	6·5*	7·0	−0·5	86	+ 8	75	+ 1	·674	−·005	1·9	+0·4	2	0·7	+1·3	3·62	0·38	+3·24	54·05	71·61	−17·56	2·46	Bombay.
2		5	7	14	2				S 68° E	S 78° E	5·8	5·5	+0·3	69	+ 6	61	+ 2	·579	+·006?	2·6	+1·2	2	0·9	+1·1	10·70	0·46	+10·24	99·91	100·81	+ 0·93	9·60	Ratnagiri.
	1	12	19	2	1				N 74° E	N 69° E	4·3	2·6	+1·7	82	− 4	79	+ 9	·671	+·003	4·0	+2·4	4	1·9	+2·1	2·72	1·11	+1·61	112·72	97·88	+14·84	2·20	Goa.
1		6	19	4					N 87° E	S 84° E	5·7*	5·3	+0·4	86	+ 8	82	+ 1	·726	−·003	3·6	+2·2	3	1·7	+1·3	1·36	0·96	+0·40	92·32	92·75	+ 0·57	0·80	Marmagao.
17	1	12							N 42° E	N 65° E	1·2	2·0	−0·8	40	−30	85	+ 3	·677	+·021	3·2	+1·7	4	2·5	+1·5	3·24	1·67	+1·57	104·65	121·62	−16·97	2·21	Karwar.
12	1	3		1		4	8	1	N 88° W	N 74° W	2·7	3·5	−0·8	29	−23	51	− 2	·383	−·023	1·1	−0·6	2	0·9	+1·1	5·03	0·41	+4·62	17·61	22·12	− 4·51	4·14	Malegaon.
6	4			2	5		5	8	N 71° W	N 76° E	5·0	4·8	+0·2	30	+15	50	−14	·352	−·118	1·5	−0·2	3	0·9	+2·1	1·18	0·50	+0·68	11·06	21·00	− 9·94	0·66	Ahmadnagar.
27					1		2		S 63° W	S 76° E	6·7	4·6	+2·1	7	−20	70	+ 9	·411	+·013	0·5	−1·2	4	1·6	+2·4	2·49	0·82	+1·67	24·07	26·29	− 2·22	1·10	Poona.
2	1	12	7	4				4	N 59° E	S 87° E	8·6	6·1	+2·5	56	− 8	57	+ 4	·440	+·011	2·3	−0·1	2	1·3	+0·7	0·94	0·89	+0·05	15·66	28·17	−12·51	0·53	Sholapur.
7	1	9	6	2	3			2	N 71° E	S 76° E	3·2	2·6	+0·6	43	−11	58	−12	·460	−·075?	2·3	−0·2	1	1·6	−0·6	0·43	0·89	−0·46	12·43	19·45	− 7·02	0·41	Bijapur.
10		5	11	4					N 88° E	S 87° E	6·7	7·9	−1·2	56	− 2	67	+ 3	·478	+·018	2·8	+0·5	3	2·0	+1·0	1·20	1·47	−0·27	70·44	47·12	+23·32	0·61	Belgaum.
																																XI.—Central India.
14	1	2	11				2		N 77° E	N 51° E	3·5	3·9	−0·4	33	−15	49	+ 2	·292	−·026	1·7	+0·8	2	0·2	+1·8	0·66	0·15	+0·51	24·10	27·80	− 3·70	0·39	Neemuch.
19	1	6	1	1	1			1	N 51° E	N 45° E	1·3	1·4	−0·1	23	+ 5	54	− 3	·347	−·033	1·6	+0·5	2	0·5	+1·5	3·63	0·30	+3·33	29·46	32·05	− 2·59	1·85	Indore.
16	2	1			5	2	4		S 52° W	N 53° W	0·9	0·7	+0·2	23	+10	72	+ 2	·381	−·016	1·8	+0·4	1	0·6	+0·4	1·61	0·33	+1·28	45·21	41·21	+ 4·00	1·61	Nowgong.
27	1						2		N 63° W	N 13° W	0·5	2·3	−1·8	7	−40	74	+11	·413	+·036	2·6	+1·5	1	0·7	+0·3	1·00	0·33	+0·67	40·36	41·78	− 1·42	0·96	Sutna.
																																XII.—Central Provinces.
	2	5	9	8	1		3	2	N 86° E		4·3	3·7	+0·6	46		44		·331		1·5		2	0·9	+1·1	0·58	0·56	+0·02	21·48	33·54	−12·06	0·43	Buldana.
2	1	5	8	7	3	2	1	1	S 73° E	N 89° E	4·7	2·6	+2·1	46	+ 6	47	−12	·333	−·074	1·9	+0·4	2	0·7	+1·3	0·34	0·43	−0·09	19·22	31·01	−11·79	0·21	Akola.
1		12	12	2	2			1	N 75° E	N 67° E	4·6	2·8	+1·8	72	+21	50	− 3	·364	−·048	2·1	+0·6	1	0·9	+0·1	0·20	0·51	−0·31	21·64	32·05	−10·41	0·16	Amraoti.
8	1	10	5	3	1	1		1	N 68° E	N 74° E	1·8	2·0	−0·2	46	+21	57	0	·370	0	1·7	+0·6	2	0·8	+1·2	4·10	0·39	+3·71	19·84	29·01	− 9·17	2·65	Khandwa.
1		14	5	6	1	2		1	N 77° E	N 66° E	1·8	1·5	+0·3	56	− 4	65	− 3	·371	−·035?	2·9	+1·6	2	0·7	+1·3	3·68	0·43	+3·25	41·01	47·62	− 6·61	3·40	Hoshangabad.
8		3	1	7	1	6	4		S 1° W	S 73° E	3·1	2·0	+1·1	27	− 6	51	− 3	·315	−·039	2·1	+1·0	2	0·6	+1·4	3·05	0·40	+2·65	34·91	44·03	− 9·12	2·90	Saugor.
15	1	3	2	3	4	1		1	S 58° E	S 37° E	1·0	1·2	−0·2	20	−21	69	− 4	·378	−·033	2·1	+0·9	1	0·8	+0·2	2·23	0·43	+1·80	42·61	53·08	−10·47	2·22	Jubbulpore.
5	8	9	1	2	1	1	1	2	N 24° E	N 36° E	3·1	1·7	+1·4	46	+ 3	55	− 8	·347	−·065	2·0	+0·7	1	0·8	+0·2	2·01	0·53	+1·48	44·33	49·61	− 5·28	2·01	Seoni.
3	8	13	3				1	2	N 27° E	N 21° E	2·8	2·7	+0·1	72	+42	58	− 4	·401	−·038	2·0	+0·1	1	1·0	0	0·52	0·68	−0·16	46·24	46·77	− 0·53	0·48	Nagpur.
11	8	2			2	2		5	N 21° W		2·3			30		57		·358		2·3		1	0·5	+0·5	0·73	0·20	+0·53	36·34	45·81	− 9·47	0·72	Pendra.

* Uncorrected for scale error.

Table

(2) *Abstract of observations taken at 8 hrs. at 220*

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. Mean 8 hrs. pressure reduced to 32°.	Departure from normal.	Mean 8 hrs. pressure reduced and to sea-level and to constant gravity, at 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XII.—Central Provinces —*concld.*																						
	Raipur	970	29·050	+·006	29·999	29·136	27th	28·869	1st	·267	67·5	84·2	+1·0	61·1	+0·4	72·6	+0·7	23·1	88·7	16th & 20th.	48·6	29th & 30th.	40·1
	Chanda	*634*	29·375	—·007	23·977	29·468	27th	29·217	1st	·251	67·0	85·3	+0·1	58·9	—0·4	72·1	—0·1	26·4	95·0	23rd	45·0	30th	50·0
	Jagdalpur	1,813	28·188		29·982	28·251	8th	23·030	1st	·221	65·4	82·3		58·0		70·1		24·3	87·2	15th	42·1	30th	45·1
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	28·118	—·033?	29·973	28·190	8th	27·988	22nd	·202	71·9	85·6	—1·4	61·4	+2·5	73·5	+0·5	24·2	90·9	3rd, 18th & 19th.	47·7	30th	43·2
	Nizamabad	1,248	28·745		29·965	28·814	29th	28·639	1st	·175	69·2	85·9	+1·0	59·8	+0·2	72·9	+0·6	26·1	90·9	6th	47·7	30th	43·2
	Bidar	*2,165*									73·9	83·2		63·7		73·4		19·5	87·5	9th, 16th & 18th.	54·4	29th & 30th.	33·1
28	Gulbarga	1,503	28·502	—·004	29·967	28·570	8th & 29th.	28·436	1st	·134	71·0	86·3	—0·7	62·6	0	74·4	—0·3	23·7	91·5	5th	53·8	30th	37·7
	Raichur	*1,311*	28·687	+·005	29·956	28·761	8th	28·615	1st	·146	73·5	86·9	+0·7	66·4	—0·9	76·6	—0·1	20·4	91·0	4th	57·1	30th	33·9
	Hyderabad (Deccan)	1,690	28·365	—·012	29·958	28·376	8th	28·204	1st	·172	69·5	84·6	+0·8	62·6	+0·5	73·6	+0·7	22·0	89·3	3rd & 15th	52·2	30th	37·1
	Hanamkonda	877	29·130	—·018	29·968	29·200	29th	28·990	1st	·210	72·7	85·2	—0·8	63·8	—0·6	74·5	—0·7	21·4	90·0	6th	53·2	30th	36·8
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·582	—·013	29·909	27·640	8th	27·540	10th	·100	71·2	81·0	—1·1	64·0	0	72·5	—0·5	17·0	84·1	14th	57·8	11th	26·3
	Hassan	3,149	26·876*	+·003*	29·915*	26·937	8th	26·823	20th	·114	68·0	79·3	—0·5	60·4	+0·7	69·8	+0·1	18·9	83·7	14th	52·0	11th	31·7
	Bangalore	3,021	26·994	+·003	29·909	27·053	8th	26·939	11th	·114	68·6	79·1	—0·2	61·9	0	70·5	—0·1	17·2	82·8	13th	55·3	7th	27·5
	Mysore	2,518	27·474	—·012	29·912	27·536	8th	27·418	20th	·118	70·2	81·2	—1·3	63·6	—0·5	72·4	—0·9	17·6	84·0	14th	56·0	11th	28·0
	XV.—Madras.																						
30	Mangalore	65	29·892	—·010	29·889	29·972	8th	29·793	18th	·179	78·7	87·8	—1·7	72·2	+0·1	80·0	—0·8	15·6	92·8	19th	66·9	12th	25·9
	Calicut	27	29·920	—·014	29·876	29·984	8th	29·818	18th	·166	77·3	85·9	—1·5	73·8*	+0·7*	79·9*	—0·4	12·1	87·8	11th & 15th.	69·1	11th	18·7
	Cochin	9	29·941	—·009	29·877	30·001	3rd	29·864	18th	·137	79·4	87·3	—0·2	74·5	+0·1	80·9	—0·1	12·8	89·7	10th	72·2	2nd	17·5
	Trivandrum	198	29·752	—·003	29·882	29·821	3rd	29·654	18th	·167	76·8	82·9	+0·3	73·9	—0·5	78·4	—0·1	9·0	87·0	9th	72·0	26th, 27th & 30th.	15·0
31	Pamban	37	29·906	—·022	29·871	29·971	5th	29·785	19th	·186	79·3	87·5	+3·2?	75·9	—0·2	81·7	+1·5?	11·6	89·7	4th	72·8	21st, 29th & 30th.	16·9
	Madura	447	29·519	+·009	29·902	29·568	5th	29·424	19th	·144	78·3	88·0	+0·7	73·5	+1·0	80·8	+0·9	14·5	92·0	3rd & 10th	70·6	10th & 12th.	21·4
	Pudukkottai	318	29·643		29·896	29·705	5th	29·526	19th	·179	77·8	86·4		72·6		79·5		13·8	92·1	2nd & 3rd	68·7	10th	23·4
	Negapatam	31	29·919	—·009	29·878	29·974	4th	29·811	19th	·153	78·3	84·1	0	73·5	—0·6	78·8	—0·3	10·6	91·2	2nd	70·7	18th, 19th & 29th.	20·5
	Trichinopoly	255	29·715	+·002	29·905	29·768	8th	29·612	19th	·156	78·5	87·8	+0·7	72·7	+0·7	80·3	+0·7	15·1	93·6	3rd & 4th	68·8	10th, 11th & 12th.	24·8
	Coimbatore	1,341	28·606	—·018	29·891	28·663	8th	28·536	19th	·127	73·6	84·3	—1·9	67·6	—1·3	76·0	—1·6	16·7	90·5	14th	61·3	10th	29·2
	Salem	940	29·058	+·010	29·941	29·113	8th	28·983	19th	·130	75·9	87·1	—0·2	69·0	+0·5	78·1	+0·1	18·1	92·5	6th	62·8	7th, 10th & 11th.	29·7
	Cuddalore	37	29·936	—·003	29·903	29·992	8th	29·853	19th	·139	77·1	84·5	—0·3	73·0	+1·4	78·8	+0·5	11·5	91·3	4th	68·2	10th & 11th.	23·1
	Vellore	707	29·271		29·926	29·333	8th	29·205	19th	·128	73·8	84·4*		68·2		76·3*		16·2	90·2	3rd & 4th	61·0	10th	29·2
	Madras	22	29·955	—·002	29·907	30·010	8th	29·884	19th	·126	77·7	85·6	+0·5	72·3	0	79·0	+0·3	13·3	92·0	2nd & 3rd	67·5	10th & 11th.	24·5
32	Cuddapah	433	29·552	—·012	29·931	29·610	8th	29·493	1st	·117	74·0	86·9	—1·6	67·1	—2·2	77·0	—1·9	19·8	92·2	1st	59·3	10th	32·9

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

* Mean of 29 days.

3—continued.

tations in India, etc., in November, 1912—continued.

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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th Nov., 1912.	Normal rainfall for period, 1st May to 30th Nov.	Departure from normal of period, 1st May to 30th Nov., 1912.	Heaviest rainfall during month.	Station.
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																															XII.—Central Provinces—*concld.*
7	7	3			3	2	3	N 8° E	N 40° E	1·9	2·3	−0·4	40	+17	64	− 2	·437	−·028	0·9	−1·1	1	1·0	0	0·20	0·42	−0·22	45·27	47·56	−2·29	0·15	Raipur.
2	1	1	1	1			2	N 23° E	N 39° E	1·3	1·2	+0·1	7	−22	74	+ 1	·493	−·021	1·9	−0·1	1	1·5	−0·5	1·02	0·77	+0·25	42·89	50·77	−7·88	1·00	Chanda.
4	1		3			5	4	N 43° W		3·1			27		85		·535		2·0		2			0·81			52·75			0·52	Jagdalpur.
																															XIII.—Hyderabad.
2	3	11	9	1			2	S 84° E		7·3			59		48	− 1	·370		2·2		2	0·6	+1·4	1·10	0·47	+0·63	16·94	27·13	−10·19	0·61	Aurangabad.
	1		2		1		2	(*a*)		2·7			65	− 5	·465				2·3		1	0·9	+0·1	1·71	0·62	+1·09	32·64	38·72	−6·08	1·65	Nizamabad.
	11	3	10		1		2	N 86° E		5·0			53		56		·469		4·1		1	1·5	−0·5	1·18	1·00	+0·18	30·28	34·94	−4·66	1·18	Bidar.
3	8	14	2	1	1	1		N 74° E	N 81° E	5·9	5·8	+0·1	62	+13	55	− 9	·413	−·087	1·2	−1·2	3	1·1	+1·9	2·92	0·61	+2·31	26·45	31·21	−4·76	1·60	Gulbarga.
3	6	9	8	3		1		S 85° E	N 86° E	5·9	5·3	+0·6	59	− 5	60	− 8	·511	−·057	3·2	+0·7	3	1·6	+1·4	1·58	0·72	+0·86	18·07	27·03	−8·96	0·77	Raichur.
	2		1					N 72° E	S 72° E	1·8	2·6	−0·8	7	−16	69	− 4	·501	−·038	2·9	+0·2	2	2·0	0	1·32	0·88	+0·44	21·53	28·99	−7·41	1·16	Hyderabad (Deccan).
7		1	4	3			4	N 14° E		3·3			13		63	− 2	·503		2·8		2	1·1	+0·9	2·51	0·65	+1·86	25·82	32·66	−6·84	1·64	Hanamkonda.
																															XIV.—Mysore.
1	1	11	12		1	1	2	S 71° E	S 84° E	3·9	4·5	−0·6	59	− 6	77	+ 6	·585	+·028	4·4	0	4	3·1	+0·9	2·13	1·83	+0·30	29·65	23·29	+6·36	0·90	Chitaldrug.
3	5	12	4		1	3	2	N 86° E	N 77° E	3·7	2·2	+1·5	43	−32	80	+ 5	·545	0	5·7	+0·4	6	4·0	+2·0	1·77	2·65	−0·88	38·21	32·32	+5·89	0·63	Hassan.
	10	14	2		1	3		N 75° E	N 71° E	4·5	3·7	+0·8	62	−12	79	+ 1	·55[illegible]	+·009	5·3	+1·1	5	4·5	+0·5	1·42	2·83	−1·41	41·31	32·74	+8·57	0·73	Bangalore.
3	11	6	1	1	1	4	1	N 45° E	N 67° E	5·3	6·3	−1·0	43	−24	81	+ 5	·604	+·022	6·0	+0·7	5	3·2	+1·8	2·23	2·07	+0·21	25·49	27·71	−2·22	0·64	Mysore.
																															XV.—Madras.
	5	23	2					N 86° E	S 82° E	3·8	1·9	+1·9	92	+15	72	− 5	·707	−·028	2·9	−0·1	5	4·1	+0·9	3·21	2·79	+0·42	145·59	124·92	+20·67	2·03	Mangalore.
8	4	8	8		2			S 74° E	N 87° E	2·5	4·8	−2·3	53	−21	85	+ 4	·798	+·013	3·3	−0·1	6	5·9	+0·1	2·98	4·75	−1·77	136·51	110·89	+25·62	1·09	Calicut.
2	8	16	3					N 80° E	N 39° E	2·9*	3·0	−0·1	79	+12	80	− 1	·801	+·002	3·8	0	6	8·4	−2·4	3·96	6·29	−2·33	138·21	103·55	+34·66	1·71	Cochin.
9	4	3	2			1	1	N 24° E	N 5° W	2·1*	2·6	−0·5	23	− 3	86	+ 1	·789	−·012	6·7	+1·3	13	9·1	+3·9	11·28	6·23	+5·05	84·28	53·44	+30·84	2·85	Trivandrum.
5	10	7	1	1	3		2	1	N 19° E	N 21° E	8·5	7·4	+1·1	43	− 9	87	+ 2	·859		4·8		12	12·4	−0·4	10·69	11·18	−0·49	21·75	24·19	−2·44	2·11	Pamban.
5	6	6	2			5	6	N 12° W	N 3° E	3·7	4·8	−1·1	46	−24	81	+ 5	·772	+·041	6·8	+2·3	8	7·3	+0·7	6·84	4·64	+2·20	31·88	28·77	+ 3·11	2·38	Madura.
4	13	10					3	N 13° E		5·5			77		78		·735		5·5		10	8·2	+1·8	8·88	5·30	+3·58	35·52	28·90	+ 6·62	2·30	Pudukkottai.
	6	1		1	1	6	9	N 28° W	N 30° W	8·7	4·2	+4·5	56	+ 8	81	0	·816	−·002	6·3	−0·5	15	12·9	+3·0	20·24	15·38	+4·86	34·03	38·73	− 4·70	9·19	Negapatam.
7	6	1				5	5	N 14° W	N 13° E	2·1*	2·8	−0·7	46	+ 9	76	− 3	·738	−·012	3·9	−0·7	7	7·8	−0·8	4·90	4·89	+0·01	26·05	26·69	−0·64	1·81	Trichinopoly.
16	3	8	2				1	N 37° E	N 81° E	2·4	1·8	+0·6	37	−11	82	− 3	·678	−·045	4·3	−1·3	10	6·5	+3·5	13·17	3·19	+9·98	29·31	17·87	+11·44	2·70	Coimbatore.
14	2	6	1	1	1	5		S 68° E	N 50° E	1·1	2·3	−1·2	3	−24	78	0	·696	−·006	5·1	+0·4	10	5·8	+4·2	6·29	3·54	+2·75	32·67	35·89	−3·22	1·31	Salem.
	8	1	2		3	2	14	N 38° W	N 25° W	5·3	1·6	+3·7	62	− 8	87	− 3	·813	−·023	5·7	−0·3	12	10·3	+1·7	20·02	12·03	+7·99	47·36	40·50	+6·86	7·75	Cuddalore.
24			1	1	2	1	1	S 45° W		1·5			10		86		·718		4·7		11	7·6	+3·4	16·39	5·23	+11·16	40·48	38·57	+1·91	7·43	Vellore.
1	12	3	1	3	1	3	6	N 20° W	N 1° E	4·3*	4·7	−0·4	49	−14	86	+ 3	·823	+·027	4·7	−0·8	15	11·0	+4·0	21·81	12·78	+9·03	43·56	41·20	+2·36	5·79	Madras.
5	5	1	1	4	4	1	1	8	N 37° W	N 89° E			17	−24	79	+ 3	·677	−·018	4·4	+0·5	11	5·2	+5·8	10·12	3·26	+6·86	28·20	29·51	− 1·31	2·50	Cuddapah

* Uncorrected for scale error.
(*a*) Indeterminate.

Tabl

(2) *Abstract of observations taken at 8 hrs. at 22*

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras— *concld.*																						
	Bellary	1,475	28·502	−·008	29·936	28·569	8th	28·440	1st	·129	71·8	86·7	0	65·6	0	76·2	0	21·1	91·0	15th	59·3	3rd & 9th	31·7
	Kurnool	923	29·057	−·015	29·940	29·131	8th	28·983	1st	·148	71·1	87·9	−0·2	64·8	+0·8	76·4	+0·3	23·1	92·7	4th	55·6	10th & 11th.	37·1
33	Nellore	66	29·919	−·005	29·920	29·973	8th & 30th.	29·821	1st	·152	76·1	84·2†	−2·5†	71·2	−0·4	77·7†	−1·5	13·0	92·5	3rd	67·1	10th & 11th.	25·4
	Masulipatam	15	29·989	+·009	29·938	30·049	30th	29·848	1st	·201	75·7	84·9	−0·2	70·7	−0·6	77·8	−0·4	14·2	90·3	2nd	64·2	29th & 30th.	26·1
	Cocanada	26	29·986	+·006	29·949	30·057	20th & 30th.	29·807	1st	·250	76·2	83·5	0	70·7	+0·2	77·1	+0·1	12·8	87·7	2nd	63·1	30th	24·6
	Waltair (Vizagapatam).	*226*	29·784	+·008	29·954	29·863	20th	29·589	1st	·274	76·2	83·1		71·6		77·4		11·5	86·6	14th	61·9	30th	21·7
	Calingapatam	19	29·959		29·956	30·085	20th	29·789	1st	·296	73·2	84·3		68·1		76·2		16·2	88·8	25th	56·3	30th	32·5
	Gopalpur	72	29·986	−·001	29·960	30·068	27th	29·734	1st	·334	71·9	83·2	−0·2	66·8	0	75·1	−0·1	16·4	86·7	14th	56·0	30th	30·7
	Bay Islands.																						
1	P. V. Fraser	8	29·964		29·945	30·090	30th	29·687	1st	·403	78·2												
	Port Blair	58	29·887	0	29·875	29·952	2nd	29·789	10th	·163	79·7	86·4	−0·4	76·1	−1·1	81·2	−0·7	10·3	89·2	10th	72·5	27th	16·7
	Slipper Island	90	29·851		29·875	29·913	20th	29·739	10th	·174	81·6	85·1		78·0		81·5		7·1	87·1	17th	75·1	13th	12·0
	Kashmir.																						
13	Muzaffarabad	2,475	27·636		30·222	27·728	27th	27·491	24th	·257	46·6	74·7		43·2		59·0		31·5	83·1	1st	33·3	16th	49·8
	Srinagar	5,204	24·994	−·040	24·965	25·089	8th	24·779	24th	·310	35·5	60·3	0	30·5	−1·1	45·4	−0·5	29·8	69·1	1st & 3rd.	21·1	21st	48·0
	Dras	*10,059*	20·845	−·063	20·813	20·955	8th	20·590	24th	·365	19·6	42·3		13·7		28·0		28·6	53·5	1st	0	30th	53·5
	Leh	*11,503*	19·736	−·042	19·704	19·844	8th	19·484	24th	·360	26·7	46·8	−0·8	19·1	−1·4	22·9	−1·1	27·7	55·9	1st	7·0	28th & 30th.	48·9
	Skardu	*7,505*	22·978	−·055	22·948	23·097	19th	22·758	24th	·339	31·4	53·8	−1·2	28·5	−2·2	41·2	−1·7	25·3	64·5	9th	16·6	30th	47·9
	Gilgit	4,890	25·262		25·235	25·363	28th	25·069	24th	·294	43·9	62·7	+0·7	40·0	−2·8	51·4	−1·1	22·7	74·2	1st	28·2	30th	46·1
	Baluchistan.																						
15	Fort Sandeman		25·506		25·475	25·593	18th	25·345	24th	·248	38·7	69·2		35·8		52·3		33·6	80·4	1st	25·7	29th	54·1
	Quetta	5,502	24·748	−·021	24·708	24·832	6th & 18th.	24·629	24th	·203	29·5	62·9	−1·9	27·4	−4·7	45·2	−3·3	35·5	74·6	1st	18·7	24th, 27th & 28th.	55·9
	Chaman	4,311	25·799	−·039	25·761	25·918	18th	25·692	24th	·226	43·2	64·4	−5·0	40·3	−6·1	52·3	−5·5	24·1	79·3	1st	28·5	22nd	50·9
	Kalat	6,630	23·815		23·777	23·898	8th	23·692	24th	·206	27·7	60·9		18·0		39·4		42·9	72·0	1st	5·2	22nd	66·8
	Dalbandin	2,779	27·271		30·156	27·419	18th	27·118	3rd	·301	45·3	76·5		40·6		58·5		35·9	91·8	1st	29·3	24th	62·5
	Pasni		30·049		30·009	30·164	28th	29·873	2nd	·291	66·1	86·5		63·2		74·8		23·3	97·5	1st	56·0	27th & 29th.	41·5
	Panjgur		26·868		26·826	26·975	18th	26·739	2nd	·236	46·9	71·0		43·9		57·4		27·1	87·3	3rd	34·0	24th	53·3
	Robat		26·941		26·899	27·136	18th	26·730	3rd	·406	49·1	75·7		45·8		60·7		29·9	93·0	1st	35·3	21st	57·7
	Hill stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*																					
	Para Chinar	6,000	24·544		24·520	24·646	8th	24·364	24th	·282	45·9	62·1		35·9		49·0		26·2	71·2	1st	27·1	27th & 28th.	44·1
	Cherat	*4,956*	25·829	+·014	25·797	25·906	27th	25·652	24th	·254	53·5	63·9	−3·3	46·9	−2·2	55·5	−2·7	17·0	73·7	1st	35·9	24th	37·8
	Drosh		P		P	P	P	P	P	P	45·7	66·9		42·7		54·8		24·2	80·2	1st	33·6	30th	46·6
	Murree	6,333	23·923	−·015	23·891	24·019	8th	23·749	24th	·270	46·4	56·1	−4·8	44·2	−1·4	50·2	−3·1	11·9	64·6	1st	32·2	26th	32·

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

NOTE.—The barometric readings are not reduced to sea-level in the c

† Mean of 28 days.

B—*continued.*

stations in India, etc., in November, 1912—continued.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November, 1912.	Normal rainfall for period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November, 1912.	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	56	57
																																XV.—Madras—*concld.*
9	1	2	4	7	2	1	2	2	S 58° E	S 85° E	1·9	2·3	−0·4	27	− 6	72	+ 5	·559	+·014	3·9	−0·1	6	3·1	+2·9	3·14	1·96	+1·18	21·60	18·63	+ 2·97	1·16	Bellary.
13		3	9	1	1	2	1		S 84° E	N 34° W	2·5*			30	+29	79	+ 8	·547	−·035	3·7	+1·1	5	2·1	+2·9	1·93	1·08	+0·85	18·96	25·36	− 6·40	0·83	Kurnool.
6	7	3	1	1		1	1	10	N 19° W	N 44° W	3·6*	3·4	+0·2	53	− 2	82	− 1	·737	−·049	6·9	+2·1	12	7·5	+4·5	13·53	8·74	+4·79	44·47	29·79	+14·68	2·32	Nellore.
4	15	7	1	2				1	N 19° E	N 14° E	3·7	3·9	−0·2	69	− 9	80	− 2	·708	−·035	5·0	+1·4	4	4·3	−0·3	2·25	5·01	−2·76	42·91	37·45	+ 5·46	1·36	Masulipatam.
6	5	16		1			1	1	N 32° E	N 12° E	5·7	7·3	−1·6	62	−21	76	+ 3	·699	+·049	4·8	+1·4	2	4·3	−2·3	1·97	5·04	−3·07	26·19	36·17	− 9·98	1·07	Cocanada.
	3	16		1		1	6	3	N 11° E	N 15° W	5·6			49	+ 6	69	+ 1	·623	−·027	4·9	+1·5	3	3·1	−0·1	2·48	3·19	−0·71	30·83	33·27	− 2·44	1·34	Waltair (Vizagapatam).
	11	4	1		1		3	10	N 18° W		6·4			69		82		·672		2·6		1	0·6	+0·4	2·98	1·40	+1·58	67·40	30·55	+36·85	2·92	Calingapatam.
	15	8				1		6	N 2° E	N 25° W	4·6	6·1	−1·5	79	− 8	81	+ 1	·636	+·011	2·8	−0·4	1	2·8	−1·8	2·35	3·42	−1·07	36·28	41·84	− 5·56	2·34	Gopalpur.
																																Bay Islands.
	15	7			2	1		5	N 3° E					70		68		·662		2·7		1			1·83			32·54			1·83	P. V. Fraser.
18	1	2	3	2		1		3	N 52° E	N 72° E	5·0	4·9	+0·1	10	−10	85	0	·865	−·018	5·3	−0·4	11	12·2	−1·2	4·61	9·94	−5·33	91·56	106·01	−14·45	1·42	Port Blair.
4	4	7	10	1	3			1	N 69° E		5·0			53		79		·843		4·2		8	6·5	+1·5	4·53	5·55	−1·02	76·16	75·93	+ 0·23	1·65	Slipper Island.
																																Kashmir.
	1	4	1	3	7	11	2	1	S 23° W					43		76		·246		1·2		0			0·11			36·90			0·09	Muzaffarabad.
12		3	1	9	1		1	3	S 64° E	S 53° E	1·5	1·9	−0·4	23	0	78	−10	·164	−·027	2·0	−0·9	2	1·1	+0·9	0·61	0·35	+0·26	8·14	12·39	−4·75	0·28	Srinagar.
30									(a)		1·8			(a)		81†	− 3	·092†		1·5		0	1·0	−1·0	0·11	0·30	−0·19	5·99	7·12	−1·13	0·04	Dras.
30									(a)	S 46° W	2·6	1·5	+1·1	(a)		54	−13	·082	−·021	2·0	−2·1	0	0·2	−0·2	0	0·04	−0·04	1·24	1·86	−0·62	0	Leh.
27					1	1	1		S 45° W		2·1			10		74	− 7	·129		3·2		0	0·1	−0·1	0	0·04	−0·04	4·01	3·77	+0·24	0	Skardu.
30									(a)		0·1			(a)		38	−14	·109	−·056	2·0	−2·0	0	0·1	−0·1	0	0·04	−0·04	1·75	3·04	−1·29	0	Gilgit.
																																Baluchistan.
11	1	1	14	2		1			S 88° E		2·1			51		51		·119		0·5		0			0·02			4·12			0·02	Fort Sandeman.
28		1				1			(a)	S 18° W	1·1	1·5	−0·4	(a)		71	+19	·117	−·036	0·3	−1·7	0	0·8	−0·8	0·03	0·29	−0·26	1·03	2·20	−1·17	0·03	Quetta.
11		3	9	6				1	S 84° E	S 61° E	2·2	4·7	−2·5	49	−14	51	+16	·130	−·071	0·7	−2·0	1	0·7	+0·3	0·18	0·22	−0·04	0·59	0·51	+0·08	0·18	Chaman.
6				5	12	5		1	S 2° W	S 20° W	3·8			62	+12	73		·111		1·1		0	0·8	−0·8	0·04	0·26	−0·22	1·32	1·67	−0·35	0·03	Kalat.
3	10	4	1	2	3	1	1	5	N		4·3			37		34		·112		0		0			0			0·46			0	Dalbandin.
16	6		2				2	4	N 19° W		3·1			30		78		·516		1·5		0			0			1·25			0	Pasni.
2	3	21	2	1	1				N 47° E		5·2			73		57		·197		0·3		0			0			1·92			0	Panjgur.
1	1				1	14	13		S 67° W		1·4			82		57		·205		1·0		0			0·02			0·02			0·02	Robat.
																																Hill stations excluding Kashmir and Baluchistan.
																							1·1			0·41			4·93			Chitral.
27	1	1						1	N		0·9			8		53		·171		1·0		1	1·3	−0·3	0·30	0·48	−0·18	15·70	14·26	+1·41	0·30	Para Chinar.
8	12	1		1	1		1	6	N 14° W	N 13° W	5·5	8·5	−3·0	53	−14	39	0	·162	−·009	1·4	−1·0	1	0·3	+0·7	0·21	0·08	+0·13	11·77	13·67	−1·90	0·21	Cherat.
26	1		2	1					N 83° E		0·8			9		35		·110		0·5		0	1·1	−1·1	0	0·33	−0·33	0·34‡	6·83	−6·49	0	Drosh.
11	7	1		7		1		3	N 34° E	N 75° E	3·1	4·2	−1·1	17	+10	49	+13	·150	+·021	2·0	−0·8	1	1·0	0	0·25	0·70	−0·45	32·39	40·12	−7·73	0·17	Murree.

of hill or plateau stations, the elevations of which exceed 3,500 feet.

* Uncorrected for scale error.
‡ Rainfall since 6th August, 1912.
(a) Indeterminate.

† Mean of 23 days.

Table

(a) Abstract of observations taken at 8 hrs. at 22

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 hrs. in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Hill stations, excluding Kashmir and Baluchistan —concld.																						
	Simla	7,232	23·173	—·006	23·135	23·262	13th	22·999	24th	·263	46·6	54·3	—1·8	42·5	—2·5	48·3	—2·1	11·8	61·1	22nd	33·0	25th	28·1
	Sarain		23·215		23·177	23·291	12th & 13th.	23·037	24th	·254	34·4	53·4		32·2		42·8		21·2	60·3	10th	26·3	27th	34·0
	Kalabagh																						
	Chakrata	7,022	23·371	+·017	23·331	23·443	13th	23·213	24th	·230	46·4	59·5	—0·5	40·6	—3·3	50·1	—1·9	18·9	66·7	1st & 12th.	30·7	27th	36·0
	Mukteswar	7,592	22·902	—·027	22·861	23·080	8th	22·735	21th	·345	46·3	55·8	—4·4	39·0	—4·4	47·4	—4·4	16·8	63·5	10th	32·0	24th, 25th & 27th.	31·5
	Darjiling	7,376	23·069	—·031	23·024	23·132	12th	22·991	2nd	·151	47·4	56·1	+1·9	42·3	—0·1	49·2	+0·9	13·8	62·8	11th	34·7	29th	28·1
	Shillong	4,920	25·222		25·174	25·285	12th & 13th.	25·187	24th	·098	57·4	66·5		47·1		56·8		19·4	72·4	12th	40·7	28th & 29th.	31·7
	Cherrapunji	4,309	25·772		25·723	25·826	13th	25·733	25th	·093	62·0	68·2		54·7		61·5		13·5	75·7	11th	48·1	30th	27·6
	Maymyo	3,545	26·513	—·013	26·458	26·559	1st	26·437	10th	·122	61·5	73·7	—0·1	56·3	+4·9	65·0	+2·4	17·4	79·0	20th	44·6	30th	34·4
	Pachmarhi	3,528	26·552	—·001	26·499	26·623	8th	26·418	23rd	·205	63·1	72·9	—0·4	50·8	—0·5	61·9	—0·5	22·1	80·0	20th	36·1	30th	43·9
	Mount Abu	3,945	26·155	—·008	26·105	26·254	8th	26·058	22nd	·196	63·4	72·5	—1·0	56·5	—1·4	64·5	—1·2	16·0	79·7	1st	45·9	29th	33·8
	Mercara	3,781	26·252	—·005	26·185	26·309	8th	26·168	18th	·141	64·0	74·7	—1·2	59·7	—0·4	67·2	—0·8	15·0	80·5	14th	54·0	11th	26·5
	Ootacamund	*7,327*	23·075		23·011	23·122	23rd	23·012	11th	·110	55·0	63·1		46·1		54·6		17·0	67·5	13th, 14th & 28th.	35·7	11th	31·8
	Kodaikanal	7,688	22·841	—·021	22·776	22·884	23rd	22·780	11th	·104	54·2	60·9	—0·5	49·1	0	55·0	—0·3	11·8	70·5	14th	44·0	7th	26·5
	Extra India.																						
	Singapore (a)	10	29·937		29·868	30·041	1st	29·878	25th	·163	81·8	87·2		74·1		80·7		13·1	91·2	3rd	70·5	30th	20·7
	Penang (a)	17	29·970		29·915	29·951	1st	29·796	13th	·155	81·3	88·3		73·5		80·9		14·8	92·0	21st	72·0	7th & 17th	20·0
	Trincomalee	99	29·838	P	29·886	29·896	3rd	29·712	19th	·184	78·0	85·6	+0·3	74·4	—0·3	80·0	0	11·2	90·5	3rd	71·0	24th	19·5
	Colombo	24	29·917	—·016	29·867	29·980	3rd	29·820	19th	·160	74·2	86·0	—0·4	72·4*	—1·7	79·2*	—1·1	13·6	90·0	7th	69·5	13th	20·5
	Minicoy	7	29·960			30·023	3rd	29·868	18th	·155													
	Amini Divi	*13*	29·938	—·023	29·879	30·009	8th	29·829	20th	·180	81·4	87·3	+2·2	74·5	—1·0	80·9	+0·6	12·8	90·2	15th	68·8	13th	21·4
	Gyantse	13,120	17·205		17·166	17·305	11th	17·050	5th	·255	24·3	47·0		9·2		28·1		37·8	52·7	1st	1·0	29th	51·7
	Phariyong	14,400									4·7	26·8		—14·5		6·2		41·3	36·4	1st	—22·5	30th	58·9
	Gangtok	5,660?	24·582		24·537	24·637	22nd	24·513	25th	·124	53·4	66·4		48·1		57·2		18·3	74·7	13th	42·2	29th	32·5
	Gartok (b) (i)	15,100?	17·672			17·750	28, 29 & 30th.	17·550	6th, 18th & 19th.	·200	10·9	32·6		3·8		18·2		28·8	34·1	7th	—0·5	29th	34·6
	Kashgar (b)	4,255																					
	Kabul (i)										40·2	68·2	—0·3	39·2*	+3·7**	53·8**	+1·7	29·0	78·2	6th	27·4	24th	50·8
	Meshed	3,104	26·932		30·200	27·139	20th	26·696	2nd	·443	37·8	61·2		33·0	—5·2	47·1		28·2	78·4	3rd	24·6	21st	53·8
	Jask	13	30·063	—·010	30·030	30·161	17th & 18th.	29·863	3rd	·298	69·4	82·9	—0·3	67·3	—1·4	75·1	—0·9	15·6	87·3	1st	61·3	26th	26·0
	Muscat	20	30·061	—·007	30·029	30·167	17th	29·881	3rd	·286	76·0	86·3	+6·3	72·7	—2·6	79·5	+1·9	13·6	94·3	4 days	66·1	24th	28·2
	Bahrein	18	30·086		30·057	30·177	18th & 19th.	29·968	3rd	·209	74·9	80·4		70·1		75·3		10·3	90·7	2nd	62·5	21st	28·2
	Bushire	14	30·055	—·019	30·031	30·156	18th	29·953	4th	·203	64·9	79·1	+1·0	61·9	—0·4	70·5	+0·3	17·2	85·8	1st & 8th	54·0	25th	31·8
	Busrah	25	30·076		30·071	30·187	18th	29·979	4th	·218	65·3	78·3		57·6		68·0		20·7	91·9	7th	47·1	27th	44·8
	Kerman		24·763			25·020	7th	24·620	8 days	·400	44·6	73·7		32·3		53·0		41·4	89·4	4th	19·5	20th	69·9
	Ispahan (c)	*5,817*	24·350			24·470	9th	24·200	3rd	·270	36·3	64·4	+2·5	34·0	—1·8	49·2	+0·3	30·4	76·9	1st	27·2	18th	49·7
	Tehran (c)	*4,002*	25·873			26·000	9th, 15th & 20th.	25·700	2nd & 3rd	·300	43·8	63·5	+2·1	40·7	—1·4	52·1	+0·3	22·8	79·4	1st & 2nd	31·2	20th	48·2
	Baghdad (g)*	127	30·007	+·035	30·117	30·147	18th	29·804	12th	·343	52·8	78·5	+4·0	49·0	—0·6	63·7	+1·7	29·5	86·5	7th	41·6	26th	44·9
	Beirut (d)																						
	Aden	94	29·971	+·020	29·998	30·035	23rd	29·856	16th	·179	77·5	84·4	—0·5	73·6	—1·1	79·0	—0·8	10·8	91·1	15th	67·9	24th	23·2
	Zanzibar	72	29·968	+·005	29·969	30·065	1st	29·845	26th	·220	80·6	85·0	+1·3	77·6	+0·5	81·3	+0·9	7·4	87·3	25th & 28th.	74·3	6th	13·0

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.

(d) 8½ hrs. observations.

* Mean of 29 days.

** " 23 "

(a) 9 hrs. observations

(b) Aneroid corrected.

(c) " uncorrected.

(g) 7 hrs. observations.

(i) Mean of 25 days.

B—*concluded.*

stations in India, etc., in November, 1912—concluded.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November, 1912.	Normal rainfall for period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November, 1912.	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	56	57
																																Hill stations, excluding Kashmir and Baluchistan—*concld.*
																48	+ 6	·148	+ ·007	1·2	−0·6	3	0·9	+2·1	1·56	0·45	+1·11	49·18	51·73	− 2·55	0·95	Simla.
																84		·166		1·3		2	0·7	+1·3	0·53	0·36	+0·17	40·75	40·70	+ 0·05	0·22	Sarain.
																																Kalabagh.
5	12	12	1						N 25° E	N 34° E	2·2	3·9	−1·7	72	+35	55	+ 2	·170	−·015	1·1	−0·3	3	0·7	+2·3	1·74	0·43	+1·31	67·98	58·05	+ 9·93	1·19	Chakrata.
8	2	4	8	1	2	1	3	1	N 73° E		4·0			23		50	+ 3	·155		2·5		2	0·2	+1·8	1·25	0·21	+1·04	44·80	42·20	+ 2·60	0·97	Mukteswar.
19		6	2	2		1			N 73° E	N 87° E	0·6	2·0	−1·4	23	−17	79	0	·256	−·006	3·8	+0·4	6	0·8	+5·2	14·68	0·29	+14·39	118·25	113·72	+ 4·53	8·65	Darjiling.
82		3	3	1		1			N 82° E		1·1			17		72		·337		2·2		3	2·8	+0·2	5·46	1·46	+4·00	78·70	76·51	+ 2·19	3·66	Shillong.
19		6	3				1	1	N 48° E		2·0			27		69		·373		2·8		3	1·7	+1·3	8·39	2·61	+5·78	333·53	364·81	−31·28	5·89	Cherrapunji.
23		4		2	1				N 84° E		0·9			14		95	+ 8	·532		3·2		7	5·1	+1·9	2·51	3·04	−0·53	50·92	53·51	− 2·59	0·95	Maymyo.
12	1	6	3	5	1	1	1		E	N 82° E	1·7	2·0	−0·3	30	+12	60	+ 6	·340	−·003	1·0	−0·6	1	0·9	+0·1	3·95	0·52	+3·43	73·91	72·89	+ 1·02	3·90	Pachmarhi.
5	6	6	1	1		1	2	8	N 10° W	N 27° E	3·7	3·2	+0·5	46	+19	40	− 2	·234	−·032	1·3	−0·5	1	0·3	+0·7	0·12	0·22	−0·10	43·99	59·72	−15·73	0·12	Mount Abu.
10		9	9	1				1	N 67° E	N 71° E	2·8	3·8	−1·0	53	−17	83	+ 2	·488	−·015	5·2	0	7	5·0	+2·0	3·22	2·73	+0·49	130·16	122·35	+ 7·81	1·36	Mercara.
11		2	6	7	3			1	S 63° E		3·0			43		80		·351		5·1		11	8·0	+3·0	7·47	3·79	+3·68	49·42	47·89	+ 1·53	2·02	Ootacamund.
1	5	4	5	4	1		4	6	N 17° E		10·0			27		85	+ 5	·356		5·7		13	10·2	+2·8	11·29	6·50	+4·79	47·45	46·17	+ 1·28	2·72	Kodaikanal.
																																Extra India.
8		1		2		7		12	N 76° W					37						6·3		13	13·3	−0·3	7·75	8·42	−0·67	56·64	48·54	+ 8·10	4·57	Singapore (*a*).
	3	18		5				4	N 42° E		7·0			66								14	15·4	−1·4	9·26	13·06	−3·77	78·64	77·71	+ 0·93	2·96	Penang (*a*).
2	1	7	1	1	1	13	3	1	S 56° W	S 57° W	4·5*	3·9	+0·6	27	+ 5	88	+ 2	·839	−·023	5·9	+2·4	13	13·5	−0·5	11·97	14·41	−2·44	37·14	36·76	+ 0·38	2·33	Trincomalee.
20		9				1			N 45° E	N 48° E	2·8*	4·5	−1·7	27	− 3	94	+16	·789	−·049	7·6	+2·8	11	12·8	−1·8	12·99	12·32	+0·58	80·71	58·84	+21·87	4·63	Colombo.
	10	4	1	1	3	4	3	4	N 24° W	N 7° W	3·8	4·5	−0·7	33	− 1					6·5	+2·4	10	6·8	+3·2	4·97	5·27	−0·30	43·38‖	52·01	− 8·63	1·41	Minicoy.
3	6	9		1	2	1		8	N 4° E		3·5			50		75	− 3	·802	−·056	3·2	−1·4	5	3·3	+1·7	5·62	1·66	+3·96	39·91¶	48·90	− 8·99	1·89	Amini Divi.
15			5	10					S 60° E		0·9			43		99		·132		0·4		2			0·75			7·44			0·40	Gyantse.
24				1	1	4			S 22° W		6·6§			20						1·6		2			3·03			19·38			2·00	Pharijong.
28	1							1	N 27° W		1·2			7		81		·329		1·1		6	3·6	+2·4	7·16	1·83	+5·33	125·84	114·13	+11·71	4·47	Gangtok.
16				4	5				S 21° E		5·1§			32						1·6		0			0			1·23			0	Gartok.
										N 5° W		0·7											0			0·01			2·27			Kashgar.
	2		3	2	7	6	5		S 24° W	S 45° W				48		79		·197		1·9		0	1·7	−1·7	0	0·68	−0·68	0	2·54	− 2·54	0	Kabul.
27	1				1			1	N 45° W		†0·8*			3		75		·170		2·4	−2·2	2	1·5	+0·5	1·10	0·58	+0·52	2·83	2·81	+ 0·02	0·78	Meshed.
1	8	12	5					4	N 29° E	N 27° E	5·4	7·1	−1·7	72	+15	63	− 4	·470	−·109	0·7	−1·1	0	0·6	−0·6	0·06	0·32	−0·26	0·06	0·42	− 0·36	0·06	Jask.
19	1		3				2	5	N 30° W	S 74° W	3·4	2·5	+0·9	20	−13	61	− 7	·554	−·097	2·0	+0·5	2	0·8	+1·2	0·20	0·35	−0·15	0·46	0·59	− 0·13	0·10	Muscat.
	6	2	1		1	1	7	12	N 45° W		5·2			67		72		·621		0·9		0	0·3	−0·3	0	0·04	−0·04	0	0·15	− 0·15	0	Bahrein.
7	7	10	2	1			3		N 26° E	N 61° E	5·5	4·5	+1·0	56	−14	73	+ 6	·455	−·003	0·7	−2·4	0	2·4	−2·4	0	1·56	−1·56	0	1·69	− 1·69	0	Bushire.
2	1	1	1		1	5	14	5	N 87° W		3·1			63		59		·370		2·2		1	1·8	−0·8	0·12	0·89	−0·77	0·24	1·62	− 1·38	0·12	Busrah.
16	2		2	1		1	3	4	N 45° W		3·0			20		47		·142		0·8		0			0			0			0	Kerman.
29							1		W	N 62° W	1·3	1·8	−0·5	1	−13	70	− 5	·154	−·062	1·3	−2·4	0	1·6	−1·6	0	0·72	−0·72	0·22	1·22	− 1·00	0	Ispahan.
7	8	13				1		1	N 25° E	N 11° E	1·8‡	1·6	+0·2	63	+35	57	− 2	·159	−·040	1·8	−1·8	0	3·2	−3·2	0·05	1·05	−1·00	1·13	2·23	− 1·10	0·05	Tehran.
6	6	1	1	1	1		2	11	N 28° W	N 5° W	4·7†	1·7	+3·0	52	+28	57	− 7	·230	−·057	2·3	+1·0	0	1·5	−1·5	0·03	0·79	−0·76	0·17	1·15	− 0·98	0·03	Baghdad.
																																Beirut.
10	1	19							N 43° E	N 76° E	7·8	9·4	−1·6	62	−18	66	− 6	·629	−·057	1·7	−2·1	0	0·3	−0·3	0	0·16	−0·16	0·02	0·74	− 0·72	0	Aden.
8	3	5	1	7	5		1		S 72° E	S 45° E	3·3	3·4	−0·1	30	−12	80	− 3	·837	−·001	6·2	+0·2	15	11·4	+3·6	5·70	8·64	−2·94	18·26	32·12	−13·86	0·70	Zanzibar.

* Uncorrected for scale error.

† Mean of 28 days.
‡ " 29 "
§ " 24

‖ Rainfall for October wanting.
¶ " " May "

Table C.—Abstract of observations taken at 8 hrs. at 61 fourth and fifth class stations in India, etc., in November, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* section on wind at p. 8 of the Review for January 1912.)

Tab

Abstract of observations taken at 8 hrs. at 61 four

Number of sub-division.	Station.	Temperature of air.													Wind direction.									
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	II.—Assam.																							
4	Balek	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bishnath	65·8	80·1	...	57·1	...	68·6	...	23·0	84·7	13th	51·6	26th	33·1	...	...	...	...	...	...	...	...	...	...
	Borjuli	67·6	82·5	...	55·8	...	69·1	...	26·7	88·3	17th	51·1	27th	37·2	...	...	...	...	...	...	...	...	...	...
	Chandkhira	68·3	85·7	...	62·8	...	74·3	...	22·9	94·4	13th	55·4	20th	39·0	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	60·4	80·2	...	57·6	...	68·9	...	22·6	86·3	10th	50·7	30th	35·6	...	...	...	...	...	...	...	...	...	...
	Dikom	63·8	81·1	...	56·1	...	68·6	...	25·0	86·4	8th	49·0	30th	37·4	...	...	...	...	...	...	...	...	...	...
	Golaghat	65·5	78·8	...	59·3	...	69·1	...	19·5	85·1	21st	54·2	21st & 30th.	30·9	...	...	...	...	...	...	...	...	...	...
	Hailakandi	69·1	84·9	...	64·9	...	74·9	...	20·0	93·0	13th	58·4	20th & 28th.	34·6	...	...	...	...	...	...	...	...	...	...
	Jorehat	63·7	80·2	...	60·3	...	70·3	...	19·9	84·7	10th & 11th	55·0	30th	29·7	...	...	...	...	...	...	...	...	...	...
	Lumding	63·7	78·5	...	59·9	...	69·2	...	18·5	83·5	13th	54·4	29th	29·1	...	...	...	...	...	...	...	...	...	...
	Messa	72·9	84·8	...	57·2	...	71·0	...	27·6	90·0	9th	51·6	28th	38·4	...	...	...	...	...	...	...	...	...	...
	Panerihat	58·6	79·6	...	56·3	...	67·9	...	23·3	83·4	19th	52·2	25th	31·2	...	...	...	...	...	...	...	...	...	...
	Srimangal	68·3	85·7	...	62·1	...	73·9	...	23·6	93·7	13th	55·8	20th & 28th.	37·9	...	...	...	...	...	...	...	...	...	...
	III.—Bengal.																							
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	76·6	84·6	...	65·2	...	74·9	...	19·4	92·6	13th	58·6	28th	34·0	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	73·3	84·3	...	62·4	...	73·3	...	21·8	90·2	9th	55·9	29th	34·3	...	...	...	...	...	...	...	...	...	...
	Pabna	70·0	82·8	...	63·5	...	73·1	...	19·3	90·0	11th	56·9	30th	33·1	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	61·0†	91·1§	...	53·4†	...	70·1†	...	37·7	96·9	17th	47·5	28th	49·4	...	...	...	...	...	...	...	...	...	...
	Kalchini	72·2	83·0	...	52·5	...	67·7	...	30·5	87·1	12th	47·9	30th	39·2	...	...	...	...	...	...	...	...	...	...
	Nagrakata	73·2	83·2‡	...	58·5	...	70·9‡	...	24·7	91·1	14th	54·0	28th	37·1	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

‡ Mean of 28 days. † Mean of 14 days. § Mean of 25 days.

C.

and fifth class stations in India, etc., in November, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November, 1912.	Normal rainfall of period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November, 1912.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Balek.
...	...	...	...	...	90	...	·573	...	...	...	1	1·5	−0·5	0·98	0·52	+0·46	76·81	76·89	−0·08	0·86	Bishnath.
...	...	...	...	...	81	...	·545	...	...	...	1	2·0	−1·0	1·40	0·67	+0·73	79·04	69·29	+9·75	0·29	Borjuli.
...	...	...	...	...	96	...	·670	...	...	...	3	1·3	+1·7	2·73	1·42	+1·31	...	88·45	...	1·59	Chandkhira.
...	...	...	...	...	97	...	·508	...	...	...	2	1·0	+1·0	1·21	0·46	+0·75	85·18	75·58	+9·60	0·96	Doom Dooma.
...	...	...	...	...	87	...	·515	...	...	...	1	1·0	0	1·19	0·46	+0·73	88·50	81·84	+6·66	1·10	Dikom.
...	...	...	...	...	92	...	·576	...	...	...	1	0·8	+0·2	0·99	0·35	+0·64	56·60	54·20	+2·40	0·92	Golaghat.
...	...	...	...	...	92	...	·651	...	...	...	4	1·2	+2·8	2·11	1·21	+0·90	28·97*	98·93	−69·96	0·90	Hailakandi.
...	...	...	...	...	98	...	·575	...	...	...	2	1·2	+0·8	1·19	0·42	+0·77	71·93	63·16	+8·77	0·94	Jorehat.
...	...	...	...	...	96	...	·565	...	...	...	2	...	...	1·69	...	...	38·23	...	...	1·47	Lumding.
...	...	...	...	...	77	...	·617	...	...	...	1	1·0	0	0·91	0·32	+0·59	62·98	74·89	−11·91	0·76	Messa.
...	...	...	...	...	98	...	·481	...	...	...	2	1·5	+0·5	1·39	0·48	+0·91	70·71	63·14	+7·57	0·81	Panerihat.
...	...	...	...	...	92	...	·639	...	...	...	4	0·8	+3·2	2·23	1·25	+0·98	68·96	79·76	−10·80	1·53	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	3	1·4	+1·6	3·43	1·15	+2·28	83·59	77·73	+5·86	2·04	Comilla.
...	...	...	...	...	76	...	·693	...	...	...	2	0·7	+1·3	3·05	0·56	+2·49	56·94	68·42	−11·48	1·86	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	2	1·3	+0·7	1·72	1·23	+0·49	64·62	61·05	+3·57	1·56	Faridpur.
...	...	...	...	...	78	...	·641	...	...	...	2	0·3	+1·7	2·93	0·51	+2·42	56·79	58·41	−1·62	1·59	Goalundo.
...	...	...	...	...	80	...	·591	...	...	...	3	0·5	+2·5	2·61	0·49	+2·12	56·15	54·06	+2·09	2·13	Pabna.
...	...	...	...	...	...	...	...	...	...	...	3	0·6	+2·4	2·47	0·50	+1·97	48·11	58·38	−10·27	1·35	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	4	0·6	+3·4	2·11	0·45	+1·66	35·45	49·92	−14·47	0·91	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	5	0·5	+4·5	3·30	0·24	+3·06	50·19	49·37	+0·82	1·68	Malda.
...	...	...	...	...	...	...	...	...	...	...	4	0·2	+3·8	4·28	0·11	+4·17	84·90**	75·16	+9·74	3·47	Rangpur.
...	...	...	...	...	96†	...	·515†	...	...	...	2	0·5	+1·5	0·72	0·09	+0·63	108·62	145·09	?	0·49	Dam Dim.
...	...	...	...	...	67	...	·535	...	...	...	3	1·0	+2·0	2·18	0·34	+1·84	98·68§	141·50	−42·82	1·26	Kalchini.
...	...	...	...	...	65	...	·518	...	...	...	3	1·2	+1·8	3·65	0·27	+3·38	141·28	150·61	−9·33	3·07	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	4	0·3	+3·7	3·77	0·08	+3·69	124·18	137·85	−13·67	2·58	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	3	1·1	+1·9	3·15	1·02	+2·13	56·68	51·41	+5·27	2·35	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	3	1·0	+2·0	4·25	0·51	+3·74	60·78	50·34	+10·44	2·02	Bankura.
...	...	...	...	...	...	...	...	...	...	...	3	0·6	+2·4	3·78	0·46	+3·32	42·38	48·52	−6·14	1·55	Raniganj.

§ Rainfall from 17th to 30th July not included. * Rainfall from August to November 1912. ** Rain fall for September and October 1912 not included.

Table

Abstract of observations taken at 8 hrs. at 61 fourth and

Number of sub-division.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	65·9	81·4	...	57·9	...	69·7	...	23·5	87·8	11th	48·2	30th	39·6	...	...	...	...	...	...	...	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XII.—Central Provinces.																								
23	Chhindwara	62·3	80·4	...	54·1	...	67·3	...	26·3	87·7	19th	39·8	30th	47·9	...	4	7	2	2	1	3	6	5	N 21° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	73·1	85·7	...	65·8	...	75·8	...	19·9	90·0	15th	56·3	11th	33·7	...	...	...	...	...	...	...	...	...	...	...
33	Guntur	74·5	87·0	...	68·8	...	77·9	...	18·2	91·5	3rd	61·0	28th	30·5	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	65·7	78·0	...	56·0	...	67·0	...	22·0	86·6	2nd	49·0	29th	37·6	...	19	6	3	...	...	...	2	...	N 12° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	31·8	54·5	...	25·0	...	39·7	...	29·5	65·7	6th	11·4	28th	54·3	...	11	1	9	9	...	...	...	...	N 73° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C—*continued.*

fifth class stations in India, etc., in November, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.									Heaviest rainfall during month.	Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November, 1912.	Normal rainfall of period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November, 1912.		
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	4	0·7	+3·3	2·74	0·25	+2·49	42·82	48·64	—5·82	1·00	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	3	0·3	+2·7	3·59	0·12	+3·47	43·67	46·27	—2·60	1·93	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	4	0·3	+3·7	2·82	0·16	+2·66	43·10	47·02	—3·92	1·16	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	2	0·2	+1·8	1·25	0·20	+1·05	42·49	53·67	—11·18	0·72	Motihari.
...	...	...	...	...	...	...	...	...	...	...	2	0·4	+1·6	1·16	0·23	+0·93	33·64	39·75	—6·11	0·71	Chapra.
...	...	...	...	...	...	...	...	...	...	...	4	0·4	+3·6	2·01	0·16	+1·85	35·67	41·89	—6·22	0·85	Arrah.
...	...	...	...	...	...	...	...	...	...	...	3	0·5	+2·5	2·04	0·35	+1·69	30·24	39·86	—9·62	1·08	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	76	...	·484	...	...	...	...	No	rain	gauge	...	...	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	1	0·3	+0·7	0·14	0·12	+0·02	31·09	28·80	+2·29	0·14	Meerut.
...	...	...	...	...	...	...	...	...	...	...	1	0·7	+0·3	1·23	0·30	+0·93	58·33	78·07	—19·74	1·14	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	1	0·1	+0·9	0·25	0·02	+0·23	25·35	22·73	+2·62	0·14	Udaipur.
																					XII.—Central Provinces
0·5	...	...	27	...	73	...	·415	...	1·8	...	1	...	...	3·70	...	...	38·15	...	...	3·70	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	8	9·1	—1·1	4·27	6·73	—2·46	19·94	17·69	+2·25	1·15	Tinnevelly.
...	...	...	...	...	74	...	·605	...	6·3	...	6	...	...	3·67	...	...	27·62	...	...	1·02	Anantapur.
...	...	...	...	...	83	...	·711	...	3·6	...	3	...	...	1·37	...	...	20·71	...	...	0·96	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	6	13·1	—7·1	3·12	11·83	—8·71	103·29	81·56	+21·73	0·92	Car Nicobar.
																					Kashmir.
...	...	...	80	...	63	...	·395	...	0·9	...	1	...	...	0·15	...	...	21·66	...	...	0·15	Jammu.
...	...	...	...	...	...	...	...	...	...	...	4	1·8	+2·2	1·20	1·18	+0·02	16·03	23·98	—7·95	0·43	Sonamarg.
...	...	...	53	...	84	...	·147	...	1·5	...	1	...	...	0·10	...	...	4·37	...	...	0·10	Kargil.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor.

Table

Abstract of observations taken at 8 hrs. at 61 fourth and

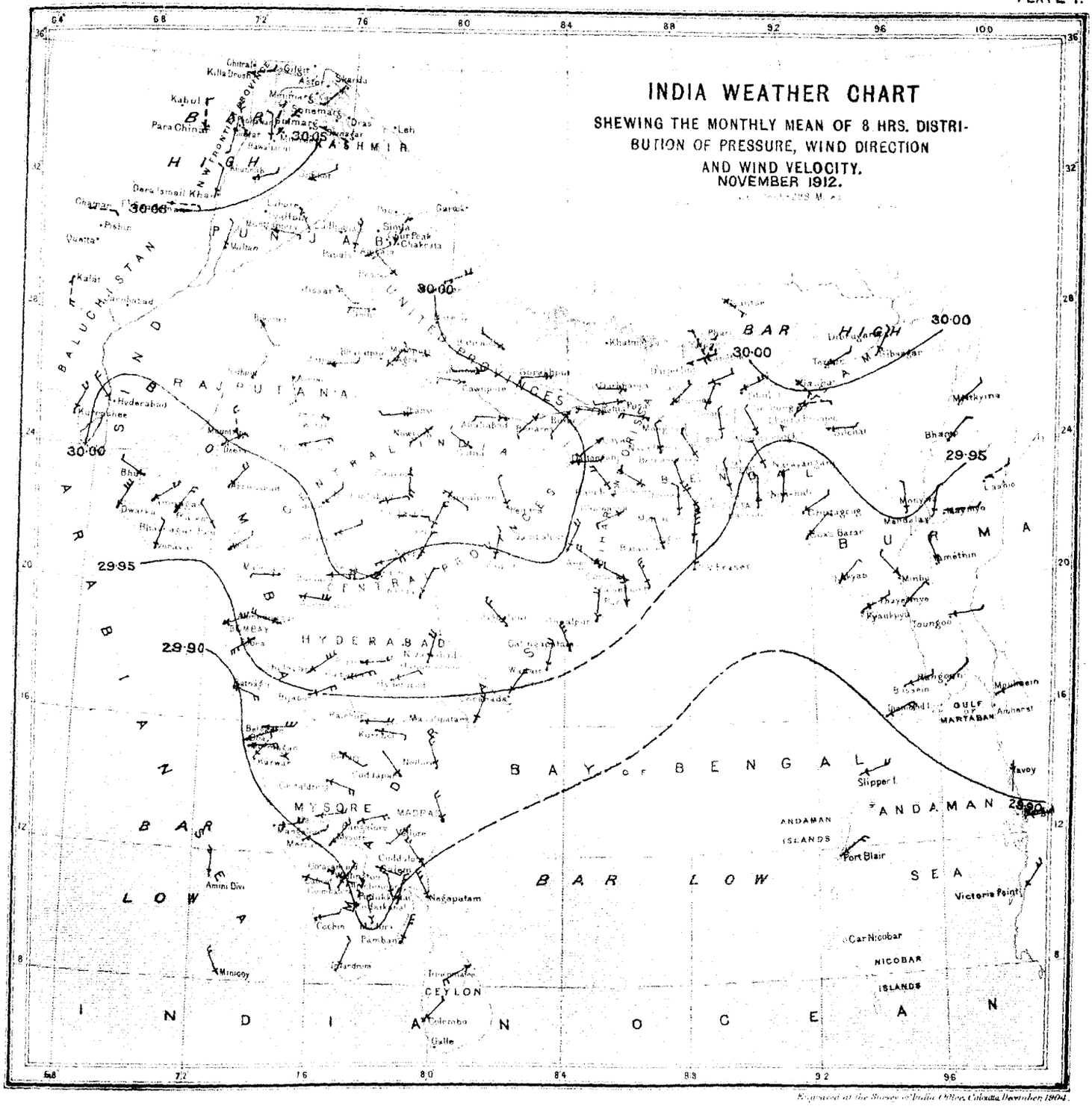
Number of sub-division.	Station.	Temperature of air.													Wind direction.										
															Number of winds from										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill Stations, exclusive of Kashmir.																								
	Panighatta	67·3	79·3	...	59·5	...	69·4	...	19·8	88·1	13th	55·0	30th	33·1	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	57·0	66·4	...	52·9	...	59·7	...	13·5	74·3	6th	46·9	23rd	27·4	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	54·6	...	33·6	...	44·1	...	21·0	62·9	10th	24·6	27th	38·3	8	...	...	11	3	1	1	3	3	S 74° E	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pishin	...	64·5	...	28·2	...	46·3	...	36·3	76·3	1st	18·0	28th	58·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	78·2	...	58·4	...	68·3	...	19·8	90·6	1st	50·2	23rd	40·4	...	...	...	...	...	...	...	...	...	...	...
	Birjand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chumbi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	40·5	62·8	...	34·3	...	48·5	...	28·5	71·6	7th	24·6	25th	47·0	...	...	...	...	...	...	...	...		...	...
	Koweit	...	79·1	...	61·8	...	70·4	...	17·3	90·4	1st	50·2	26th	40·2	1	8	...	2	...	3	2	10	4	N 63° W	...
	Maidan	...	81·4	...	54·6	...	68·0	...	26·8	92·1	1st	45·2	25th	46·9	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	80·7	...	58·3	...	69·5	...	22·4	89·4	6th	49·4	30th	40·0	...	...	...	...	5	...	...	...	18	a N 45° W	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...
	Seistan	...	68·7	...	38·8	...	53·7	...	29·9	86·8	5th	26·0	18th & 28th.	60·8	7	6	2	1	...	...	...	...	14	N 22° W	...

a=7 winds variable.

—concluded.

fth class stations in India, etc., in November, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st May to 30th November, 1912.	Normal rainfall of period, 1st May to 30th November.	Departure from normal of period, 1st May to 30th November, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill stations, exclusive of Kashmir.
...	...	...	...	...	66	...	·432	...	...	...	6	0·3	+5·7	4·51	0·07	+4·44	136·52	130·47	+6·05	3·27	Panighatta.
...	...	...	...	...	74	...	·334	...	...	...	6	0·2	+5·8	8·00	0·07	+7·93	159·10	144·64	+14·46	5·43	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	4	...	...	10·55	...	...	139·40	...	...	5·27	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	3	...	...	4·09	...	...	...	...	...	2·30	Lachung.
...	...	...	...	...	...	...	...	...	...	...	4	...	...	6·75	...	...	142·37	...	...	5·08	Ringim.
...	...	...	23	...	...	...	...	...	2·4	...	1	0·7	+0·3	0·16	0·21	−0·05	3·60	3·72	−0·12	0·10	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	0·9	...	...	0·37	...	...	9·40	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Bakloh.
...	...	...	...	...	...	...	...	...	0·2	...	0	0·4	−0·4	0·09	0·11	−0·02	1·90	0·61	+1·29	0·09	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	13	...	0	...	...	0	...	...	0·25	...	...	0	Ahwaz.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Birjand.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Chumbi.
...	...	...	...	...	67	...	·171	...	...	...	1	...	...	0·17	...	...	1·43	...	...	0·17	Kirmanshah.
...	...	...	43	...	...	...	...	...	1·0	...	0	...	...	0	...	...	0·05	...	...	0	Koweit.
...	...	...	...	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Maidan.
...	...	...	43	...	...	...	...	...	...	...	0	...	...	0	...	...	0·30	...	...	0	Muhammerah.
...	...	...	...	...	...	...	...	...	...	...	13	11·9	+1·1	8·86	8·73	+0·13	19·23	41·78	−22·55	2·70	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	9·2	...	...	7·32	...	...	33·39	...	...	Prison Island.
5·5	...	...	63	...	...	...	...	...	...	...	0	...	...	0	...	...	0	...	...	0	Seistan.



Engraved at the Survey of India Office, Calcutta, December 1904.

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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.

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

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

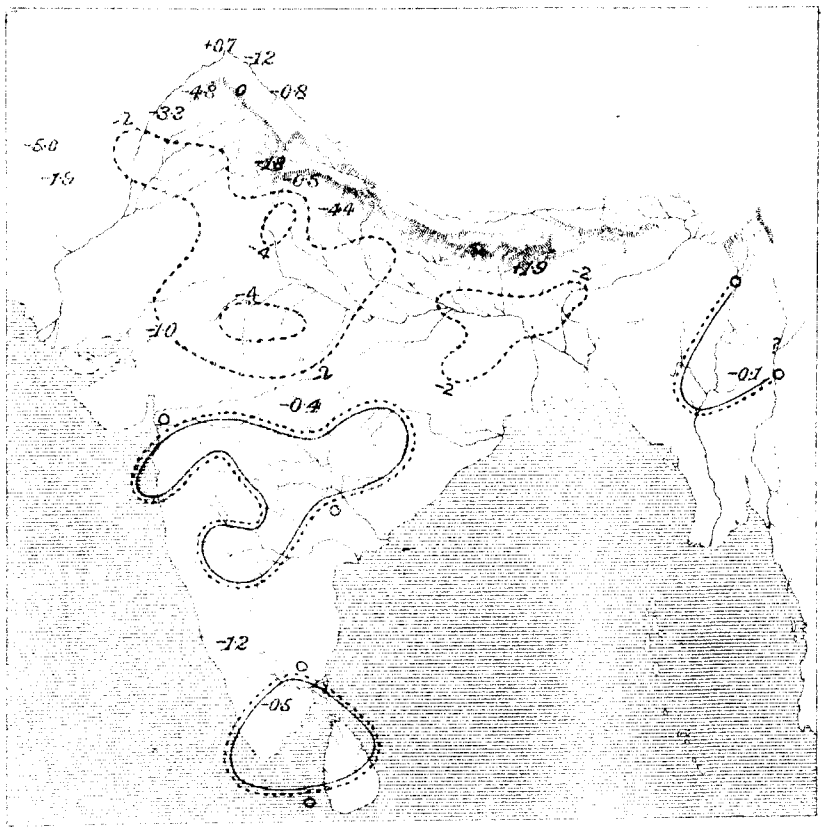
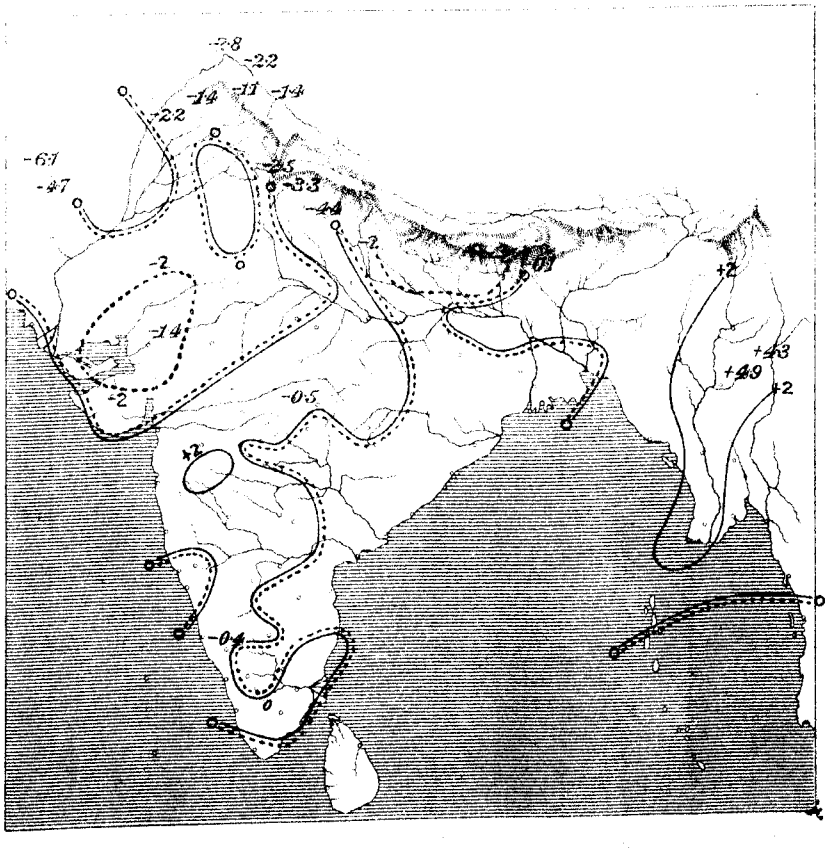


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MINIMUM TEMPERATURE.



LITHO. BY S.S.M.

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

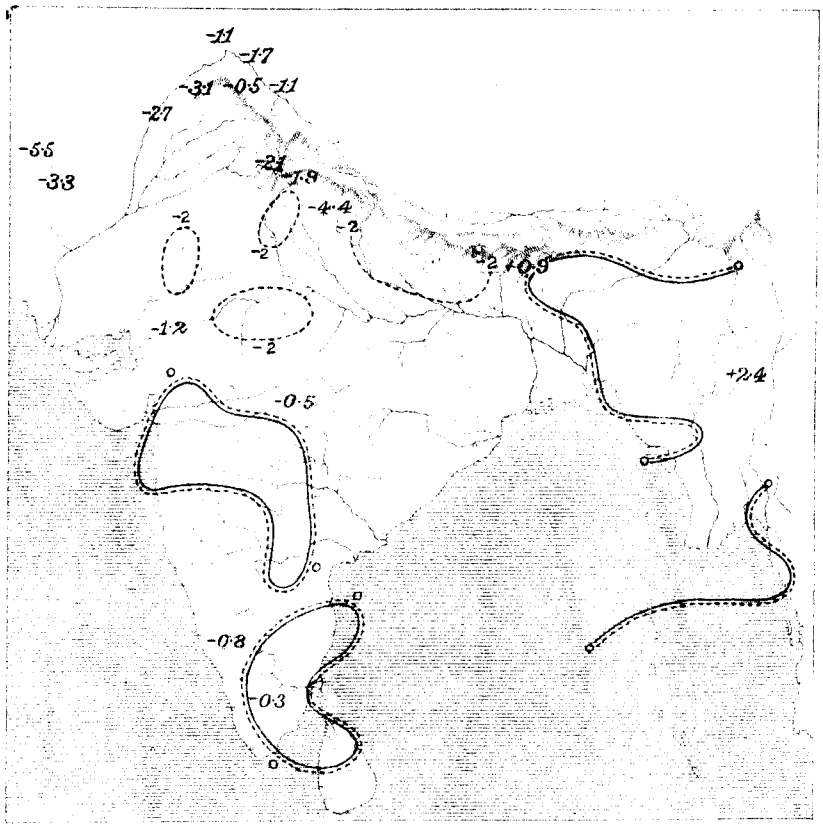


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

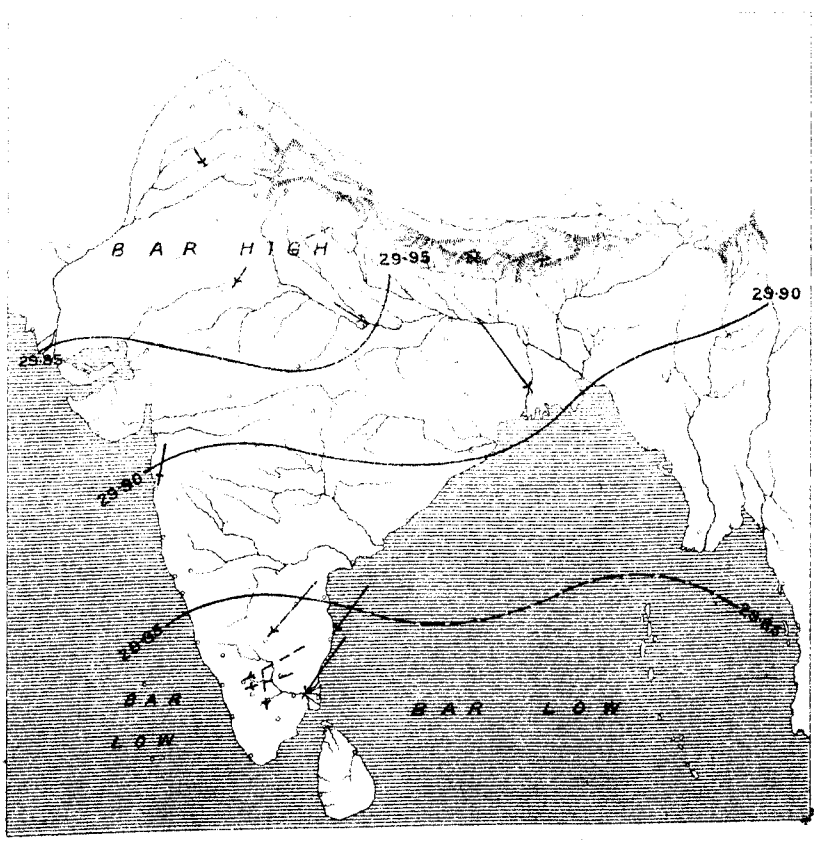


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

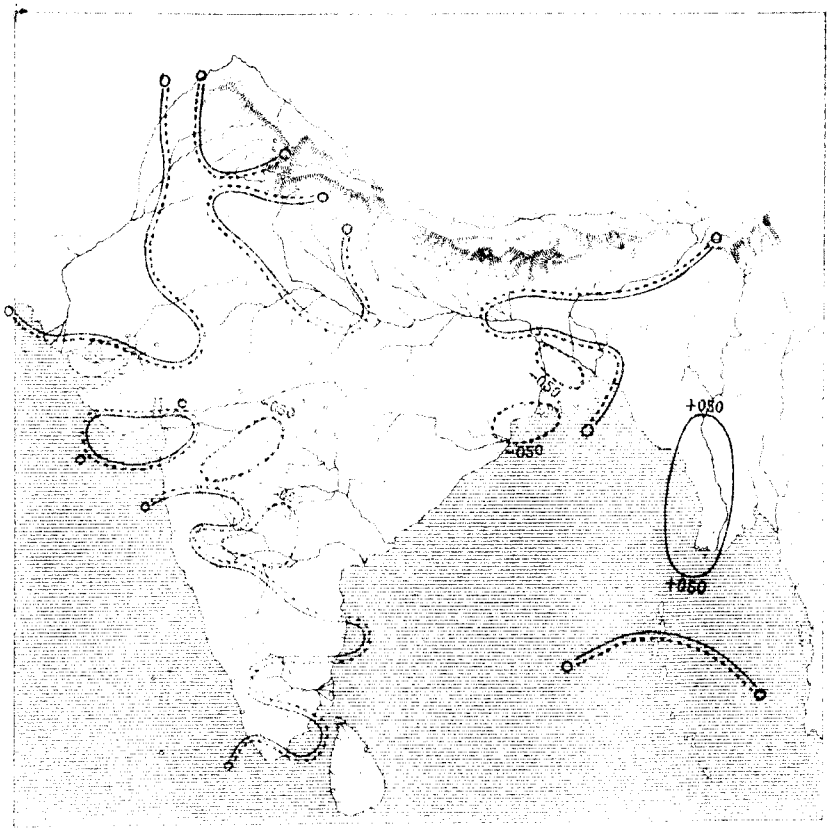


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.

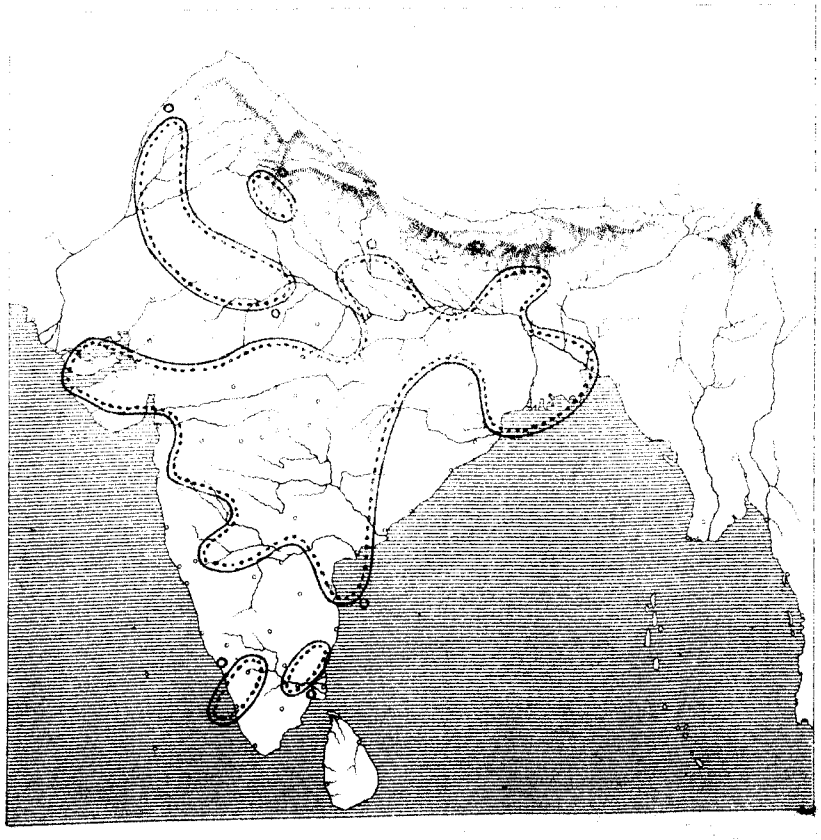


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 HRS.

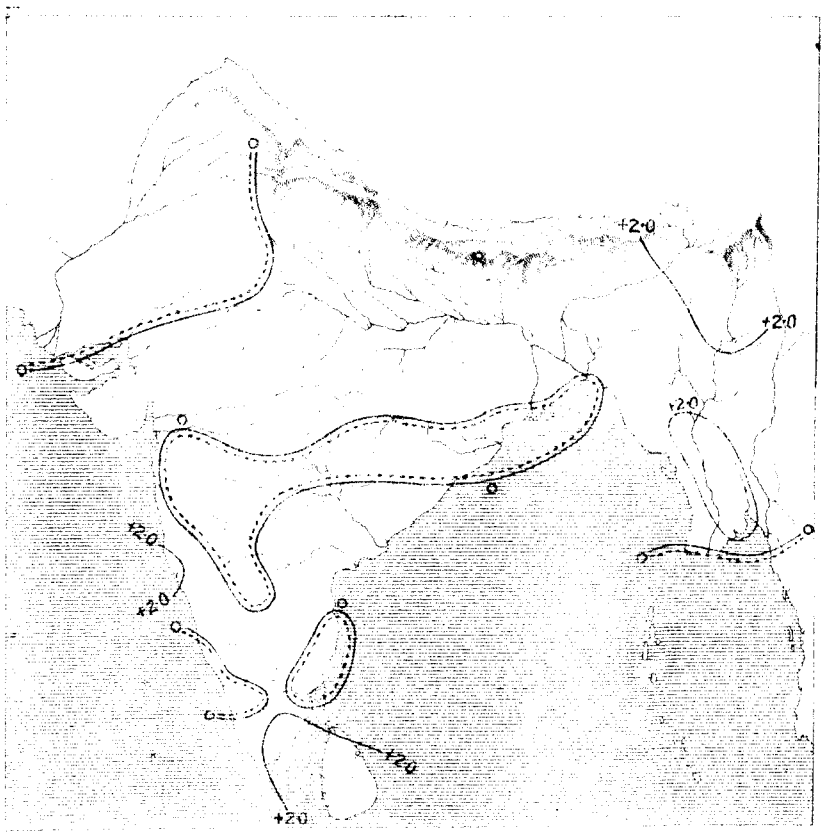
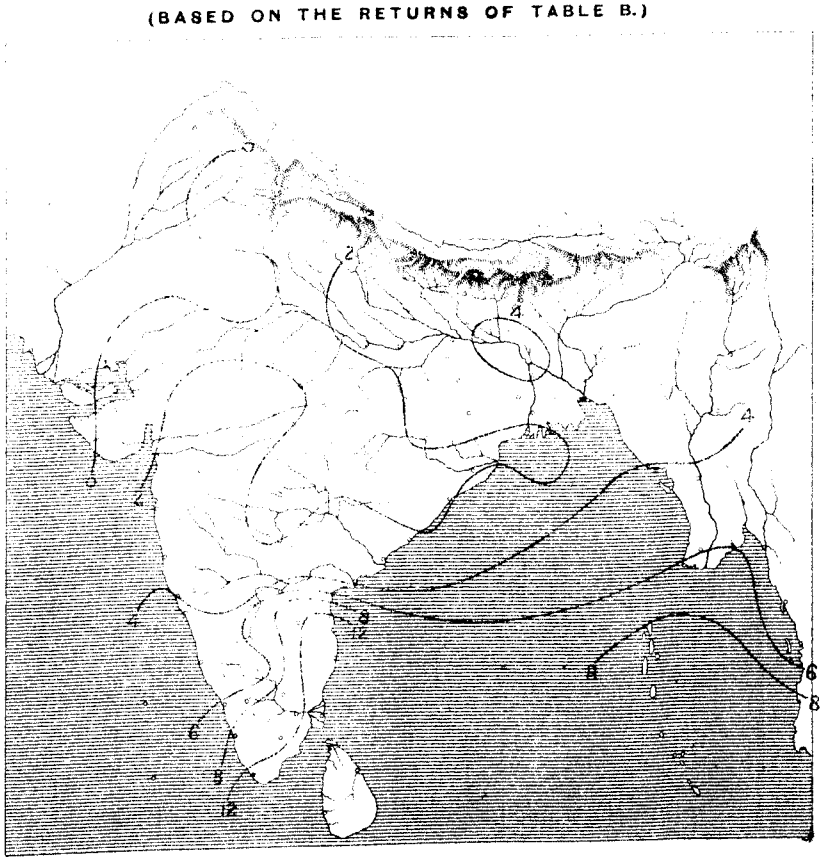
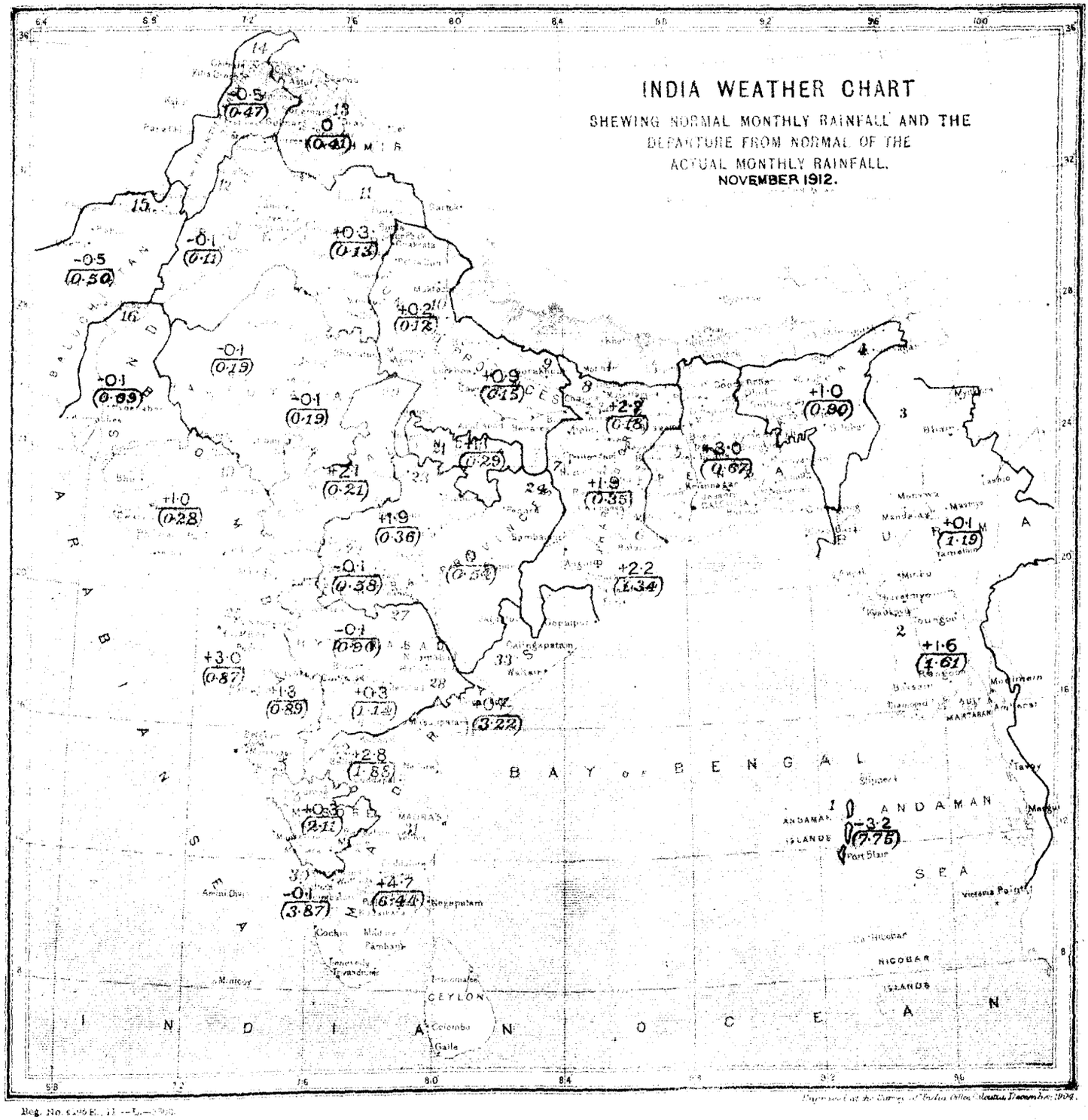


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)





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 monthly 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
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

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, DECEMBER, 1912.

INTRODUCTION.

THIS review of the weather in India during the month of December, 1912, is based on observations taken daily at 8 hrs. at 216 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 16 stations. In the rainfall summary have been utilized the data furnished by the meteorological observatories, and such rainfall statements of the month as had been published by the Provincial Governments up to the date of the preparation of the review. The brief notes on solar, seismic and magnetic disturbances are supplied by the chief observatories in the Indian area.

For a statement of the methods adopted in recording and tabulating the data, for each of the elements of observation, reference should be made to the introductory portion of the review for January.

Summary of the chief features of the weather in India during the month.

2. Abnormally dry weather held over nearly the whole country during the month. Four or five disturbances of the winter type were transmitted eastwards from Persia, but their effect on Indian weather was not marked, and was confined almost entirely to Baluchistan, Kashmir and parts of the North-West Frontier Province.

Precipitation was either entirely absent or lighter than usual except in Baluchistan, where the recorded quantity was 4 per cent. in excess of the normal amount. As the normal rainfall in December is small over the greater part of the country the defect in the month under review was small in absolute amount, except locally in the Bay Islands and south-east Madras where it amounted to about 4″ and 2½″ respectively.

The departures from normal of climatic elements other than rainfall were in general not very marked.

Barometric pressure over the plains exceeded the normal by ·020″.

Solar, seismic and magnetic disturbances.

KODAIKANAL OBSERVATORY.

3. *Solar Observations.*—No solar observations could be made on 6 days during the month and on one other day no prominences could be observed.

Sunspots.—Four spot groups were recorded of which one seen from the 15th to 23rd of the month was of moderate size. The others were small and did not last more than a day. The daily average number of spots was 0·4 and the average life was 3·0 days. Two of the spots, including the moderate sized group visible from the 15th to 23rd, were almost on the equator, and the other two were in the northern hemisphere in moderately high latitudes, *viz.*, +20° and +27°. Only one very minute spot has been observed in as high a latitude as 27° during the past five years, and it is twelve months since a spot appeared in the northern hemisphere. The two northern spots observed this month probably mark the beginning of a new spot cycle.

Prominences.—58 large and 3 eruptive prominences were recorded during the month. There was no metallic prominence observed. Prominences about 2 minutes in

height were observed on the 22nd, 25th, and 26th and they were the highest for the month.

Magnetic disturbances.—Moderate disturbances were recorded from the 7th to 8th and from the 22nd to 24th. The latter occurred at an interval of a synodic rotation of the sun since the moderate disturbance of November 26th and 27th.

Seismological records.

TABLE 1.

No.	Date.	P. T. commencement. G. M. T.	L. W. commencement. G. M. T.	Maxima. G. M. T.	End. G.M.T.	Maximum amplitude.	Duration. G. M. T.	REMARKS.
	1912.	h. m.	h. m.	h. m.	h. m.	mm.	h. m.	
71	Dec. 1	8 39·2	8 51·5	8 54·5	9 20·3	0·7=0·3	0 41·1	
72	„ 9	0 21·3	0 32·8	0 34·4	1 3·7	0·5=0·2	0 42·4	
73	„ 9	9 54·1	10 28·0	10 30·3	10 48·5	0·6=0·3	0 54·4	
74	„ 10	2 49·0	...	...	3 35·1	...	0 46·1	Widening of line.
75	„ 20	20 12·6	...	...	20 44·4	...	0 31·8	Ditto.
76	„ 23	17 43·8	...	...	18 32·3	...	0 48·5	Ditto.
77	„ 24	0 2·8	0 25·4	0 32·0	0 54·1	0·7=0·3	0 51·3	
78	„ 24	18 30?	18 36·2	18 38·0	18 52·6	0·5=0·2	0 23·0	Hour signal at 18h. 30m.
79	„ 25	17 33·8	...	17 38·8	18 16·9	0·4=0·2	0 43·1	
80	„ 27	0 9·0	...	...	1 46·4	...	1 37·4	Widening of line.
81	„ 28	8 9·0	8 27·7	8 32·0	9 8·0	0·7=0·3	0 59·0	

T. ROYD,
for *Director*,
Kodaikanal and Madras Observatories.

BOMBAY OBSERVATORY.

Alibag magnetic record.

4. During the month of December 1912 the traces showed 10 calm days and 21 days of small disturbance.

The days of the month selected as quiet for the purposes of the Magnetic Survey of India are the 5th, 12th, 16th, 21st and 28th.

The following table represents the magnetic character of each day during the month:—

TABLE 2.

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

C=calm; S=small; M=moderate; G=great; V. G.=very great.

The mean observed absolute values of the several magnetic elements reduced to the mean monthly tabulations of the magnetograms, as also the ranges and the summed ranges of the horizontal force and declination for the month are as follows:—

Easterly declination	0° 49′ 31″
Horizontal force	0·36877 C. G. S. unit.
Vertical force	0·16415 C. G. S. unit.
Inclination	23° 59′·7
Inclination (observed)	23° 59′·3
Horizontal force range	0·00028 C. G. S. unit.
Horizontal force summed range	0·00169 C. G. S. unit.
Declination range	1′·2
Declination summed range	6′·7.

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

Seismic disturbances.

TABLE 3.

Date.	Commencement.	Maximum.	End.	Maximum amplitude.	Duration.
1912.	h. m.	h. m.	h. m.	mm.	h. m.
December 9	Beginning mixed up in tremor.	0 28·9	End mixed up in tremors.	1·0	...
„ 9	8 54·0	10 10·9	10 58·7	0·5	2 4·7
„ 24	0 7·5	0 31·6	End mixed up in tremors.	0·3	...
„ 24	18 26·5	18 35·7	18 51·6	0·3	0 25·1
„ 28	8 6·9	8 34·6	9 9·4	0·8	1 2·5

All times given above denote G. M. T.
Sensibility to tilt 1 mm. = 0″·35.

N. A. F. MOOS,
Director,
Bombay & Alibag Observatories.

CALCUTTA OBSERVATORY.

5.—*List of displacements recorded by the Milne seismograph.*

TABLE 4.

Date.	P. T. commencement. G. M. T.	L. W. commencement. G. M. T.	Maximum. G. M. T.	End. G. M. T.	Duration.	Maximum displacement on trace from mean position.	REMARKS.
1912.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
Dec. 1st	8 36·8	8 43·4	8 50·0	9 43·4	1 6·6	2·25	
,, 5th	13 13·6	... 9-12-12.	13 16·1 9-12-12.	13 33·9	0 20·3	0·50	
,, 8th	23 59·5	0 17·3	0 18·3	?	?	2·00	Ends in morning air tremor.
,, 9th	9 7·8	9 58·1 24-12-12.	10 1·2 24-12-12.	11 34·2	2 26·4	1·50	
,, 23rd	23 38·9?	0 14·5	0 15·15	?	?	1·50	Begins and ends in morning air tremor.
,, 24th	18 19·5	18 26·1	18 28·1	18 58·1	0 38·6	3·00†	† Measured from base line.
,, 28th	8 7·0	8 18·2	8 29·3	9 5·0	0 58·0	1·75	
,, 29th	22 11·1	...	22 15·7	22 24·3	0 13·2	0·50	

Sensibility 1 mm.=0″·38 of tilt.

C. W. PEAKE,

Meteorologist, Calcutta.

SIMLA OBSERVATORY.

6. List of earthquakes recorded by the Omori-Ewing seismographs :—

TABLE 5.

Date.	Beginning of 1st P. T.	Beginning of 2nd P. T.	Beginning of L. W.	Time of Maximum amplitude.	End approximately.	Duration.	Max. displacement of style.*	REMARKS.
December	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	mm.	
12th A	15 51·7	?	?	15 51·9	15 53	0 1	0·2	Barely distinguishable on B.
24th A	0 6·0	0 13·6	?	?	?	?	Small	
24th B	0 13·6	?	?	0 35·9	?	?	1·5	
28th A	8 8·3	8 15·4	8 28·8	8 30·8	?	?	1·0	
28th B	?	?	?	8 26·4	?	?	1·5	

December 1st A Tremors commencing at 8 hrs. 32·5 mins. Max. Amp. 1·5 mm. at 8 hrs. 51·5 mins. and ends at 9 hrs. 30 mins.
,, 1st B Tremors commencing at 8 hrs. 38·8 mins. Max. Amp. 1·5 mm. at 8 hrs. 48·0 mins. and ends at 13 hrs. 10 mins.
,, 7th A Very slight tremors for several hours commencing at 19 hrs. 30 mins.
,, 7th B Very slight tremors for several hours commencing at 19 hrs. 30 mins.
,, 9th A Slight tremors Max. Amp. 1·5 mm. at 0 hr. 23·5 mins. beginning and end uncertain.
,, 9th B Slight tremors commencing at 0 hr. 6·5 mins. Max. Amp. 1·0 mm. at 0 hr. 22·5 mins. beginning and end uncertain.
,, 9th A Slight tremors continuing for more than one hr. Max. Amp. 1·0 mm. at 9 hrs. 54·5 mins. beginning and end uncertain.
,, 9th B Slight tremors continuing for more than one hr. Max. Amp. 2·0 mm. at 9 hrs. 52·5 mins. beginning and end uncertain.
,, 19th A Slight tremors lasting about 10 mins. Max. Amp. 0·7 mm. at about 8 hrs. 5 mins.
,, 19th B Slight tremors lasting about 10 mins. Max. Amp. 0·7 mm. at about 8 hrs. 5 mins.
,, 24th A Slight tremors lasting about 30 mins. Max. Amp. 1·0 mm. at about 18 hrs. 33 mins.
,, 24th B Slight tremors lasting about 30 mins. Max. Amp. 3·0 mm. at 18 hrs. 32 mins.

All times are given in G. M. T.
A=E—W component.
B=N—S component.
Magnification of both instruments was 15.
* Displacements less than 0·2 mm. are reported as "small."

The following table contains a list of earthquakes that were reported :—

TABLE 6.

Place at which felt.	Date.	G. M. T. of earthquakes.		Duration.	Intensity Rossi-Forel scale.	No. of shocks.
	Dec.	h.	m.	sec.		
Drosh	12th	20	0	7	6	2
,,	15th	17	32	6	5	1
,,	16th	20	37	7	6	1
Noakhali	17th	6	32	2	5	2
Shillong	23rd	19	12	1	3	1
Drosh	24th	20	30	5	6	1
,,	25th	14	25	4	5	1

Solar radiation.—The following figures give the intensity of solar radiation, as measured at Simla by Angstrom's pyrheliometer. The values are corrected to local noon, and expressed in grammecalories per square centimetre per minute :—

Maximum	1·43
Minimum	1·28
Mean	1·38
Number of days of observation	4

G. C. SIMPSON,

Imperial Meteorologist, Simla.

ROYAL ALFRED OBSERVATORY, MAURITIUS.

7. No information has been received.

Weather in the Indian monsoon region.

8. The excess of pressure in India extended southwards over the Indian Ocean where the barometer stood about ·02 "above its normal height at Zanzibar and Seychelles and ·04" above at Mauritius. The air motion, although normal in direction, was much below the average strength.

Rainfall was irregularly distributed, being normal at Mauritius, in very large excess at Zanzibar and nearly ten per cent. in defect at the Seychelles.

TABLE 7.

—	Mauritius.	Zanzibar.	Seychelles.
Departure from normal of mean pressure.	+·032	+·023	+·019
Actual mean wind direction .	N 73° E	S 88° E	N 40° W
Normal mean wind direction .	S 88° E	N 85° E	N 44° W
Actual mean wind velocity (miles per diem).	150	48	95
Normal mean wind velocity (miles per diem).	166	110	150
Rainfall departure from normal .	—0·14	+12·28	—1·37

Depressions and cyclonic storms.

9. In all five disturbances were recorded in the Persian area, but none of them succeeded in crossing the north-west frontier into India. Judging from the weather experienced in the mountain zone bordering upper India on the west and north they appear to have followed a more northerly course than usual and passed into Afghanistan where around Kabul snowfall is said to have been almost continuous. The influence of these disturbances on Indian weather was restricted almost entirely to Baluchistan, Kashmir and parts of the North-West Frontier Province.

In connection with the abnormal behaviour of the disturbances it is noteworthy that only two depressions affected the weather in Egypt and that in the north of that area the month's rainfall was at least 25 per cent. below the normal.

Over the Indian seas the weather was free from disturbance till about the middle of the month when a small disturbance was developed in the vicinity of Ceylon. It travelled westwards on the 17th and on the morning of the 18th was central near and to the west of Colombo. In the absence of marine information nothing definite can at present be said about the further career of the disturbance, although the observations recorded on land would suggest that it was dissipated over the south-east of the Arabian Sea on the 19th or 20th. It was presumably a concentrated disturbance and according to newspaper accounts did considerable damage at Colombo.

Pressure.

10. Atmospheric pressure was above the average almost everywhere in the plains of India. The excess was most marked (between ·02" and ·04") over the tract of country stretching from the east coast of the Peninsula north-westwards to Sind and the western confines of the Punjab.

TABLE 8.

DIVISION.	Departure from normal of mean 8 hrs. pressure.
	"
Burma	+·014
Assam	+·005
Bengal	+·014
Bihar and Orissa	+·023
United Provinces	+·016
Punjab	+·026
North-West Frontier Province	+·013
Sind	+·028
Rajputana	+·019
Bombay	+·017
Central India	+·028
Central Provinces	+·029
Hyderabad	+·023
Mysore	+·019
Madras	+·022

The vertical gradient was steeper than usual in north-east India and the south of the Peninsula, and about normal in north-west and central India.

TABLE 9.

HILL STATION.	Departure from normal pressure. A	PLAIN STATION.	Departure from normal pressure, B	Departure of pressure difference. B—A.
	"		"	"
Quetta	+·021	Jacobabad	+·033	+·012
Leh	+·022	Lahore	+·028	+·006
Murree	+·030	Rawalpindi	+·018	—·012
Simla	+·024	Ludhiana	+·031	+·007
Chakrata	+·035	Roorkee	+·031	—·004
Darjiling	—·025	Dhubri	+·005	+·030
Mount Abu	+·038	Deesa	+·023	—·015
Pachmarhi	+·034	Khandwa	+·034	0
Kodaikanal	+·009	Madura	+·034	+·025

Temperature.

11. Notwithstanding that the weather was unusually dry temperature, both by day and night, was below the normal over by far the greater part of the country. The departures were however small in amount.

TABLE 10.

Sub-division.	Actual temperature.					Departure from normal of		
	Mean maximum.	Mean minimum.	Monthly mean of mean between maximum and minimum.	Mean daily range of temperature.	Absolute range during month.	Maximum.	Minimum.	Daily range.
	°	°	°	°	°	°	°	°
1. Bay Islands	84·2	76·5	80·4	7·7	15·9	+0·1	+0·2	—0·1
2. Lower Burma	84·7	65·9	75·1	18·9	26·1	—0·3	—1·1	+0·8
3. Upper Burma	79·9	54·3	67·1	25·7	34·3	—1·3	—1·2	—0·1
4. Assam	74·1	53·7	63·9	20·3	28·1	—1·1	+0·9	—2·0
5. Bengal	76·8	55·5	66·2	21·3	28·3	—0·6	+0·1	—0·7
6. Orissa	78·8	54·3	66·5	24·4	32·4	—2·2	—2·5	+0·3
7. Chota Nagpur	75·3	48·7	62·0	26·7	37·4	—2·1	—1·4	—0·7
8. Bihar	74·0	50·9	62·4	23·1	29·9	—1·3	—0·6	—0·7
9. United Provinces, East	73·7	47·2	60·5	26·4	34·6	—1·7	—0·8	—0·9
10. Do., West	73·3	46·0	59·7	27·3	37·6	—1·5	—0·5	—1·0
11. Punjab, East and North	71·0	43·3	57·2	27·7	38·8	—0·8	+0·4	—1·2
12. Do., South-west	73·3	44·2	58·7	29·1	43·1	+0·4	+1·1	—0·7
13. Kashmir	40·6	20·3	30·5	20·3	39·3	—3·3	—2·2	—1·1
14. North-West Frontier Province	68·9	41·9	55·5	27·1	42·1	—1·1	+2·3	—3·4
15. Baluchistan	62·7	39·3	51·0	23·5	43·3	—1·5	+0·2	—1·7
16. Sind	78·0	52·3	65·1	25·7	39·8	—0·2	+0·1	—0·3
17. Rajputana, West	79·4	49·0	64·2	30·4	45·9	+1·1	—1·6	+2·7
18. Do., East	77·0	49·3	63·2	27·8	41·5	—0·1	—1·7	+1·6
19. Gujarat	85·0	55·8	70·4	29·2	40·4	+0·8	—0·3	+1·1
20. Central India, West	78·8	48·9	63·9	29·9	42·7	—0·1	—0·5	+0·4
21. Do., East	74·6	44·8	59·7	29·8	39·3	—2·9	—0·8	—2·1
22. Berar	83·8	55·3	69·6	28·5	40·2	+2·5	—1·0	+3·5
23. Central Provinces, West	78·0	49·5	63·7	28·5	39·0	—1·2	—1·2	0
24. Do., East	79·0	49·7	64·3	29·3	38·7	—0·5	—1·7	+1·2
25. Konkan	85·5	67·8	76·7	17·8	24·0	—1·6	—0·8	—0·8
26. Bombay Deccan	84·5	54·9	69·7	29·7	39·5	+0·7	+0·1	+0·6
27. Hyderabad, North	83·1	55·4	69·3	27·7	37·5	+0·3	—0·5	+0·8
28. Do., South	83·4	57·1	70·3	26·3	34·4	—0·6	—2·7	+2·1
29. Mysore	80·1	57·6	68·9	22·5	30·4	+0·1	—1·1	+1·2
30. Malabar	86·5	71·3	78·9	15·2	21·4	—0·9	+0·2	—1·1
31. Madras, South-east	83·4	67·8	75·6	15·6	22·6	—0·5	—1·3	+0·8
32. Do., Deccan	85·4	59·5	72·5	25·8	34·6	—1·1	—2·2	+1·1
33. Do. Coast, North	80·6	63·1	71·9	17·5	24·2	—1·3	—2·0	+0·7

TABLE 11.

Division.	Departure from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−0·7	−1·1	−0·9
Assam	−1·1	+0·9	−0·1
Bengal	−0·6	+0·1	−0·2
Bihar and Orissa	−1·7	−1·3	−1·5
United Provinces	−1·6	−0·7	−1·1
Punjab	−0·4	+0·6	+0·1
North-West Frontier Province	−1·1	+2·3	+0·7
Sind	−0·2	+0·1	0
Rajputana	+0·3	−1·7	−0·7
Bombay	+0·1	−0·3	−0·1
Central India	−1·0	−0·6	−0·8
Central Provinces	−0·6	−1·3	−1·0
Hyderabad	−0·3	−2·0	−1·1
Mysore	+0·1	−1·1	−0·5
Madras	−0·9	−1·3	−1·1

Winds.

12. In the United Provinces the westerly element in the mean wind direction was in the ascendant, and in Rajputana the northerly component was weaker than usual, but with these exceptions the directions were not very different from those which are usually characteristic of December.

The rate of air movement agreed fairly closely with the normal in most places, but owing to the absence of cold weather storms the wind was more than usually steady.

TABLE 12.

Division.	Departure from normal of	
	Hourly wind velocity.	Wind steadiness.
Burma	−0·3	−12
Assam	+0·1	−5
Bengal	−0·4	−17
Bihar and Orissa	+0·1	−1
United Provinces	−0·2	+12
Punjab	+0·3	+9
North-West Frontier Province	−0·2	+13
Sind	+0·1	+1
Rajputana	+0·1	+7
Bombay	−0·7	−4
Central India	−0·4	−4
Central Provinces	−0·2	+2
Hyderabad	−1·0	+24
Mysore	+0·2	−1
Madras	+0·4	+6

Humidity and cloud.

13. Humidity, both relative and absolute, was appreciably in defect in Berar, north and east Rajputana, and round Bhuj and Rajkot, but in nearly all other parts of the country the hygrometric conditions of the month were practically normal.

The cloud proportion was much above the normal in Ceylon, upper Assam, the west Punjab and the North-West Frontier Province, and in a less degree on the west coast of the Peninsula; whereas in Tenasserim, deltaic Bengal and Orissa, the sky was unusually clear. Over

the rest of the country there was about the normal amount of cloud.

TABLE 13.

Division.	Hygrometry, 8 hrs.				Cloud.	
	Mean humidity.	Departure from normal.	Mean vapour tension in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.
	%					
Burma	85	+ 2	·551	—·011	3·0	+0·3
Assam	94	— 1	·448	+·020	3·3	—0·2
Bengal	85	+ 1	·451	—·005	1·0	—0·4
Bihar and Orissa	80	+ 1	·370	—·016	0·6	—0·7
United Provinces	76	— 1	·308	—·014	1·1	—0·3
Punjab	71	— 1	·239	—·007	3·0	+0·2
North-West Frontier Province.	67	— 4	·208	—·003	4·5	+1·3
Sind	60	+ 1	·292	+·013	2·7	+0·2
Rajputana	50	— 9	·213	—·060	2·0	—0·2
Bombay	58	— 3	·373	—·027	1·4	—0·1
Central India	69	+ 6	·291	—·007	1·3	0
Central Provinces	60	— 2	·293	—·044	1·1	—0·4
Hyderabad	59	— 3	·375	—·049	1·3	—0·5
Mysore	79	+ 7	·482	+·001	3·9	+0·3
Madras	79	+ 1	·608	—·036	3·4	—0·2

Rainfall.

14. Over the greater part of the country the month was remarkably dry. Indeed the Bay Islands, Upper Burma, Assam, Malabar, Madras South-east, Kashmir and Baluchistan were the only areas which received precipitation of any consequence and in the last-named division alone did the aggregate for the month exceed the average. The normal fall of December averages about 2¼″ in Madras and a third of an inch over the rest of the country.

TABLE 14.

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			″	″	″	
1. Bay Islands	0·5	4·5	0·55	4·27	—3·72	— 87
2. Lower Burma	0·1	0·3	0·05	0·16	—0·11	— 69
3. Upper do.	0·4	0·7	0·10	0·35	—0·25	— 71
4. Assam	0·8	0·9	0·32	0·35	—0·03	— 9
5. Bengal	0	0·3	0	0·16	—0·16	—100
6. Orissa	0	0·4	0	0·23	—0·23	—100
7. Chota Nagpur	0	0·3	0	0·20	—0·20	—100
8. Bihar	0	0·3	0	0·12	—0·12	—100
9. United Provinces, East	0·1	0·6	0·03	0·29	—0·26	— 90
10. Do., West	0·2	0·9	0·07	0·45	—0·38	— 84
11. Punjab, East and North	0·4	0·9	0·09	0·52	—0·43	— 83
12. Punjab, South-west	0·2	0·5	0·08	0·22	—0·14	— 64
13. Kashmir	3·5	2·8	1·19	1·34	—0·15	— 11
14. North-West Frontier Province	0·3	0·9	0·09	0·48	—0·39	— 81
15. Baluchistan	2·8	2·2	1·00	0·96	+0·04	+ 4
16. Sind	0	0·3	0	0·11	—0·11	—100

Sub-division.	Number of rainy days.		Rainfall.			
	Actual.	Normal.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
			"	"	"	
17. Rajputana, West	0	0·4	0	0·15	—0·15	—100
18. Do., East	0·2	0·9	0·07	0·40	—0·33	— 83
19. Gujarat	0	0·1	0	0·05	—0·05	—100
20. Central India, West	0·3	0·9	0·07	0·37	—0·30	— 81
21. Do., East	0	0·9	0·04	0·45	—0·41	— 91
22. Berar	0·2	0·4	0·04	0·28	—0·24	— 86
23. Central Provinces, West	0·3	0·6	0·07	0·36	—0·29	— 81
24. Do., East	0	0·4	0	0·23	—0·23	—100
25. Konkan	0	0·2	0	0·07	—0·07	—100
26. Bombay Deccan	0	0·4	0·01	0·22	—0·21	— 95
27. Hyderabad, North	0	0·7	0	0·41	—0·41	—100
28. Do., South	0	0·3	0	0·18	—0·18	—100
29. Mysore	0	0·7	0	0·38	—0·38	—100
30. Malabar	0·3	1·4	0·14	1·04	—0·90	— 87
31. Madras, South-east	1·8	4·2	1·10	3·55	—2·45	— 69
32. Do., Deccan	0	0·8	0	0·51	—0·51	—100
33. Do. Coast, North	0·1	1·1	0·03	1·09	—1·06	— 97

TABLE 15.

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Burma	0·07	0·26	—0·19	— 73
Assam	0·32	0·35	—0·03	— 9
Bengal	0	0·16	—0·16	—100
Bihar and Orissa	0	0·16	—0·16	—100
United Provinces	0·05	0·37	—0·32	— 86
Punjab	0·09	0·46	—0·37	— 80
North-West Frontier Province	0·09	0·48	—0·39	— 81

Division.	Rainfall.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	"	
Sind	0	0·11	—0·11	—100
Rajputana	0·05	0·33	—0·28	— 85
Bombay	0	0·14	—0·14	—100
Central India	0·06	0·40	—0·34	— 85
Central Provinces	0·04	0·30	—0·26	— 87
Hyderabad	0	0·29	—0·29	—100
Mysore	0	0·38	—0·38	—100
Madras	0·57	2·23	—1·66	— 74
Mean of India	0·10	0·47	—0·37	— 79

Snowfall.

I.—BALUCHISTAN.

15. Slight snow fell on the hills near Quetta on the 4th, 5th, 12th to 16th and 27th, and heavy snow on the 10th and 18th.

II.—AFGHANISTAN.

Very frequent falls occurred in Kabul and on the adjoining hills, but none of the falls in Kabul itself exceeded one foot in depth. Towards the end of the month all the high elevations were under snow.

III.—NORTH-WEST FRONTIER PROVINCE.

(*a*) *Wano.*—Snow fell on the Marwatti and Pirghal (elevation 11,000 feet) to the extent of 2 inches on the 5th, 2 feet on the 11th and 12th and 3 inches on the 16th, while a fall of 3 to 4 inches occurred on all the surrounding hills on the 13th.

The snow melted however quickly so that by the end of the month only about an inch remained even on the highest peaks.

(*b*) *Tochi* (North Waziristan).—There was a moderate fall on the hills in North Waziristan on the night of the 13th.

(*c*) *Kurram.*—Snow fell in Parachinar and on the hills on the 5th, 6th, 10th, 11th, 12th, 14th and 15th and on the hills alone on the 16th, 18th and 27th.

At the end of the month the Paiwar Kotal was bare of snow.

(*d*) *Kohat.*—Snow fell locally on the 5th, 7th and 13th. The statement below shows the character of the fall:—

TABLE 16.

Locality.	Total amount recorded during the month.	
	feet.	inches.
SAMALZAI HILLS.		
Mozioghar	0	8
Dappa-har	0	6
Alraighar	0	4
Takhtarghar	2	0
FORT LOCKHART.		
Tirak Mozioghar	2	2
Samana hill	0	1

(*e*) *Drosh.*—Snow fell on the 7th, 11th, 15th, 16th and 18th to a total depth of about a foot. The depth of snow lying on the Lowarai pass after the fall of the 18th was estimated at 8 or 9 feet.

(*f*) *Hazara.*—The statement below gives the total snowfall received during the last seventeen days of the month in the various localities:—

TABLE 17.

Locality.	Total snowfall recorded during month.	
	feet.	inches.
Narang	3	6
Paluderan	2	6
Kagan	1	4
Jared	0	0
Malkandi	0	0
Sundigali	2	6
Dunga	3	3
Tandiani	1	4

The snowline came down to about 5,000 feet on the outer hills and 4,000 feet on the inner.

IV.—KASHMIR.

No information has been received.

V.—PUNJAB.

(*a*) *Murree.*—No snow fell in these hills.

(*b*) *Kilba* (Simla Hills).—Light snow fell on the 7th, 8th, 11th, 12th, 15th and 18th. The lowest level reached by the snowline was 7,000 feet. At the end of the month snow to a depth of 8 feet was reported to be lying on the Rupin (18,000 feet) and to a depth of 7 feet at an elevation of 13,000 feet.

VI.—UNITED PROVINCES.

(*a*) *Garhwal.*—Snow fell on the higher peaks in the north on the 18th and 19th.

(*b*) *Almora.*—During the first 24 days for which alone information is available the aggregate snowfall was reported as amounting to about 13 feet in Malla Darma, 12 feet in Byans and 7 feet in Chaudas.

The snowline descended to a distance of about six miles from the perpetual snows.

Table 18.

Name of pass.	DEPTH OF ACCUMULATION AT THE END OF THE MONTH.	
	Reported.	Normal.
Nuwe pass	37 feet	33 feet
Binkaru "	15 "	26 "
Lipulekh "	15 "	5 "
Lampia "	21 "	3 "

SUMMARY.

16. So far as can be judged from the available information the snowfall of the month was probably heavier than usual locally in Baluchistan and Afghanistan and deficient in the western Himalayas and the greater part of the North-West Frontier Province.

HEM RAJ.

Table A.—Abstract of observations taken at 10 hrs. and 16 hrs. at 16 stations in India, etc., in December, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911 inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 10 hrs. and 16 hrs.

Number of subdivision.	Station.	Elevation of bar-clatern above sea-level, in feet.	Pressure. Mean of 10 hrs.	Pressure. Mean of 16 hrs.	Pressure. Mean daily range.	Pressure. Mean of daily mean pressures.	Pressure. Departure from normal.	Pressure. Mean reduced to sea-level and gravity, 45° Lat.	Temperature of air. Mean maximum.	Temperature of air. Mean minimum.	Temperature of air. Mean daily range.	Temperature of air. Highest maximum.	Temperature of air. Lowest minimum.	Temperature of air. Absolute range.	Temperature of air. Mean 10 hrs.	Temperature of air. Mean 16 hrs.	Temperature of air. Mean of daily means.	Temperature of air. Departure from normal.	Temperature, wet-bulb. Mean minimum.	Temperature, wet-bulb. Mean 10 hrs.	Temperature, wet-bulb. Mean 16 hrs.	Temperature, wet-bulb. Mean of three previous columns.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	III.—Bengal.																					
5	Calcutta . .	21	30·106	29·982	·124	30·038	+·010	30·006	77·1	55·2	21·9	81·9	52·5	29·4	70·3	74·9	65·2	—0·1	54·0	61·8	62·4	59·4
	V.—United Provinces of Agra and Oudh.																					
9	Allahabad . .	309	29·842	29·723	·119	29·771	+·022	30·046	74·2	46·9	27·3	80·6	42·7	37·9	64·7	72·9	58·6	−1·2	46·0	55·3	57·8	53·0
	VI.—Punjab.																					
11	Lahore . . .	702	29·428	29·338	·090	29·373	+·018	30·081	71·9	42·7	29·2	77·6	37·2	40·4	58·1	69·2	55·1	+0·5	40·7	50·9	56·7	49·4
	IX.—Rajputana.																					
18	Jaipur . . .	1,431	28·692	28·592	·100	28·631	+·021	30·046	78·3	47·8	30·5	85·2	40·1	45·1	69·0	76·3	61·1	—0·4	42·8	53·8	56·6	51·1
	X.—Bombay.																					
25	Bombay . .	37	30·029	29·923	·106	29·971	+·018	29·948	85·0	70·7	14·3	87·1	67·3	19·8	76·5	81·8	77·0	+0·6	65·0	68·8	72·4	68·7
	XIV.—Mysore.																					
29	Bangalore . .	3,021	27·059	26·959	·100	27·010	+·028	29·894	78·8	56·7	22·1	85·3	53·0	30·3	70·4	76·3	66·9	—0·6	55·9	61·7	62·3	60·0
	XV.—Madras.																					
31	Pudukkottai .	318	29·737	29·609	·128	29·673		29·926	82·6	68·5	14·1	85·5	65·1	20·4	76·9	80·7	75·6			69·5	68·0	
	Madras . .	22	30·060	29·953	·107	30·006	+·025	29·958	83·4	68·4	15·0	94·8	63·9	26·9	75·5	80·1	75·1	—0·6	67·2	71·9	71·8	70·3
	Hill stations, excluding Kashmir and Baluchistan.																					
	Simla . . .	7,232	23·200§	23·157	·043§	23·167	+·017	23·128	50·5	40·6	9·9	56·1	32·9	23·2	45·3§	46·9	44·6	+1·2	31·7	35·9§	37·5	35·0
	Sarain . . .		23·249	23·188	·061	23·208		23·170	51·9	32·1	19·9	59·3	27·3	32·0	45·3	42·8	41·1			36·4	35·9	
	Kalabagh . .																					
	Mukteswar . .	7,592	22·922	22·860	·062	22·879		22·837	53·8	37·6	16·2	60·7	29·4	31·3	47·7	50·2	44·8		29·5	37·9	40·6	36·0
	Katmandu . .	4,388	25·774	25·667	·107	25·718	+·008†	25·736	64·8	40·0	24·8	67·4	36·2	31·2	50·4	60·7	51·5	—1·1†	38·4	47·6	52·6	46·2
	Ootacamund .	*7,397*	23·117	23·044	·073	23·077		23·014	66·1	44·3	21·8	71·3	35·3	36·0	62·6	60·0	54·3		38·3	48·7	49·7	45·6
	Kodaikanal . .	7,688	22·884	22·822	·062	22·851		22·788	64·2	47·8	16·4	70·8	40·9	29·9	60·9	58·9	54·7		41·1	51·4	52·1	47·8
	Dodabetta . .	8,539?	22·125	22·058	·067	22·088		22·025	58·9	46·4	12·5	63·6	40·7	22·9	55·8	53·9	51·8		35·9	45·0	45·8	42·2
	Extra India.																					
	Diego Garcia .																					
	Seychelles . .	15	29·992	29·898	·094	29·955	+·019†	29·893	83·3	76·1	7·2	85·2	72·6	12·6	80·7	81·6	78·6	+0·7†	70·7	75·7	76·3	74·2
	Mauritius . .	181																				

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.

§Mean of 24 days.

A.

at 16 stations in India, etc., in December, 1912.

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.	Number of subdivision.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
																															III.—Bengal.	
·402	·438	·398	·425	—·013	92	59	46	69	− 2	0·5	1·0	0·7	−1·1	2	14	4		1		4	5	32	N 37° W	N 13° W	72	63	‖ 52*	60	0	0	Calcutta . .	5
																															V.—United Provinces of Agra and Oudh.	
·301	·317	·280	·307	—·024	93	51	35	65	− 2	0·7	1·1	0·9	−0·6	12	1	1	2	1	2	3	30	10	N 84° W	N 48° W	58	27	43	72	0·03	0·03	Allahabad .	9
																															VI.—Punjab.	
·230	·278	·295	·266	—·005	83	58	42	63	0	3·2	3·5	3·3	+0·5	21	5	1		1	4		4	26	N 47° W	N 36° W	47	21	26	31	0·17	0·16	Lahore . .	11
																															IX.—Rajputana.	
·217	·229	·218	·221	—·046	65	32	24	45	− 8	1·9	3·0	2·5	0	8	11	5	8	6	1	6	4	13	N 7° W	N 27° W	23	27	53*	70	0·10	0·10	Jaipur . .	18
																															X.—Bombay.	
·542	·603	·672	·631	—·008	72	66	62	70	− 2	1·5	1·7	1·6	−0·3		1	12	15	4			12	18	N 5° E	N 15° E	31	55	137*	233	0	0	Bombay . .	25
																															XIV.—Mysore.	
·438	·448	·401	·443	—·023	96	61	45	69	− 1	2·8	2·9	2·9				16	41	5					N 82° E	N 72° E	90	81	123	132	0·01	0·01	Bangalore . .	29
																															XV.—Madras.	
	·643	·590				68	57			5·0	5·6	5·3		2	17	42	1						N 33° E		90		195		1·08	0·51	Pudukkottai .	31
·647	·681	·664	·683	—·046	93	68	65	77	− 5	3·8	4·1	3·9	−1·5		32	29	1						N 4° E	N 24° E	63	81	118*	175	0·30	0·30	Madras.	
																															Hill stations, excluding Kashmir and Baluchistan.	
·093	·113§	·123	·116	—·023	39	39§	43	43	− 5	4·1§	4·4	4·3§	+0·3																0·37	0·27	Simla.	
	·126	·140				46	52			3·9	5·2	4·5																	1·19	1·19	Sarain.	
																															Kalabagh.	
·086	·126	·154	·127		40	40	45	45		3·2	4·5	3·9		16				3	2		41		S 84° W		63		160		0·55	0·35	Mukteswar.	
·214	·295	·303	·276	+·008	87	82	57	78	+ 3	1·9	3·8	2·9	+0·3	60			1				1		(a)	N 72° W	(a)	43	10*	22	0	0	Katmandu.	
·177	·204	·252	·215		60	38	50	48		3·7	3·9	3·8		6	7	12	18	10	4	1		4	N 78° E		50		76		0·67	0·43	Cotacamund.	
·202	·291	·325	·269		59	57	67	63		4·1	5·0	4·5			3	15	28	12	1		2	1	N 84° E		72		320		5·25	2·41	Kodaikanal.	
·109	·191	·227	·176		35	45	55	45		4·7	4·5	4·6		3	1	15	24	13	3				N 88° E		78		286		0·34	0·16	Dodabetta.	
																															Extra India.	
																															Diego Garcia.	
·680	·825	·836	·805	+·027	75	79	74	78	− 5	6·3	6·4	6·3	−0·5†	18	2	1	5	12	2	2	4	16	N 49° W	N 44° W	5	55	95*	150	13·07	4·92	Seychelles.	
																															Mauritius.	

* Uncorrected for scale error. † Departure from old normal. ‖ Mean of 28 days. (a) Indeterminate.

Table B.—Abstract of observations taken at 8 hrs. at 216 stations in India, etc., in December, 1912.

(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 2,000 stations.

	Pressure departure from normal.	Temperature of air.								Wind.		Hygrometry.				Cloud.		Rainfall.		
		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.	Absolute range during month.	Departure of velocity from normal.	Departure of steadiness from normal.	Mean humidity.	Departure from normal.	Mean vapour tension.	Departure from normal.	Mean cloud amount.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.
Burma	+·014	82·6	−0·7	60·7	−1·1	71·5	−0·9	21·9	29·8	−0·3	−12	85	+ 2	·551	−·011	3·0	+0·3	0·07	0·26	−0·19
Assam	+·005	74·1	−1·1	53·7	+0·9	63·9	−0·1	20·3	28·1	+0·1	− 5	94	− 1	·448	+·020	3·3	−0·2	0·32	0·35	−0·03
Bengal	+·014	76·8	−0·6	55·5	+0·1	66·2	−0·2	21·3	28·3	−0·4	−17	85	+ 1	·451	−·005	1·0	−0·4	0	0·16	−0·16
Bihar and Orissa	+·023	75·7	−1·7	51·4	−1·3	63·5	−1·5	24·3	32·4	+0·1	− 1	80	+ 1	·370	−·016	0·6	−0·7	0	0·16	−0·16
United Provinces of Agra and Oudh	+·016	73·5	−1·6	46·7	−0·7	60·1	−1·1	26·8	36·0	−0·2	+12	76	− 1	·308	−·014	1·1	−0·3	0·05	0·37	−0·32
Punjab	+·026	71·6	−0·4	43·6	+0·6	57·6	+0·1	28·1	40·0	+0·3	+ 9	71	− 1	·239	−·007	3·0	+0·2	0·09	0·46	−0·37
North-West Frontier Province	+·013	68·9	−1·1	41·9	+2·3	55·5	+0·7	27·1	42·1	−0·2	+13	67	− 4	·208	−·003	4·5	+1·3	0·09	0·48	−0·39
Sind	+·028	78·0	−0·2	52·3	+0·1	65·1	0	25·7	39·8	+0·1	+ 1	60	+ 1	·292	+·013	2·7	+0·2	0	0·11	−0·11
Rajputana	+·019	78·0	+0·3	49·2	−1·7	63·6	−0·7	28·8	43·2	+0·1	+ 7	50	− 9	·213	−·060	2·0	−0·2	0·05	0·33	−0·28
Bombay	+·017	85·0	+0·1	58·5	−0·3	71·8	−0·1	26·5	36·0	−0·7	− 4	58	− 3	·373	−·027	1·4	−0·1	0	0·14	−0·14
Central India	+·028	76·7	−1·0	46·9	−0·6	61·7	−0·8	29·9	41·0	−0·4	− 4	69	+ 6	·291	−·007	1·3	0	0·06	0·40	−0·34
Central Provinces	+·029	79·6	−0·6	50·9	−1·3	65·3	−1·0	28·8	39·2	−0·2	+ 2	60	− 2	·293	−·044	1·1	−0·4	0·04	0·30	−0·26
Hyderabad	+·023	83·3	−0·3	56·4	−2·0	69·8	−1·1	26·9	35·7	−1·0	+24	59	− 3	·375	−·049	1·3	−0·5	...	...	...
Mysore	+·019	80·1	+0·1	57·6	−1·1	68·9	−0·5	22·5	30·4	+0·2	− 1	79	+ 7	·482	+·001	3·9	+0·3	0	0·38	−0·38
Madras	+·022	83·4	−0·9	66·1	−1·3	74·8	−1·1	17·4	24·4	+0·4	+ 6	79	+ 1	·608	−·036	3·4	−0·2	0·57	2·23	−1·66

Table

(2) *Abstract of observations taken at 8 hrs. at 216 stations*

Number of subdivision.	Station.	Elevation of barometer above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	I.—Burma.																						
2	Victoria Point	147	29·844		29·921	29·906	3rd	29·790	19th	·116	77·2	86·1		73·7		79·9		12·4	89·1	23rd	71·2	10th	17·9
	Mergui	65	29·946	+·013	29·942	29·987	4th	29·882	19th	·105	75·3	86·9	−0·4	68·1	+1·1	77·5	+0·5	18·8	89·0	6days	62·8	7th	26·2
	Tavoy	19	30·005	−·001?	29·957	30·046	6th	29·954	19th	·092	72·7	88·6	+0·9	65·4§	+0·6§	76·9§	+0·7	23·2	91·5	17th	61·3	6th & 20th	30·2
	Moulmein	94	29·968	+·026	30·002	30·014	10th	29·909	1st & 19th.	·105	70·0	87·4	+0·2	66·0	−0·9	76·7	−0·3	21·4	90·0	29th	61·3	19th & 20th.	28·7
	Rangoon	18	30·040	+·020	29·996	30·091	10th	29·968	19th	·123	65·2	86·6	−0·7	65·5	−1·8	76·1	−1·3	21·1	89·0	28th	60·0	19th	29·0
	Bassein	27?	30·031	+·024	29·995	30·080	10th	29·957	19th	·123	68·3	83·0	−0·5	64·6	−0·5	74·3	−0·5	19·3	86·2	1st, 26th & 27th.	59·9	19th	26·3
	Diamond Island	41	29·999	+·013	29·975	30·044	11th	29·937	19th	·107	76·3	86·2	+2·3	70·3‡	−1·8‡	76·7‡	+0·3	15·9	86·9	2nd	64·5	21st	22·4
	Toungoo	164	29·909	+·030	30·022	29·968	10th	29·827	17th	·141	63·3	82·3	−1·7	58·5	−3·6	70·4	−2·7	23·8	85·0	1st	53·4	22nd & 23rd	31·6
	Kyaukpyu	18	30·042		30·000	30·108	14th	29·945	19th	·163	70·2	80·1		64·4		72·3		15·7	84·9	6th	58·4	19th	25·6
	Akyab	20	30·055	+·024	30·016	30·114	13th	29·955	19th	·159	64·5	79·1	−2·6	61·9	−2·1	70·5	−2·3	17·2	80·9	4days	57·5	23rd	23·4
3	Thayetmyo	121	29·950	+·014	30·017	30·003	10th & 11th.	29·855	19th	·148	64·3	83·1	−1·5	55·2	−3·1	69·2	−2·3	27·9	88·4	1st	50·9	19th & 23rd.	35·5
	Minbu	*165*	29·923§	+·005§	30·038§	29·994	14th	29·850	20th	·144	63·9	82·6	−1·4	57·8	−2·2	70·2	−1·8	24·8	88·8	17th	52·0	18th	36·8
	Yamethin	657	29·401	+·003	30·036	29·467	12th & 14th.	29·303	19th	·164	62·8	84·3	−0·7	57·0	−0·2	70·6	−0·5	27·3	88·3	1st & 2nd	52·0	23rd	36·3
	Mandalay	250	29·836	+·017	30·045	29·898	10th	29·733	19th	·165	63·1	85·6	+3·3?	57·0	−2·3	71·3	+0·5?	28·6	90·2	2nd	52·6	22nd.	37·6
	Monywa	*280*	29·816		30·057	29·892	12th	29·711	17th	·181	63·2	82·1		58·2		70·2		23·9	86·3	1st	54·1	17th	32·2
	Lashio	*2,820*	27·253	−·002	27·199	27·345	11th	27·139	19th	·206	52·5	71·1†	−2·6†	47·2	−0·7	59·1†	−1·7	23·9	75·1	25th	42·5	22nd & 23rd.	32·6
	Bhamo	*381*	29·726	+·016	30·084	29·818	14th	29·595	19th	·223	55·7	76·0	−0·3	50·9	+0·2	63·4	−0·1	25·1	79·4	26th	46·6	23rd	32·8
	Myitkyina	458	29·628		30·075	29·729	14th	29·500	19th	·229	54·7	74·5		50·7		62·6		23·8	78·7	1st	48·0	8th	30·7
	II.—Assam.																						
4	Dibrugarh	353	29·747		30·086	29·845	14th	29·614	19th	·231	54·1	72·7		51·8		62·3		20·9	77·4	1st	49·1	4 days	28·3
	Sibsagar	333	29·789	+·004	30·100	29·856	12th & 13th.	29·617	17th	·219	56·3	70·4	−1·1	51·8	+1·1	61·1	0	18·6	74·6	4th	47·5	15th	27·1
	Tezpur	252	29·874		30·101	29·976	14th	29·740	19th	·236	56·8	74·2		54·3		64·2		19·9	79·6	1st	50·2	15th, 16th & 18th.	28·8
	Gauhati	195	29·929		30·091	30·025	14th	29·788	19th	·237	58·3	75·1		52·8		63·9		22·3	79·3	31st	48·1	15th, 16th & 24th.	31·2
	Dhubri	115	29·887	+·005	30·062	30·087	14th	29·867	19th	·220	60·7	73·3	−1·0	56·9	+1·8	65·1	+0·4	16·4	75·5	4 days	54·1	15th & 16th.	21·4
	Silchar	104	30·005	+·024?	30·067	30·079	13th & 14th.	29·881	19th	·198	60·1	78·6	−1·1	54·7	−0·3	66·6	−0·7	23·9	82·3	1st	50·3	14th	32·0
	III.—Bengal.																						
5	Cox's Bazar	36	30·045		30·028	30·112	14th	29·926	19th	·186	65·0	79·1		57·5		68·3		21·6	81·2	3rd & 22nd	54·2	18th	27·0
	Chittagong	87	29·995	+·019	30·032	30·062	14th	29·864	19th	·198	60·7	77·7	−0·4	55·7	−2·3	66·7	−1·3	22·0	80·5	1st	52·5	17th & 23rd.	28·0
	Noakhali	43	30·050		30·042	30·125	14th	29·921	19th	·204	61·2	76·9		54·7		65·8		22·2	78·8	21st	51·9	23rd	26·9
	Barisal	12	30·078	+·014	30·037	30·157	14th	29·945	19th	·212	62·8	77·1	−0·5	55·5	−0·6	66·3	−0·5	21·6	82·3	21st	51·6	23rd	30·7
	Narayanganj	26	30·061‖	+·015‖	30·037‖	30·144	13th	29·924	19th	·220	62·2	77·4	−0·6	57·6	+0·3	67·5	−0·1	19·8	79·0	21st & 22nd.	54·8	10th & 23rd.	24·2
	Mymensingh	63	30·034	+·008	30·052	30·117	13th	29·909	19th	·208	60·6	77·1	+0·9	57·4	+2·8	67·2	+1·9	19·7	78·6	21st	55·1	4 days	23·5
	Bogra	75	30·025	+·012	30·055	30·114	14th	29·890	19th	·224	59·2	75·0	−1·9	55·6	+1·6	65·3	−0·1	19·4	80·2	3rd	50·7	22nd	29·5
	Dinajpur	123	29·970	+·001	30·055	30·070	14th	29·829	19th	·241	58·3	75·5	−1·4	53·6	+2·2	64·6	+0·4	21·9	76·8	3rd, 6th & 26th.	48·0	22nd	28·8
	Jalpaiguri	223	29·826	+·011	30·081	29·925	12th	29·698	17th & 19th.	·227	61·1	76·7	+1·5	54·6	+1·7	65·6	+1·6	22·1	81·4	1st	51·9	9th, 13th & 16th.	29·5
	Saugor Island	25	30·086	+·020	30·055	30·179	14th	29·949	19th	·230	61·8	75·3	−1·0	57·4	−1·7	66·3	−1·3	17·9	78·7	18th	53·7	23rd	25·0
	Midnapore ‖	149	29·947		30·052	30·050	14th	29·799	15th	·251	59·8	78·8		53·7		66·3		25·1	85·3	21st	48·7	3rd	36·6
	Calcutta	21	30·091	+·018	30·059	30·192	14th	29·949	19th	·243	59·0	77·1	+0·6	55·3	−0·7	66·2	−0·1	21·8	82·1	21st	52·5	16th	29·6

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

† Mean of 27 days.
‡ „ „ 21 „
§ „ „ 28 „
‖ „ „ 30 „

B.

in India, etc., in December, 1912.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st Dec., 1912.	Normal rainfall for period, 1st to 31st Dec.	Departure from normal of period, 1st to 31st Dec., 1912.	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	56	57
																																I.—Burma.
1	8	14	5	1	1		1		N 42° E		5·2*			69		77		·737		4·0		2			0·70			0·70			0·38	Victoria Point.
26		2	3						N 72° E	N 14° E	3·1	1·3	+1·8	13	−52	83	+ 9	·713	+·047	1·7	−1·7	2	1·1	+0·9	0·99	0·37	+ 0·62	0·93	0·37	+ 0·62	0·85	Mergui.
31									(a)	N 30° E	1·0*	0·9	+0·1	(a)		83	+ 2	·668	+·019	1·5	−1·2	0	0·3	−0·3	0	0·21	− 0·21	0	0·21	− 0·21	0	Tavoy.
1	1	16	11		1		1		N 62° E	N 50° E	2·9	2·0	+0·9	76	+19	84	+ 1	·625	−·020	2·0	−0·5	0	0·2	−0·2	0	0·07	− 0·07	0	0·07	− 0·07	0	Moulmein.
2	9	16	4						N 36° E	N 44° E	1·5	3·3	−1·8	82	+10	82	− 1	·583	−·031	4·8	+2·5	0	0·4	−0·4	0	0·15	− 0·15	0	0·15	− 0·15	0	Rangoon.
20	2	8	1						N 41° E	N 40° E	2·3	2·6	−0·3	33	−32	84	− 1	·589	−·016	2·8	−0·1	0	0·5	−0·5	0	0·29	− 0·29	0	0·29	− 0·29	0	Bassein.
2	4	18	6					1	N 46° E	N 42° E	6·6	6·5	+0·1	79	− 7	73	− 1	·673	+·003	1·9	−1·5	0	0·8	−0·8	0	0·75	− 0·75	0	0·75	− 0·75	0	Diamond Island.
4	8	11	5	1				2	N 36° E	N 10° W	1·0	1·5	−0·5	66	− 6	90	+ 1	·519	−·046	3·5	+1·2	0	0·4	−0·4	0	0·24	− 0·24	0	0·24	− 0·24	0	Toungoo.
5	1	19	4	1		1			N 53° E		2·7			69		81		·609		1·7		0			0			0			0	Kyaukpyu.
4	14	13							N 21° E	N 18° E	1·6	1·8	−0·2	82	0	91	+ 2	·545	−·027	1·9	−0·4	0	0·8	−0·8	0	0·73	− 0·73	0	0·73	− 0·73	0	Akyab.
27	2	2							N 28° E	N 16° E	0·8*	2·6	−1·8	13	−11	83	+ 6	·503	+·012	2·3	+0·6	0	0·4	−0·4	0	0·20	− 0·20	0	0·20	− 0·20	0	Thayetmyo.
					1			30	N 46° W	N 50° W	2·9	5·0	−2·1	95	+22	79	+ 2	·465	−·029	4·5	+2·4	0	0·6	−0·6	0	0·46	− 0·46	0	0·46	− 0·46	0	Minbu.
18	7							6	N 26° W	N 13° W	1·4	2·5	−1·1	40	− 1	83	− 1	·471	−·036	1·1	0	0	0·7	−0·7	0	0·35	− 0·35	0	0·35	− 0·35	0	Yamethin.
20	1	4			2		2	2	N 11° W	N 4° W	2·2	1·4	+0·8	10	−26	85	− 2	·496	−·048	1·3	−1·1	1	0·7	+0·3	0·19	0·33	− 0·14	0·19	0·33	− 0·14	0·19	Mandalay.
7	¶7	1						6	N 9° W		1·5			72		87		·506		2·2		0	1·0	−1·0	0·02	0·37	− 0·35	0·02	0·37	− 0·35	0·02	Monywa.
31									(a)		1·1*			(a)		94	+ 1	·370	−·013	4·5	−1·8	2	1·2	+0·8	0·82	0·76	+ 0·06	0·82	0·76	+ 0·06	0·62	Lashio.
27	1	2		1					N 51° E	N 1° E	0·9	1·2	−0·3	10	−19	98	+ 5	·443	+·021	8·9	+5·2	2	1·1	+0·9	0·74	0·56	+ 0·18	0·74	0·56	+ 0·18	0·50	Bhamo.
24	1	1	2	1		1		1	N 63° E		0·9			7		92		·399		3·3		1	1·6	−0·6	0·25	0·51	− 0·26	0·25	0·51	− 0·26	0·21	Myitkyina.
																																II.—Assam.
31									(a)		0·7			(a)		99		·413		1·6		1	1·0	0	0·42	0·36	+ 0·06	0·42	0·36	+ 0·06	0·32	Dibrugarh.
24	1	1	1		2	1		1	S 45° E	N 63° E	0·9	1·2	−0·3	1	−28	97	− 2	·439	+·021	7·9	+2·6	1	1·6	−0·6	0·27	0·49	− 0·22	0·27	0·49	− 0·22	0·14	Sibsagar.
7	3	16	5						N 49° E		1·6			69		93		·426		2·0		0	0·5	−0·5	0·22	0·25	− 0·03	0·22	0·25	− 0·03	0·08	Tezpur.
27		2	1	1					N 77° E		1·1			10		95		·451		6·2		0	0·3	−0·3	0·06	0·09	− 0·03	0·06	0·09	− 0·03	0·06	Gauhati.
7		11	11		1	1			N 72° E	N 54° E	4·1¶	3·4	+0·7	62	−10	90	− 1	·481	+·034	1·0	−0·6	0	0·1	−0·1	0	0·05	− 0·05	0	0·05	− 0·05	0	Dhubri.
19		2	2	7		1			S 61° E	S 81° E	0·9	1·1	−0·2	30	+23	91	+ 1	·477	+·005	1·4	−2·6	1	0·7	+0·3	0·18	0·43	− 0·25	0·18	0·43	− 0·25	0·18	Silchar.
																																III.—Bengal.
	2	17	8	4					N 83° E		1·9*			82		85		·525		1·7		0			0			0			0	Cox's Bazar.
17	1	11	2						N 48° E	N 32° E	0·9	2·0	−1·1	46	−28	89	− 1	·474	−·039	0·6	−1·9	0	0·9	−0·9	0	0·79	− 0·79	0	0·79	− 0·79	0	Chittagong.
7	19	4						1	N 5° E		1·0			74		89		·450		1·3		0	0·3	−0·3	0	0·31	− 0·31	0	0·31	− 0·31	0	Noakhali.
26	3	1						1	N	N 11° E	0·3	1·2	−0·9	14	− 4	86	− 1	·488	−·019	0·4	−0·8	0	0·7	−0·7	0	0·47	− 0·47	0	0·47	− 0·47	0	Barisal.
24	3						1	3	N 31° W	N 5° W	0·6	1·5	−0·9	20	−27	85	− 2	·472	−·014	1·3	−1·0	0	0·8	−0·5	0	0·17	− 0·17	0	0·17	− 0·17	0	Narayanganj.
28	1							2	N 31° W	N 36° E	0·4	0·7	−0·3	7	−25	88	− 3	·471	+·002	2·5	+1·0	0	0·3	−0·3	0	0·07	− 0·07	0	0·07	− 0·07	0	Mymensingh.
25	2	1			1		2		N 23° W	N 1° W	0·3	1·0	−0·7	10	−35	88	+ 3	·448	+·017	1·7	+1·5	0	0·2	−0·2	0	0·03	− 0·03	0	0·03	− 0·03	0	Bogra.
5	2	7	9		2	8	3		N 19° W	N 12° W	1·2	1·4	−0·2	27	−27	91	+ 5	·446	+·036	0·9	+0·2	0	0·1	−0·1	0	0·03	− 0·03	0	0·03	− 0·03	0	Dinajpur.
20	1	8		1	1				N 52° E	N 12° E	1·1			27	−27	87	− 2	·475	+·043	1·4	+0·4	0	0·8	−0·3	0	0·08	− 0·08	0	0·08	− 0·08	0	Jalpaiguri.
	13	14				2	2		N 15° E	N 15° E	4·9	5·2	−0·3	82	0	89	+ 1	·487	−·036	0·9	−1·6	0	0·6	−0·6	0	0·33	− 0·33	0	0·33	− 0·33	0	Saugor Island.
8	3	7	2					7	N 6° E		1·2			60		71		·361		0·2		0	0·3	−0·3	0	0·25	− 0·25	0	0·25	− 0·25	0	Midnapore.
9	5	3			1	1		12	N 27° W	N 4° W	2·1*	1·8	+0·3	53	+ 3	86	+ 5	·426	−·016	0·3	−0·8	0	0·4	−0·4	0	0·21	− 0·21	0	0·21	− 0·21	0	Calcutta.

(a) Indeterminate. * Uncorrected for scale error. ¶ Mean of 17 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 216 stations*

Number of subdivision.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	III.—Bengal—*concld.*																						
5	Jessore	33	30·077	+·027	30·060	30·170	14th	29·947	19th	·223	60·5	76·0	−1·6	53·8	−1·1	64·9	−1·3	22·2	79·5	21st	50·7	23rd	28·8
	Burdwan	99	30·013	+·013	30·065	30·104	14th	29·866	19th	·238	59·5	77·3	−0·9	54·9	−1·1	66·1	−1·0	22·4	82·4	21st	51·3	6th	31·1
	Berhampore	67	30·045	+·015	30·065	30·140	14th	29·906	19th	·234	58·3	74·8	−1·7	55·5	+0·2	65·2	−0·7	19·3	78·1	21st	53·2	10th, 13th & 22nd.	24·9
	IV.—Bihar and Orissa.																						
6	Balasore	50	30·074	+·017	30·072	30·174	14th	29·935	19th	·239	58·7	78·9	−1·1	53·4	−1·6	66·1	−1·3	25·5	84·4	21st	49·6	1st & 3rd.	34·8
	Hukitala (False Point)	42	30·083	+·032	30·066	30·186	14th	29·948	19th	·238													
	Cuttack	80	30·055	+·043	30·081	30·153	14th	29·929	19th	·224	60·0	77·7	−4·4	55·5	−3·2	66·6	−3·8	22·2	82·0	21st	52·2	15th	29·8
	Puri	24	30·086		30·049	30·172	14th	29·958	19th	·214	63·2	80·0		59·8		69·9		20·2	83·6	19th	57·1	3rd & 15th	26·5
	Angul	455	29·653		30·096	29·752	14th	29·527	19th	·225	60·0	78·5		51·6		65·1		26·9	82·1	20th & 21st.	48·0	1st & 25th	34·1
	Sambalpur	486	29·639	+·029	30·103	29·738	14th	29·517	19th	·221	59·1	78·7	−1·1	51·3	−2·7	65·0	−1·9	27·4	81·6	21st	44·6	24th	37·0
7	Chaibasa	*733*	29·352	+·014	30·087	29·460	14th	29·202	19th	·258	53·1	76·7	−2·6	49·1	−2·1	62·9	−2·3	27·6	82·1	20th & 21st	42·3	2nd	39·8
	Ranchi	2,128	27·930	+·022	30·092	28·028	14th	27·795	19th	·233	55·2	72·1	−1·6	49·9	−0·7	61·0	−1·1	22·2	77·2	20th	45·4	4th	31·8
	Purulia	*816*	29·274		30·090	29·380	14th	29·137	19th	·243	56·6	76·5		51·8		64·1		24·7	82·5	21st	48·1	1st, 2nd & 3rd.	34·4
	Daltonganj	*730*	29·397		30·147?	29·495	14th	29·244	19th	·251	48·7	76·1		43·9		60·0		32·2	82·6	20th	39·0	23rd	43·6
8	Purnea	124	?	?	?	?	?	?	?	?	56·7	74·1	−1·7	53·1‡	+2·5‡	63·3‡	+0·4	21·0	75·6	7 days	49·8	4th, 10th & 16th.	25·8
	Monghyr	155	29·972		30·090	30·073	14th	29·810	17th	·263	59·0	72·0		52·5		62·7		20·4	75·2	28th	49·9	12th & 23rd.	25·3
	Darbhanga	165	29·947	+·015	30·076	30·051	14th	29·791	17th	·260	56·9	73·9	−0·6	50·1†	−3·6†	62·0†	−2·1	23·8	77·1	9th & 26th.	47·7	10th, 12th & 16th.	29·4
	Pusa	188	29·919		30·075	30·026	14th	29·754	17th	·272	54·4	74·4		49·3		61·9		25·1	76·9	27th	45·8	12th	31·1
	Patna	183	29·930	−·002	30·080	30·021	10th & 14th.	29·777	17th	·244	56·8	72·5	−1·7	51·5	−0·1	62·0	−0·9	21·0	76·0	30th	48·2	2nd, 11th & 22nd.	27·8
	Buxar	239	29·869		30·083	29·970	14th	29·710	19th	·260	53·5	75·0		49·5		62·3		25·5	80·0	20th	45·6	21st	34·4
	Gaya	372	29·740	+·009	30·091	29·829	14th	29·577	19th	·252	56·1	75·0	−1·2	50·3	−1·2	62·6	−1·2	24·7	79·9	20th	46·7	12th	33·2
	Naya Dumka	489	29·612	+·034	30·084	29·696	13th	29·433	19th	·213	57·9	74·4	−1·3	50·9	−0·4	62·7	−0·9	23·5	78·9	19th & 21st.	47·0	4th	31·9
	V.—United Provinces of Agra and Oudh.																						
9	Gorakhpur	257	29·834	+·004	30·067	29·945	14th	29·658	17th	·287	54·8	72·6	−1·6	48·7§	−1·7§	60·7§	−1·7	23·9	74·6	9th, 25th & 29th.	45·8	10th	28·8
	Benares	267	29·853†	+·019†	30·091†	29·956	14th	29·685	19th	·271	56·5	74·7	−0·3	46·8†	−1·4†	60·8†	−0·9	27·9	81·1	20th	43·1	4 days	38·0
	Allahabad	309	29·814	+·020	30·101	29·933	14th	29·630	19th	·304	54·0	74·0	−1·7	46·9	−0·9	60·4	−1·3	27·1	80·6	20th	42·5	21st	38·1
	Cawnpore	416	29·694	+·016	30·098	29·812	14th	29·498	19th	·314	52·4	74·7	−1·6	45·9	−1·7	60·3	−1·7	28·8	79·2	17th	40·9	23rd	38·3
	Lucknow	368	29·744	+·022	30·096	29·860	14th	29·567	19th	·293	53·9	73·9	−1·8	47·0	+0·8	60·5	−0·5	26·9	78·0	14th & 20th.	42·6	12th	35·4
	Bahraich	401	29·671	−·006	30·061	29·790	14th	29·493	17th	·297	53·0	72·0	−3·0	48·1	+0·1	60·0	−1·5	23·9	74·6	18th, 25th & 28th.	45·5	1st & 22nd.	29·1
10	Jhansi	824	29·300	+·028	30·131	29·420	14th	29·120	19th	·300	55·2	76·0	−2·4	46·4	−5·5P	61·2	−3·9P	29·6	80·5	19th	41·5	11th	39·0
	Agra	556	29·570	+·027	30·124	29·701	14th	29·410	19th	·291	54·9	75·0	−1·1	48·4	−0·4	61·7	−0·7	26·6	80·5	19th	44·5	1st & 11th	36·0
	Mainpuri	516	29·579	+·009	30·095	29·709	14th	29·389	19th	·320	50·4	74·0	−1·1	45·5	−1·8	59·8	−1·5	28·5	78·8	17th	41·1	11th	37·7
	Bareilly	568	29·506	+·005	30·078	29·613	14th	29·343	19th	·270	51·8	72·2	−0·6	46·2	+0·2	59·2	−0·2	26·0	77·3	17th	39·5	23rd	37·8
	Roorkee	899	29·182	+·031	30·119	29·307	14th	29·039	17th	·268	48·9	69·3	−3·1	43·5	0	56·4	−1·5	25·8	75·0	26th	37·4	23rd	37·6
	VI.—Punjab.																						
11	Delhi	718	29·380	+·023	30·116	29·502	14th	29·249	19th	·253	51·7	72·6	−1·1	48·1	−0·8	60·4	−0·9	24·5	77·0	19th	43·8	11th	33·2
	Sirsa	662	29·455	+·037	30·136	29·570	14th	29·282	18th	·288	49·9	73·8	−1·1	43·5	+0·8	58·6	−0·1	30·3	79·8	28th	37·0	21st	42·8

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 elevation of which exceed 2,200 feet.

† Mean of 30 days.
‡ " " 21 "
§ " " 28 "

B—*continued.*

in India, etc., in December, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st Dec., 1912.	Normal rainfall for period, 1st to 31st Dec.	Departure from normal of period, 1st to 31st Dec., 1912.	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	56	57
																																III.—Bengal—*concld.*
27	2						1	1	N 33° W	N 11° W	0·9	1·1	−0·2	13	−26	82	− 4	·433	−·025	0·3	−0·9	0	0·5	− 0·5	0	0·19	− 0·19	0	0·19	− 0·19	0	Jessore.
11	9	2					1	8	N 18° W	N 22° W	1·0	1·2	−0·2	56	+17	77	+ 6	·391	+·006	0·8	−0·6	0	0·3	− 0·3	0	0·16	− 0·16	0	0·16	− 0·16	0	Burdwan.
24	3			1			1	2	N 26° W	N 41° W	0·7	1·0	−0·3	17	−23	86	0	·422	−·014	0·8	−0·6	0	0·3	− 0·3	0	0·11	− 0·11	0	0·11	− 0·11	0	Berhampore.
																																IV.—Bihar and Orissa.
6	15	1					1	6	N 13° W	N 25° W	1·0	1·5	−0·5	66	− 6	72	−10	·353	−·091	1·0	−1·1	0	0·5	− 0·5	0	0·26	− 0·26	0	0·26	− 0·26	0	Balasore.
1	3	1		2		4	1	19	N 49° W	N 17° W	4·5	4·2	+0·3	62	−24					0·8	−1·7	0	0·9	− 0·9	0	0·77	− 0·77	0	0·77	− 0·77	0	Hukitala (False Point)
23		1				3	4		S 75° W	N 48° W	1·0*	0·9	+0·1	17	+ 3	78	+ 3	·410	−·037	1·6	−0·3	0	0·6	− 0·6	0	0·35	− 0·35	0	0·35	− 0·35	0	Cuttack.
	21	4						6	N 2° W		4·4			90		82		·473		1·4		0	0·6	− 0·6	0	0·43	− 0·43	0	0·43	− 0·43	0	Puri.
2	1					1	7	20	N 58° W		3·0			84		74		·389		0·6		0	1·2	− 1·2	0	0·53	− 0·53	0	0·53	− 0·53	0	Angul.
	15	12	1					3	N 16° E	N 16° E	2·7	1·8	+0·9	86	+ 5	79	+ 5	·397	−·009	1·2	−0·5	0	0·4	− 0·4	0	0·28	− 0·28	0	0·28	− 0·28	0	Sambalpur.
18					5	7	1		S 22° W	S 68° W	1·0	0·7	+0·3	40	0	88	+ 8	·358	−·017	1·5	+0·1	0	0·6	− 0·6	0	0·24	− 0·24	0	0·24	− 0·24	0	Chaibasa.
12	3					1	4	11	N 51° W	N 68° W	3·3	3·1	+0·2	53	+14	66†	+ 1	·291†	−·018	0·6	−0·6	0	0·6	− 0·6	0	0·22	− 0·22	0	0·22	− 0·22	0	Ranchi.
15							7	9	N 65° W		1·0			45		72		·333		0		0	0·6	− 0·6	0	0·17	− 0·17	0	0·17	− 0·17	0	Purulia.
19			5	6		1			S 81° E		1·4			32		88		·303		0·6		0	0·6	− 0·6	0·01	0·24	− 0·23	0·01	0·24	− 0·23	0·01	Daltonganj.
20	2	2	1	1	1		4		N 29° W	S 88° W	?	1·1	?	7	−12	93	+ 2	·427	+·044	0·4	−0·5	0	0·2	− 0·2	0	0·10	− 0·10	0	0·10	− 0·10	0	Purnea.
6						8	12	5	S 85° W		2·2			68		79		·400		0·3		0			0			0			0	Monghyr.
13							13		W	N 86° W	0·7	1·5	−0·8	42	+12	80	+ 3	·413	+·004	0·1	−0·4	0	0·1	− 0·1	0	0·06	− 0·06	0	0·06	− 0·06	0	Darbhanga.
17	1		2	1		6	4		S 51° W		1·5			23		90		·381		0		0			0			0			0	Pusa.
12			1		1	7	10		S 66° W	S 78° W	1·6	1·4	+0·2	49	− 5	77	+ 2	·360	−·012	0·2	−0·7	0	0·3	− 0·3	0	0·09	− 0·09	0	0·09	− 0·09	0	Patna.
7				2	5	11	6		S 41° W		2·7			58		79		·323		0·6		0	0·5	− 0·5	0	0·21	− 0·21	0	0·21	− 0·21	0	Buxar.
14			1		8	1	6	1	S 39° W	S 10° W	1·7	1·8	−0·1	33	+ 1	75	+ 4	·338	−·004	0·5	−1·0	0	0·2	− 0·2	0	0·14	− 0·14	0	0·14	− 0·14	0	Gaya.
31									(a)		0·8			(a)		72	− 6	·346		0·2		0	0·3	− 0·3	0	0·08	− 0·08	0	0·08	− 0·08	0	Naya Dumka.
																																V.—United Provinces of Agra and Oudh.
15		1	1			1	12	1	N 87° W	N 69° W	0·9	0·8	+0·1	40	+ 8	84	+ 3	·363	−·011	0	−1·0	0	0·4	− 0·4	0	0·15	− 0·15	0	0·15	− 0·15	0	Gorakhpur.
9				3	1	15	2	1	S 46° W	S 56° W	1·4	1·7	−0·3	56	+27	75	− 9	·343	−·012	0·2	−1·1	0	0·5	− 0·5	0·02	0·25	− 0·23	0·02	0·25	− 0·23	0·02	Benares.
10				1	1	6	10	3	S 76° W	N 76° W	2·1	2·2	−0·1	53	+24	73	− 4	·307	−·046	0·6	−0·7	0	0·5	− 0·5	0·03	0·27	− 0·24	0·03	0·27	− 0·24	0·03	Allahabad.
15	1					6	9		S 76° W	N 82° W	1·6	1·3	−0·2	43	+14	79	+ 2	·311	−·013	0·3	−1·0	0	0·7	− 0·7	0	0·24	− 0·24	0	0·24	− 0·24	0	Cawnpore.
23						4	3	1	S 72° W	N 76° W	0·9	1·2	−0·3	23	− 6	74	− 8	·309	−·025	0·9	−0·7	0	0·8	− 0·8	0	0·35	− 0·35	0	0·35	− 0·35	0	Lucknow.
14	1				1	4	6	5	N 87° W	N 51° W	1·2	1·1	+0·1	40	+16	85	+ 3	·340	−·011	1·4	+0·6	0	0·7	− 0·7	0	0·32	− 0·32	0	0·32	− 0·32	0	Bahraich.
10			1			13	5	2	S 62° W	N 79° W	1·6	1·5	+0·1	56	+38	62	+ 5	·271	−·022	3·2	+2·1	1	0·7	+ 0·3	0·23	0·27	− 0·04	0·23	0·27	− 0·04	0·21	Jhansi.
18				1	1	4	5	2	S 70° W	N 61° W	1·7	2·1	−0·4	30	− 6	59	− 9	·257	−·023	1·7	+0·2	0	0·8	− 0·8	0·07	0·33	− 0·26	0·07	0·33	− 0·26	0·07	Agra.
12	2	1			1	3	10	2	N 86° W	N 66° W	0·9	0·8	+0·1	43	+19	74	+ 1	·272	−·019	0·6	−1·7	0	1·1*	− 1·1	0·03	0·46	− 0·43	0·03	0·46	−0·43	0·03	Mainpuri.
29							2		W	N 44° W	0·1	1·2	−1·1	6	− 8	83	+ 2	·323	+·017	1·0	−0·4	0	1·0	− 1·0	0	0·38	− 0·38	0	0·38	− 0·38	0	Bareilly.
26								5	N 45° W	N 39° W	0·9	1·0	−0·1	13	+ 6	86	+ 2	·297	+·018	2·4	+0·3	1	1·3	− 0·3	0·13	0·63	− 0·50	0·13	0·63	− 0·50	0·11	Roorkee.
																																VI.—Punjab.
5	1		2	1			18	4	N 81° W	N 87° W	2·0	1·8	+0·2	59	+15	66	+ 5	·252	+·002	2·4	0	0	1·1	− 1·1	0·04	0·48	− 0·44	0·04	0·48	− 0·44	0·04	Delhi.
5	1	1	3	1	7	5	5	3	S 40° W	N 84° W				30	+23	69	0	·245	+·008	1·7	−1·3	0	0·8	− 0·8	0	0·31	− 0·31	0	0·31	− 0·31	0	Sirsa.

(a) Indeterminate. * Uncorrected for scale error. † Mean of 30 days.

Table

(2) Abstract of observations taken at 8 hrs. at 216 stations

Number of sub-division.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	VI.—Punjab—*concld.*																						
11	Patiala	*818*	29·218		30·100	29·359	12th	29·122	18th	·237	48·1	70·8		45·1		58·0		25·7	74·4	25th & 30th.	38·8	1st	35·6
	Ambala	892	29·179	+·019	30·110	29·284	14th	29·056	18th	·228	48·5	72·9	+0·8	43·4	−0·1	58·1	+0·3	29·5	76·5	29th & 30th.	35·9	4th	40·6
	Ludhiana	812	29·276	+·031	30·123	29·376	14th	29·140	18th	·236	47·8	70·4	−0·6	44·5	+0·5	57·4	−0·1	25·9	75·0	26th	40·0	1st	35·0
	Lahore	702	29·401	+·026	30·138	29·510	12th	29·270	18th	·240	45·1	71·8	−1·4	42·0	+1·7	56·9	+0·1	29·8	77·4	26th&31st	37·2	22nd&23rd	40·2
	Sialkot	830	29·262	+·035	30·137	29·372	12th	29·115	18th	·257	46·4	69·5	−0·6	41·6	−0·9	55·5	−0·7	27·9	75·0	5th & 30th	35·5	1st	39·5
	Rawalpindi	1,674	28·494	+·018	30·180	28·523	12th	28·256	18th	·272	41·1	66·3	−1·3	38·5	+1·4	52·4	+0·1	27·8	74·4	4th	30·9	1st	43·5
12	Khushab	612	29·509	+·022	30·146	29·650	14th	29·351	18th	·299	48·2	72·3	+0·6	43·0	+1·1	57·7	+0·9	29·3	80·4	30th	36·4	1st, 4th & 20th.	44·0
	Montgomery	558	29·561	+·021	30·136	29·681	14th	29·422	18th	·259	48·3	72·9	0	43·3	+0·3	58·1	+0·1	29·6	78·9	26th	37·0	20th	41·9
	Multan	420	29·719	+·022	30·138	29·872	14th	29·573	18th	·299	51·5	74·6	+0·7	46·2	+1·8	60·4	+1·3	28·4	82·8	26th	39·5	8th	43·3
	VII.—North-West Frontier Province.																						
14	Peshawar	1,113	29·002	+·008	30·183	29·131	8th	28·839	18th	·292	46·0	67·0	−0·5	41·2	+2·2	54·1	+0·9	25·8	74·2	21st, 29th & 30th.	32·9	1st	41·3
	D. I. Khan	590	29·551	+·019	30·166	29·704	14th	29·373	18th	·331	45·9	70·9	−1·6	42·6	+2·5	56·8	+0·5	28·3	78·4	30th	35·6	8th	42·8
	VIII.—Sind.																						
16	Jacobabad	186	29·970	+·033	30·130	30·111	8th	29·813	26th	·293	52·9	76·7	0	45·3	+1·3	61·0	+0·7	31·4	87·1	26th	37·8	7th	49·3
	Hyderabad	96	30·057	+·026	30·111	30·156	8th	29·903	26th	·253	56·9	78·3	−0·8	51·9	−0·4	65·1	−0·6	26·4	87·0	26th	45·0	20th	42·0
	Karachi	13	30·136	+·025	30·100	30·221	8th	30·013	26th	·208	63·0	78·9	+0·2	59·6	−0·6	69·2	−0·2	19·3	83·0	29th&30th	55·0	7th & 20th	28·0
	IX.—Rajputana.																						
17	Bikaner	*771*	29·331	+·012	30·119	29·436	13th	29·192	18th	·244	52·4	77·5	+2·2	46·4	−4·9?	62·0	−1·3?	31·1	87·0	27th	39·0	10th	48·0
	Jodhpur	780	29·326	+·031	30·111	29·411	8th&9th.	29·220	5th	·191	57·2	81·3	+1·1	51·6	−1·6	66·4	−0·3	29·7	89·5	27th	45·8	23rd&24th	43·7
18	Jaipur	1,431	28·660	+·012	30·134	28·792	14th	28·519	19th	·273	54·5	78·1	+0·4	47·9	−1·2	63·0	−0·4	30·2	85·2	29th	40·1	20th	45·1
	Ajmer	1,611	28·493	+·022	30·163?	28·597	14th	28·405	19th	·192	50·1	74·1	−2·2	48·0	+2·4?	61·1	+0·1?	26·1	80·1	28th	41·7	10th	38·4
	Kotah	819?	29·271	+·020	30·094?	29·382	14th	29·162	19th	·220	58·5	78·9	−0·6	51·9	−2·3	65·4	−1·5	27·0	86·6	19th	45·6	1st	41·0
	X.—Bombay.																						
19	Deesa	466	29·635	+·023	30·081	29·714	14th	29·543	26th	·171	60·3	87·5	+2·1	50·5	−2·2	69·0	−0·1	37·0	92·8	26th&30th	44·4	1st & 21st	48·4
	Bhuj	395	29·765	+·020	30·071	29·836	8th	29·676	26th	·160	60·6	82·2	0	50·3	−5·8?	66·3	−2·9?	31·9	87·0	11th&30th	45·0	7th	42·0
	Jamnagar	61	30·078		30·087	30·123	8th	29·990	5th	·133	64·9	82·8		52·2		67·4		30·6	87·6	11th	46·7	19th	40·9
	Dwarka	37?	30·074	+·023	30·057	30·128	14th	29·993	26th	·135	66·4	81·8	+0·6	60·4	−0·5	71·1	+0·1	21·4	86·8	14th	56·7	7th & 20th	30·1
	Rajkot	429	29·654	+·016	30·052	29·720	8th	29·571	5th	·149	63·1	85·9	+0·5	52·2	−0·7	69·1	−0·1	33·7	93·1	27th	42·3	7th	50·8
	Veraval	*18*	30·056	+·010	30·017	30·117	14th	29·979	5th	·138	67·8	84·4	+0·3	62·3	+0·3	73·4	+0·3	22·1	90·1	19th, 29th & 30th.	55·3	27th	34·8
	Bhavnagar Para	55	30·044	−·003?	30·047	30·127	14th	29·957	5th	·170	61·8	85·7	+0·7	54·9	−3·4?	70·3	−1·3?	30·8	90·0	29th&31st	48·0	1st	42·0
	Surat	39	30·046	+·019	30·029	30·124	14th	29·964	20th	·160	66·0	87·9	+0·5	59·5	+1·8	73·7	+1·1	28·4	91·9	30th	55·6	1st	36·3
	Ahmadabad	163	29·931	+·012	30·050?	30·006	14th	29·838	5th	·168	65·9	86·7	+0·8	59·7	−0·4	73·2	+0·2	27·0	92·1	30th	53·7	1st	38·4
25	Bombay	37	30·017	+·006	29·995	30·088	14th	29·925	20th	·163	72·8	84·8	+0·3	70·5	+0·7	77·7	+0·5	14·3	87·0	4th, 29th & 30th.	67·5	19th&27th	19·5
	Ratnagiri	110	29·914	+·008	29·965	29·987	14th	29·807	20th	·180	73·2	89·1	−0·4	65·8	−1·4	77·5	−0·9	23·3	92·3	10th, 24th & 30th.	61·4	1st	30·9
	Goa	199	?	?	?	?	?	?	?	?	70·4	84·9	−2·5	68·1	−1·2	76·5	−1·9	16·8	88·1	4th, 11th & 21st.	65·1	25th, 26th & 31st.	23·0
	Marmagao	*60*	29·977	+·009	29·973	30·036	14th	29·882	20th	·154	71·7	82·6	−3·7	69·2	−1·1	75·9	−2·4	13·4	84·5	3rd	66·2	26th&27th	18·3
	Karwar	44	29·998	+·027	29·977	30·065	14th	29·901	19th	·164	67·8	86·2	−1·5	65·2	−1·0	75·8	−1·3	21·0	89·2	4th & 5th	61·0	24th&27th	28·2

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

B—*continued.*

***in India, etc., in December, 1912*—continued.**

Wind direction. Number of winds from Calm. (25)	N. (26)	N.E. (27)	E. (28)	S.E. (29)	S. (30)	S.W. (31)	W. (32)	N.W. (33)	Resultant direction. (34)	Normal direction. (35)	Wind velocity. Mean velocity, miles per hour. (36)	Normal. (37)	Departure from normal. (38)	Wind steadiness. Actual percentage. (39)	Departure from normal. (40)	Hygrometry, 8 hrs. Mean humidity at 8 hrs. (41)	Departure from normal. (42)	Mean vapour tension at 8 hrs. in inches of mercury. (43)	Departure from normal in inches of mercury. (44)	Cloud. Mean cloud amount at 8 hrs. (45)	Departure from normal. (46)	Rainfall. Number of rainy days. (47)	Normal number of rainy days. (48)	Departure from normal. (49)	Rainfall of month. (50)	Normal rainfall of month. (51)	Departure from normal. (52)	Total rainfall from 1st to 31st Dec., 1912. (53)	Normal rainfall for period, 1st to 31st Dec. (54)	Departure from normal of period, 1st to 31st Dec., 1912. (55)	Heaviest rainfall during month. (56)	Station. (57)
																																VI.—Punjab—*concld.*
5	1	1	1	3	1		3	16	N 48° W		3·5			48		83		·276		2·4		0	1·3	−1·3	0·05	0·40	−0·35	0·05	0·40	−0·35	0·05	Patiala.
11	6		3				3	8	N 26° W	N 41° W	2·6	1·1	+1·5	46	+26	79	− 3	·267	−·010	2·6	+0·2	0	1·6	−1·6	0·05	0·69	−0·64	0·05	0·69	−0·64	0·05	Ambala.
28		1					1	1	N 33° W	N 47° W	0·1	0·9	−0·8	3	−14	76	0	·251	−·009	2·5	−1·3	1	1·4	−0·4	0·12	0·75	−0·63	0·12	0·75	−0·63	0·12	Ludhiana.
21	3				1		2	4	N 45° W	N 58° W	1·1	0·9	+0·2	27	+20	80	+ 2	·243	−·009	3·4	+0·5	1	0·9	+0·1	0·17	0·40	−0·23	0·17	0·40	−0·23	0·16	Lahore.
21	1	2	2		1			4	N 9° E	N 63° E	0·9	0·7	+0·2	13	+ 6	85	+11	·265	+·018	2·8	+0·2	1	1·1	−0·1	0·20	0·69	−0·49	0·20	0·69	−0·49	0·18	Sialkot.
18	2		1		2	1	1	6	N 54° W	N 41° W	1·7	0·9	+0·8	20	+ 6	73	− 1	·212	+·002	4·8	+1·2	2	1·7	+0·3	0·46	0·97	−0·51	0·46	0·97	−0·51	0·25	Rawalpindi.
25	1	3	2						N 53° E	N 27° E	1·3	1·5	−0·2	17	+ 3	52	− 8	·174	−·025	4·3	+1·6	0	0·6	−0·6	0·11	0·43	−0·32	0·11	0·43	−0·32	0·07	Khushab.
11	3	3	3	2	2	1	2	4	N 15° E	N 63° E	2·3	1·9	+0·4	13	− 5	59	− 6	·199	−·031	3·0	+0·3	0	1·1	−1·1	0·02	0·38	−0·36	0·02	0·38	−0·36	0·02	Montgomery.
23	7	1							N 5° E	N 53° E	0·9	0·8	+0·1	27	+ 9	64	− 6	·243	−·018	2·9	+0·4	0	0·7	−0·7	0	0·25	−0·25	0	0·25	−0·25	0	Multan.
																																VII.—North-West Frontier Province.
11				3	14	2		1	S	S 16° W	1·5	1·7	−0·2	54	+25	61	− 9	·193	−·012	4·9	+1·1	0	1·1	−1·1	0·06	0·49	−0·43	0·06	0·49	−0·43	0·03	Peshawar.
26	1	1						3	N 21° W	N 32° W	0·4	0·6	−0·2	13	+ 2	72	+ 1	·223	+·006	4·1	+1·5	0	0·7	−0·7	0·03	0·21	−0·18	0·03	0·21	−0·18	0·03	D. I. Khan.
																																VIII.—Sind.
30								1	N 45° W	N 7° E	0·1	1·2	−1·1	3	−11	65	+ 2	·259	+·018	2·3	−0·5	0	0·4	−0·4	0·05	0·11	−0·06	0·05	0·11	−0·06	0·05	Jacobabad.
1	14				2	2		12	N 27° W	N 2° E	4·1	5·1	−1·0	72	+16	60	+ 6	·284	+·018	3·3	+1·0	0	0·2	−0·2	0	0·06	−0·06	0	0·06	−0·06	0	Hyderabad.
2	4	22	2				1		N 40° E	N 54° E	6·4	6·1	+0·3	79	− 3	56	− 5	·333	+·004	2·4	+0·2	0	0·4	−0·4	0	0·13	−0·13	0	0·13	−0·13	0	Karachi.
																																IX.—Rajputana.
5	2	5	4	5	6	2		1	S 60° E	N 4° W	2·7	2·4	+0·3	37	+15	39	−17	·149	−·092	2·3	−0·3	0	0·4	−0·4	0	0·19	−0·19	0	0·19	−0·19	0	Bikaner.
5	7	19							N 33° E		2·4			79		38	− 5	·180		2·1		0	0·5	−0·5	0	0·14	−0·14	0	0·14	−0·14	0	Jodhpur.
14	6	2	4	2		1		2	N 35° E	N 2° W	2·0*	2·1	−0·1	30	+ 8	53	− 9	·227	−·042	2·4	+0·2	1	0·6	+0·4	0·10	0·22	−0·12	0·10	0·22	−0·12	0·10	Jaipur.
26	1	1		2				1	N 52° E	N 24° E	1·2	1·2	0	3	− 1	62	−12	·229	−·046	1·6	−0·5	0	0·5	−0·5	0	0·28	−0·28	0	0·28	−0·28	0	Ajmer.
22		1		2	1		2	3	N 79° W		1·0			6		57	− 1	·278		1·6		1	0·6	+0·4	0·29	0·29	0	0·29	0·29	0	0·29	Kotah.
																																X.—Bombay.
	1	13	14	2	1				N 73° E	N 72° E	6·0	5·8	+0·2	84	+12	43	− 4	·225	−·033	1·3	−0·5	0	0·2	−0·2	0	0·06	−0·06	0	0·06	−0·06	0	Deesa.
23		4		1		2		1	N 45° E	N 15° W	2·7	4·2	−1·5	3	− 4	46	− 9	·242	−·099	3·6	+2·0	0	0·1	−0·1	0	0·05	−0·05	0	0·05	−0·05	0	Bhuj.
2	2	14	12			1			N 62° E		5·1			77		49		·302		0·3		0	0·3	−0·3	0	0·07	−0·07	0	0·07	−0·07	0	Jamnagar.
2	7	14	8						N 46° E		7·0			79		68	+ 1	·441		1·9		0	0·3	−0·3	0	0·06	−0·06	0	0·06	−0·06	0	Dwarka.
15	4	7	4	1					N 49° E	N 69° E	3·4	3·4	0	43	− 7	41	−12	·236	−·088	1·2	+0·2	0	0·2	−0·2	0	0·05	−0·05	0	0·05	−0·05	0	Rajkot.
9	12	9	1						N 22° E	N 27° E	1·5	4·2	−2·7	66	− 9	48	− 3	·326	−·036	1·0	−1·0	0	0·3	−0·3	0	0·12	−0·12	0	0·12	−0·12	0	Veraval.
21		1					4	5	N 62° W	N 77° W	1·0	4·6	−3·6	29	−29	53	− 9	·294	−·077	1·5	+0·1	0	0·2	−0·2	0	0·10	−0·10	0	0·10	−0·10	0	Bhavnagar Para.
2	5	9	12	2				1	N 61° E	N 48° E	3·0	3·2	−0·2	69	+11	66†	+ 4	·425†	+·026	0·9	−0·4	0	0·2	−0·2	0	0·05	−0·05	0	·05	−0·05	0	Surat.
	1	24	2	1				3	N 42° E	N 62° E	3·9	3·4	+0·5	82	+ 8	41	− 8	·266	−·046	1·3	−0·2	0	0·1	−0·1	0	0·04	−0·04	0	0·04	−0·04	0	Ahmadabad.
	1	12	16	2					N 73° E	N 70° E	5·8*	7·1	−1·3	89	+ 3	74	+ 2	·597	+·009	2·0	+0·3	0	0·2	−0·2	0	0·07	−0·07	0	0·07	−0·07	0	Bombay.
		6		22	2	1			S 54° E	S 74° E	6·2	5·8	+0·4	78	+11	54	+ 1	·437	−·031?	1·5	+0·1	0	0·3	−0·3	0	0·09	−0·09	0	0·09	−0·09	0	Ratnagiri.
	1	13	15	2					N 71° E	N 75° E	3·9	3·3	+0·6	86	− 6	75	+11?	·553	−·006	2·8	+1·4	0	0·2	−0·2	0	0·14	−0·14	0	0·14	−0·14	0	Goa.
		9	20	2					N 80° E	S 77° E	5·3*	5·8	−0·5	92	+12	77	+ 1	·591	−·030?	2·4	+1·5	0	0·3	−0·3	0	0·18	−0·18	0	0·18	−0·18	0	Marmagao.
22	3	6							N 31° E	N 67° E	1·0	2·2	−1·2	30	−50	79	+ 4	·540	0	1·6	+0·5	0	0·3	−0·3	0	0·18	−0·18	0	0·18	−0·18	0	Karwar.

* Uncorrected for scale error. † Mean of 30 days.

Table

(2) *Abstract of observations taken at 8 hrs. at 216 stations*

Number of sub-division.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 hrs., in inches. 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Temperature of air. Mean of 8 hrs temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X.—Bombay *—concld.*																						
26	Malegaon	1,430	28·652	+·022	30·089	28·741	14th	28·563	19th	·178	62·0	85·0	+0·8	52·5	+1·2	68·8	+1·0	32·5	89·6	31st	47·6	24th	42·0
	Ahmadnagar	2,154	27·925	+·022	30·067	27·996	14th	27·845	20th	·151	62·9	81·8	+1·8	53·1	+1·6	69·0	+1·7	31·7	89·6	26th	46·0	16th	43·6
	Poona	1,846	28·218	+·014	30·082?	28·287	14th	28·131	19th	·156	57·5	84·5	+0·2	53·0	−0·8	68·7	−0·3	31·5	88·5	10th	47·8	1st	40·7
	Sholapur	1,590	28·478	+·022	30·052	28·555	14th	28·385	20th	·170	65·8	85·9	+0·4	56·5*	−0·9*	71·2*	−0·3	29·3	91·8	21st	50·1	24th	41·7
	Bijapur	*1,948*	28·114	+·018	30·039	28·190	14th	28·043	19th	·147	65·0	85·7	+1·7	56·8	+0·8	71·3	+1·3	28·9	89·2	21st	51·8	24th	37·4
	Belgaum	2,562	27·496	+·021	30·009	27·554	14th	27·425	20th	·129	66·4	81·2	−0·4	57·1	−1·0	69·2	−0·7	24·1	84·8	21st	53·5	10th & 19th.	31·3
	XI.—Central India.																						
20	Neemuch	1,626	28·471	+·027	30·124	28·574	14th	28·367	19th	·207	57·0	78·9	+0·5	48·3	−1·2	63·6	−0·3	30·6	85·4	27th & 29th.	41·0	1st	44·4
	Indore	1,823	28·260	+·034	30·105	28·364	14th	28·161	6th	·203	59·3	78·7	−0·6	49·5	+0·2	64·1	−0·2	29·2	84·1	29th	43·1	21st.	41·0
21	Nowgong	754	29·368	+·027	30·134	29·433	14th	29·183	19th	·305	50·6	72·3	−2·9	45·6	−0·8	58·9	−1·9	26·7	77·0	17th	41·0	22nd	36·0
	Sutna	1,041	29·061	+·025	30·135	29·149	19th	28·839	19th	·310	50·2	75·9	+1·8?	44·0	−3·1?	60·4	−0·7?	32·9	82·8	20th	40·2	11th	42·6
	XII.—Central Provinces.																						
22	Buldana	2,132	27·944		30·0[illegible]0	28·023	14th	27·817	19th	·179	67·2	81·4		53·0		69·7		23·4	86·2	29th	52·3	1st & 2nd	33·9
	Akola	925	29·175	+·033	30·095	29·272	14th	29·062	27th	·210	60·9	86·1	+2·5	50·4*	−1·0*	68·2*	+0·7	35·7	91·2	30th	41·5	1st	49·7
	Amraoti	1,215	28·877	+·029	30·087	28·965	14th	28·707	19th	·262	64·1	84·0	+1·3	57·8	+1·1?	70·9	+1·1?	26·2	89·3	30th	52·3	1st	37·0
23	Khandwa	1,044	29·055	+·034	30·108	29·147	14th	28·948	19th	·199	58·6	81·7	−1·3	50·1	−0·1	65·9	−0·7	31·6	86·7	29th & 31st.	43·6	23rd	43·1
	Hoshangabad	1,006	29·116	+·037	30·140	29·219	14th	28·994	25th	·225	54·1	77·5	−1·8	49·4	−2·3	63·5	−2·1	28·1	82·7	25th	42·4	23rd	39·3
	Saugor	1,807	28·270	+·017	30·106?	28·376	14th	28·123	19th	·253	57·7	75·5	−1·4	52·3	+0·4	63·8	−0·5	23·0	85·3	29th	48·1	10th & 21st.	32·2
	Jubbulpore	1,327	28·754	+·012	30·121	28·865	14th	28·606	19th	·259	50·5	75·3	−1·6	44·8	−1·2	60·0	−1·4	30·5	79·8	20th	39·8	22nd	40·0
	Seoni	2,033	28·059	+·034	30·122	28·162	14th	27·935	19th	·227	57·8	76·5	−1·2	48·1	−1·7	62·3	−1·5	28·4	82·0	3.st	43·5	1st, 2nd & 23 d.	39·1
	Nagpur	1,017	29·082	+·032	30·099	29·175	14th	28·953	19th	·222	60·2	81·5	+0·2	52·1	−2·2	66·8	−1·0	29·4	86·1	20th	45·8	1st	40·3
24	Pendra	2,123?	28·036		30·113	28·145	14th	27·908	19th	·237	55·9	74·8		48·6		61·7		26·2	80·8	20th	44·7	2nd, 3rd & 12th.	36·1
	Raipur	970	29·136	+·035	30·104	29·247	14th	28·996	19th	·251	59·5	79·3	+0·1	53·0	−1·1	66·2	−0·5	26·3	83·7	20th	48·6	1st	35·1
	Chanda	*634*	29·460	+·018?	30·079?	29·556	14th	29·353	19th	·203	57·1	81·4	−1·1	49·4	−2·4	65·4	−1·7	32·0	84·5	18th & 30th.	43·5	23rd	41·0
	Jagdalpur	1,813	28·2.6*		30·093*	28·332	14th	28·144	19th	·188	55·9	80·4		47·7		64·1		32·7	85·7	10th	43·1	13th	42·6
	XIII.—Hyderabad.																						
27	Aurangabad	1,905	28·185	+·001?	30·076	28·264	14th	28·085	19th	·179	66·2	84·7	+0·6	55·7	+1·1	70·2	+0·9	29·0	89·4	30th	48·7	1st	40·7
	Nizamabad	1,248	28·823		30·067	28·906	14th	28·732	19th	·174	61·2	82·2	−0·1	51·8	−2·1	67·3	−1·1	31·0	86·4	20th	45·2	23rd	41·2
	Bidar	*2,165*									70·5	81·9		58·8		70·3		23·1	85·1	20th	54·4	1st	30·7
28	Gulbarga	1,503	28·579	+·018	30·070	28·650	14th	28·506	19th	·144	64·4	85·2	+0·2	55·7	−2·1	70·4	−0·9	29·5	89·5	30th	50·8	26th	38·7
	Raichur	*1,311*	28·765	+·038?	30·049	28·834	14th	28·680	20th	·154	68·5	83·9	−1·0	60·9	−2·4	72·4	−1·7	23·0	88·0	30th	56·1	16th & 18th.	31·9
	Hyderabad (Deccan).	1,690	28·380	+·013	30·069	28·461	14th	28·304	20th	·157	61·3	82·8	+0·4	55·2	−2·1	69·0	−0·9	27·6	86·3	30th	52·2	17th, 23rd & 25th.	34·1
	Hanamkonda	877	29·217	+·037	30·069	29·303	14th	29·133	19th	·170	66·9	81·7	−2·0	56·6	−4·3	69·2	−3·1	25·1	85·5	21st	52·7	20th	32·8
	XIV.—Mysore.																						
29	Chitaldrug	2,405	27·642	+·015	29·996	27·697	3rd	27·573	20th	·124	67·5	81·1	−0·2	59·8	−1·0	70·4	−0·6	21·3	85·1	21st	57·3	26th	27·8
	Hassan	3,149	26·931	+·030	30·010	26·982	14th	26·870	19th	·112	63·3	79·6	+0·2	55·3	−0·2	67·5	0	24·3	83·9	21st	51·1	26th & 31st.	32·8
	Bangalore	3,021	27·046	+·016	30·011	27·095	14th	26·992	20th	·103	62·4	79·0	+1·0	56·7	−2·0	67·8	−0·5	22·3	83·3	21st	52·8	15th	30·5
	Mysore	2,518	27·533	+·013	29·996	27·577	9th	27·459	20th	·118	66·1	80·9	−0·7	58·7	−1·1	69·8	−0·9	22·2	85·5	21st	55·0	16th	30·5

N.B.—Elevations in italics indicate barometrical determinations. * Mean of 30 days.

B—*continued.*

in India, etc., in December, 1912—continued.

Wind direction. Number of winds from: Calm.	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 stradiness. 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, in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st Dec., 1912.	Normal rainfall for period, 1st to 31st Dec.	Departure from normal of period, 1st to 31st Dec., 1912.	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	56	57
																																X.—Bombay—*concld.*
20		1			1	1	6	2	N 8° W	N 69° W	1·5	3·1	−1·6	21	−37	57	− 1	·344	−·007	0·3	−1·7	0	0·4	−0·4	0·01	0·22	−0·18	0·04	0·22	−0·18	0·04	Malegaon.
15	2	3		1	2	1		7	N 27° W	N 81° E	2·8	3·9	−1·1	23	+18	43	−20	·246	−·132?	0·8	−0·7	0	0·7	−0·7	0	0·45	−0·45	0	0·45	−0·45	0	Ahmadnagar.
21		1	1	1		1	3	3	N 67° W	N 88° E	4·9	4·4	+0·5	10	−12	70*	+14?	·314*	−·017	0	−1·9	0	0·5	−0·5	0	0·19	−0·19	0	0·19	−0·19	0	Poona.
1	1	15	12	2					N 67° E	S 74° E	8·0	5·8	+2·8	85	+18	51	+ 2	·328	−·018	1·1	−0·9	0	0·6	−0·6	0	0·46	−0·46	0	0·46	−0·46	0	Sholapur.
10		5		15	1				S 60° E	S 67° E	2·7	2·8	−0·1	53	−16	18	−14	·376	−·101?	0·2	−1·4	0	0·6	−0·6	0	0·30	−0·30	0	0·30	−0·30	0	Bijapur.
4		1	15	11					S 73° E	S 81° E	5·5	8·8	−2·9	79	+ 3	60	+ 3	·393	+·010	1·6	0	0	0·5	−0·5	0	0·34	−0·34	0	0·34	−0·34	0	Belgaum.
																																XI.—Central India.
17			13		1				S 86° E	N 58° E	2·4	4·2	−1·8	13	−22	58	+ 5	·265	−·002	2·4	+1·0	0	0·6	−0·6	0·09	0·21	−0·12	0·09	0·21	−0·12	0·09	Neemuch.
19		7	5	1	1				N 70° E	N 68° E	3·5	1·5	+2·0	30	+12	59	0	·293	−·012	0·6	−0·8	0	0·6	−0·6	0	0·25	−0·25	0	0·25	−0·25	0	Indore.
10		1		1	7	8	4		S 33° W	N 76° W	1·0	0·8	+0·2	49	+35	82	+ 8	·309	−·009	1·6	+0·4	1	0·7	+0·3	0·25	0·50	−0·25	0·25	0·50	−0·25	0·24	Nowgong.
30							1		W	N 24° W	0·4	2·5	−2·1	3	−41	79	+12	·290	−·003	0·5	−0·5	0	0·8	−0·8	0·05	0·43	−0·38	0·05	0·43	−0·38	0·05	Satna.
																																XII.—Central Provinces.
	4	5	9	6	4	2		1	S 86° E		1·1	4·0	−2·9	48		39		·256		0·6		0	1·1	−1·1	0·05	0·59	−0·54	0·05	0·59	−0·54	0·05	Buldana.
8	1	5	6	7	4				S 73° E	S 85° E	2·5	2·3	+0·2	49	+ 5	42	−14	·232	−·083	2·6	+0·8	0	1·1	−1·1	0	0·71	−0·71	0	0·71	−0·71	0	Akola.
4		12	14	1					N 72° E	N 72° E	3·9	2·9	+1·0	79	+ 7	46	− 5	·271	−·056	0·9	−0·8	0	0·8	−0·8	0	0·57	−0·57	0	0·57	−0·57	0	Amraoti.
17	2	6	2	3				1	N 57° E	N 63° E	1·4	2·0	−0·6	30	− 2	69	+12	·335	+·035	1·1	−0·2	0	0·4	−0·4	0	0·31	−0·31	0	0·31	−0·31	0	Khandwa.
1		15	3	8	2	2			N 85° E	N 63° E	1·8	1·9	−0·1	59	− 6	76	+ 7	·317	−·012	2·4	+0·8	0	0·8	−0·8	0	0·51	−0·51	0	0·51	−0·51	0	Hoshangabad.
15		3	6	3		2	2		S 78° E	S 77° E	2·3	2·0	+0·3	23	− 9	51	− 4	·256	−·038	0·8	−0·3	0	0·6	−0·6	0·05	0·53	−0·48	0·05	0·53	−0·48	0·05	Saugor.
20	1			4	5	1			S 16° E	S 41° E	0·8	1·2	−0·4	25	−11	77	+ 3	·288	−·065	0·6	−1·0	0	0·6	−0·6	0·04	0·31	−0·27	0·04	0·31	−0·27	0·04	Jubbulpore.
12	6	8	1		1	1	1	1	N 22° E	N 39° E	2·4	1·6	+0·8	40	− 2	57	−10	·272	−·072	1·2	−0·7	0	0·8	−0·8	0·11	0·55	−0·44	0·11	0·55	−0·44	0·09	Seoni.
3	10	6	2	1			1	8	N 1° E	N 7° E	2·1	2·2	−0·1	62	+33	55	− 5	·289	−·064	1·3	−0·7	1	0·9	+0·1	0·22	0·56	−0·34	0·22	0·56	−0·34	0·22	Nagpur.
21	3	1			2	2		2	N 51° W		2·1			10		57		·266		1·2		0	0·7	−0·7	0	0·38	−0·38	0	0·38	−0·38	0	Pendra.
17	4	5	1			1	1	2	N 10° E	N 14° E	1·1	1·8	−0·7	27	+11	58	− 4	·297	−·047	0·4	−1·6	0	0·5	−0·5	0	0·26	−0·26	0	0·26	−0·26	0	Raipur.
19	2		1	1		1	2	5	N 47° W	N 39° E	1·1	1·2	−0·1	23	− 9	75	+ 3	·358	−·040	1·2	−0·2	0	0·8	−0·8	0	0·28	−0·28	0	0·28	−0·28	0	Chanda.
20	2			1			3	5	N 50° W		?			27		81		·367		0·2		0			0			0			0	Jagdalpur.
																																XIII.—Hyderabad.
6		3	13	9					S 79° E		5·4			69		45	− 4	·292		1·7		0	0·7	−0·7	0	0·31	−0·31	0	0·31	−0·31	0	Aurangabad.
28	1			1				1	N		1·2			3		67	− 1	·363		1·6		0	0·4	−0·4	0	0·11	−0·11	0	0·11	−0·11	0	Nizamabad.
18		4	1	7		1			S 69° E		3·0			26		51		·386		0·7		0	0·7	−0·7	0	0·30	−0·30	0	0·30	−0·30	0	Bidar.
	1	11	16	3					N 76° E	N 76° E	4·5	5·3	−0·8	89	+42	57	− 2	·344	−·049	0·1	−1·7	0	0·3	−0·3	0	0·22	−0·22	0	0·22	−0·22	0	Gulbarga.
		9	10	9	2	1			S 83° E	S 77° E	4·5	5·4	−0·9	72	+ 6	63	− 3	·416	−·040	2·0	+0·5	0	0·2	−0·2	0	0·15	−0·15	0	0·15	−0·15	0	Raichur.
31									(a)	S 63° E	0·9	2·3	−1·4			73	0	·395	−·057	1·5	−0·2	0	0·4	−0·4	0	0·17	−0·17	0	0·17	−0·17	0	Hyderabad (Deccan).
21	2			3	4		1		S 15° E		2·0			13		59	− 8	·396		1·7		0	0·5	−0·5	0	0·22	−0·22	0	0·22	−0·22	0	Hanamkonda.
																																XIV.—Mysore.
		1	15	14	1				S 68° E	S 77° E	4·8	5·7	−0·9	89	+ 1	70	+ 5	·464	+·004	2·9	−0·1	0	0·7	−0·7	0	0·42	−0·42	0	0·42	−0·42	0	Chitaldrug.
3		6	14	8					S 88° E	N 82° E	3·3	2·5	+0·8	78	− 7	81	+ 8	·472	−·005	4·6	+1·0	0	0·9	−0·9	0	0·85	−0·85	0	0·85	−0·85	0	Hassan.
		10	18	2	1				N 86° E	N 67° E	5·3	4·0	+1·3	86	0	84	+ 6	·468	−·015	3·4	−0·4	0	1·4	−1·4	0·01	0·49	−0·48	0·01	0·49	−0·48	0·01	Bangalore.
	2	16	13						N 62° E	N 68° E	7·2	7·5	−0·3	86	+ 3	81	+ 7	·523	+·020	4·6	+0·8	0	1·1	−1·1	0	0·43	−0·43	0	0·43	−0·43	0	Mysore.

(a) Indeterminate.

* Mean of 20 days.

Table

(2) Abstract of observations taken at 8 hrs. at 216 stations

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	XV.—Madras.																						
30	Mangalore	65	29·949	+·008	29·946	30·105	10th	29·853	19th	·152	76·3	88·4	−2·1	70·0	+0·9	79·3	−0·6	18·4	90·8	5th	65·4	31st	25·4
	Calicut	27	29·975	+·006	29·931	30·019	4th	29·894	19th	·125	74·1	85·9	−1·7	70·6	+0·1	78·3	−0·8	15·3	87·3	3rd & 4th	66·1	31st	21·2
	Cochin	9	29·985	+·010	29·922	30·029	8th	29·907	19th	·122	76·4	88·4	−0·1	72·1	−0·8	80·3	−0·5	15·3	90·7	13th & 31st.	68·7	25th	22·0
	Trivandrum	198	29·787	+·012	29·918	29·835	4th	29·717	20th	·118	75·4	83·2	+0·2	72·4	+0·7	77·8	+0·5	10·8	85·5	8th	68·5	23th	17·0
31	Pamban	37	29·972	0	29·937	30·028	4th	29·869	18th	·159	76·3	84·0	+2·4	72·7	−1·9	78·4	+0·3	11·3	87·7	2nd, 5th & 7th.	71·8	5 days	15·9
	Madura	447	29·593	+·034	29·980	29·650	3rd	29·499	20th	·161	74·9	85·4	−0·6	69·9	−0·6	77·7	−0·6	15·5	90·0	29th	65·1	25th & 26th.	24·9
	Pudukkottai	318	29·733		29·990	29·787	28th	29·649	18th	·138	73·0	82·5		68·5		75·5		14·0	85·5	10th & 30th.	65·1	26th	20·4
	Negapatam	31	29·997	+·020	29·957	30·052	4th	29·915	18th	·137	74·9	80·8	−0·7	69·8	−2·3	75·3	−1·5	11·0	82·7	9th, 10th & 12th.	64·2	28th	18·5
	Trichinopoly	255	29·803	+·037	29·995	29·852	4th	29·725	18th	·127	74·4	84·9	−0·3	68·5	−0·9	76·7	−0·6	16·4	87·6	10th, 29th & 30th.	63·3	27th	24·3
	Coimbatore	1,341	28·684	+·013	29·985	28·745	28th	28·596	18th	·149	69·8	81·8	−3·3	64·0	−2·1	72·9	−2·7	17·8	85·0	1st & 30th	57·3	25th	27·7
	Salem	940	29·139	+·035	30·034	29·187	14th	29·062	19th	·125	72·2	85·5	−0·9	64·5	−0·8	75·0	−0·9	21·0	89·0	5th & 30th	60·3	27th	28·7
	Cuddalore	37	30·023	+·026	29·990	30·071	4th	29·952	19th	·119	72·6	82·1	−1·1	68·8	−0·3	75·4	−0·7	13·3	83·8	7th	64·7	26th	19·1
	Vellore	707	29·355		30·031	29·409	14th	29·296	19th	·113	68·9	83·4		62·7		73·1		20·7	85·7	20th	60·0	25th	25·7
	Madras	22	30·048	+·030	30·000	30·100	14th	29·991	19th	·109	73·8	83·5	+0·2	63·2	−1·5	75·3	−0·7	15·3	85·0	12th, 24th & 30th.	64·0	26th	21·0
32	Cuddapah	433	29·642	+·016	30·027	29·695	14th	29·567	20th	·128	69·3	85·1	−1·7	61·8	−3·6	73·4	−2·7	23·3	87·2	20th	57·3	19th	29·9
	Bellary	1,475	28·575	+·015	30·030	28·632	14th	28·500	20th	·132	66·0	85·3	−0·3	59·9	−1·0	72·6	−0·7	25·4	89·0	30th	55·3	20th	33·7
	Kurnool	923	29·141	+·011	30·042	29·216	14th	29·058	20th	·158	63·4	85·7	−1·2	58·9	−2·0	71·4	−1·6	28·8	89·2	20th & 30th.	49·1	26th	40·1
33	Nellore	66	30·017	+·026	30·019	30·076	11th	29·950	19th	·126	71·8	82·6	−2·2	66·0	−2·2	74·3	−2·2	16·6	85·5	10th	62·1	19th	23·4
	Masulipatam	15	30·091	+·041	30·040	30·159	3rd	30·009	19th	·150	69·4	82·0	−1·0	64·3	−2·3	73·2	−1·7	17·7	83·8	23rd & 24th.	60·7	15th	23·1
	Cocanada	26	30·089	+·039	30·052	30·163	14th	30·001	19th	·162	69·3	79·3	−1·4	63·7	−2·0	71·5	−1·7	15·6	81·7	20th	60·6	15th & 16th.	21·1
	Waltair (Vizagapatam).	*226*	29·881	+·035	30·055	29·962	14th	29·787	19th	·175	71·1	79·4		65·7		72·6		13·7	82·1	11th	61·4	17th	20·7
	Calingapatam	19	30·100		30·057	30·191	14th	29·986	19th	·205	65·0	*d* 80·4		59·8		*d* 70·1		20·6	85·8	20th	56·3	14th	29·5
	Gopalpur	72	30·068	+·031	30·062	30·185	14th	29·969	19th	·216	64·8	79·7	−0·6	59·2	−1·6	69·5	−1·1	20·5	83·2	30th	56·0	4th	27·2
	Bay Islands.																						
1	P. V. Fraser	8	30·123		30·048	30·210	14th	29·995	19th	·215	72·4												
	Port Blair	58	29·941	+·017	29·929	30·003	3rd	29·893	19th	·110	80·0	85·8	+0·1	76·9	+0·2	81·4	+0·1	8·9	88·2	26th	71·0	20th	17·2
	Slipper Island	90	29·905		29·929	29·947	3rd	29·858	25th	·089	79·2	82·6		76·1		79·4		6·5	86·1	1st	71·6	26th	14·5
	Kashmir.																						
13	Muzaffarabad	2,475	27·731		30·350	27·901	14th	27·576	19th	·325	42·7	62·0		39·5		50·8		22·5	71·8	4th	31·1	2nd	40·7
	Srinagar	5,204	25·083	+·039	25·054	25·207	14th & 22nd.	24·838	18th	·369	31·6	46·3	−1·5	28·9	+0·4	37·6	−0·5	17·4	53·1	30th	22·1	2nd & 5th	31·0
	Dras	*10,059*	20·897	+·050	20·865	21·106	22nd	20·613	18th	·493	2·4	21·6		−7·6		7·0		29·2	30·0	4th & 6th	−30·0	21st	60·0
	Leh	*11,503*	19·758	+·022	19·726	19·943	23rd	19·516	18th	·427	13·2	30·7	−4·0	*d* 8·9	*d* −4·3	*d* 19·7	−4·1	21·8	38·4	5th	−2·0	21st	40·4
	Skardu	*7,505*	23·074	+·062	23·044	23·355	22nd	22·754	18th	·601	23·2	36·3	−5·5	20·1	−2·6	28·2	−4·1	16·2	45·5	7th	7·6	22nd & 23rd	37·9
	Gilgit	4,890	25·371		25·344	25·604	31st	25·071	18th	·533	35·8	46·8	−2·4	32·3	−2·2	39·5	−2·3	14·5	54·2	4th	28·2	1st	26·0

N B.—Elevations in italics indicate barometrical determinations. *d* Mean of 30 days. NOTE.—The barometric readings are not reduced to sea-level, in the case of hill or plateau

B—*continued.*

in India, etc., in December, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st Decr., 1912.	Normal rainfall for period, 1st to 31st December.	Departure from normal for period, 1st Decr., 1912.	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	56	57
																																XV.—Madras.
		3	25	3					E	S 86° E	4·1	2·1	+2·0	94	+ 8	64	− 4	·580	−·021	3·0	+0·7	0	0·7	−0·7	0	0·48	− 0·48	0	0·48	− 0·48	0	Mangalore.
1		6	13	10	1				S 81° E	N 85° E	2·3 *	5·1	−2·8	79	− 4	81	+ 4	·682	−·001	2·7	+0·5	1	1·8	−0·8	1·01	1·10	− 0·09	1·01	1·10	− 0·09	0·92	Calicut.
	1	11	18	1					N 73° E	N 36° E	3·2 *	3·1	+0·1	89	+10	72	− 3	·654	−·042	2·7	+0·3	1	2·4	−1·4	0·70	1·61	− 0·91	0·70	1·61	− 0·91	0·59	Cochin.
8	3	8	10	1				1	N 60° E	N 49° E	2·2	2·7	−0·5	59	+23	77	− 3	·675	−·049	5·2	+0·9	3	3·5	−0·5	2·31	2·20	+ 0·11	2·31	2·20	+ 0·11	1·10	Trivandrum.
1	20	9						1	N 12° E	N 13° E	13·9	9·6	+4·3	92	+ 9	92	+ 4	·826		5·2		8	9·1	−1·1	4·73	7·55	− 2·82	4·73	7·55	− 2·82	1·26	Pamban.
2	11	12	3				1	2	N 23° E	N 5° E	5·5	3·4	+2·1	76	− 7	76	+ 2	·651	−·008	6·2	+1·7	2	3·3	−1·3	0·65	1·78	− 1·13	0·65	1·78	− 1·13	0·25	Madura.
	16	14						1	N 18° E		8·0			94		80		·651		4·7		3	2·0	+1·0	1·03	1·05	+ 0·03	1·05	1·05	+ 0·03	0·51	Pudukkottai.
	1	9	1					20	N 17° W	N 6° W	7·9 *	6·6	+1·3	72	−14	83	0	·714	−·040	6·3	−0·4	7	9·4	−2·4	5·98	11·28	− 5·30	5·98	11·28	− 5·30	2·00	Negapatam.
3	13	6	1				3	5	N 4° W	N 16° E	3·7	3·3	+0·4	69	+19	72	− 5	·603	−·064	3·9	−1·0	3	4·5	−1·5	1·12	2·68	− 1·56	1·12	2·68	− 1·56	0·71	Trichinopoly.
5	6	15	5						N 43° E	N 77° E	3·6	2·2	+1·4	72	−11	83	− 1	·604	−·053	3·0	−1·9	0	2·6	−2·6	0·04	1·15	− 1·11	0·04	1·15	− 1·11	0·03	Coimbatore.
11		6	12				2		N 73° E	N 40° E	2·5	2·8	−0·3	49	+20	73	− 3	·576	−·050	4·2	+0·6	0	2·4	−2·4	0	1·10	− 1·10	0	1·10	− 1·10	0	Salem.
	11	1						19	N 27° W	N 10° W	7·4	2·0	+5·4	92	+13	84	− 6	·674	−·092	4·5	−1·5	2	6·0	−4·0	0·52	7·21	− 6·69	0·52	7·21	− 6·69	0·32	Cuddalore.
28			1	2					S 63° E		1·5 *			6		86		·610		2·1		1	3·7	−2·7	0·17	3·52	− 3·35	0·17	3·52	− 3·35	0·17	Vellore.
	11	1					2	17	N 29° W	N 8° E	5·0	5·3	−0·3	89	+ 6	82	− 1	·685	−·045	2·9	−2·2	1	5·3	−4·3	0·30	6·24	− 5·94	0·30	6·24	− 5·94	0·30	Madras.
3	6	4	2	2	3		3	8	N 15° W	S 75° E				30	−13	80	+ 2	·574	−·016	2·4	−1·0	0	1·6	−1·6	0	1·04	− 1·04	0	1·04	− 1·04	0	Cuddapah.
14			7	8	2				S 59° E	S 59° E	1·4 *	2·4	−1·0	49	+ 6	76	+ 9	·495	+·013	2·1	−1·2	0	0·3	−0·3	0	0·12	− 0·12	0	0·12	− 0·12	0	Bellary.
21	1	1	5	1	1	1			S 82° E	S 80° E	2·3 *			20	+19	76	+ 6	·447	−·046	1·6	−0·1	0	0·5	−0·5	0	0·30	− 0·30	0	0·30	− 0·30	0	Kurnool.
3	10	1	1				1	15	N 25° W	N 51° W	3·0	3·1	−0·1	76	+ 4	84	− 1	·654	−·052	4·5	+0·5	0	3·0	−3·6	0·01	3·07	− 3·06	0·01	3·07	− 3·06	0·01	Nellore.
2	22	7							N 10° E	N 15° E	3·6	3·8	−0·2	92	+ 6	82	+ 1	·582	−·055	1·5	−1·1	0	1·2	−1·2	0	1·04	− 1·04	0	1·04	− 1·04	0	Masulipatam.
6	17	8							N 14° E	N 5° E	4·4	6·6	−2·2	79	−11	77	+ 7	·559	+·018	3·3	+0·8	0	1·0	−1·0	0	1·08	− 1·08	0	1·08	− 1·08	0	Cocanada.
	13	6					9	3	N 20° W	N 31° W	4·3			69	+20	67	+ 8	·506	−·014	3·2	+0·7	0	1·1	−1·1	0	1·05	− 1·05	0	1·05	− 1·05	0	Waltair.
	9						3	19	N 36° W		5·5			89		84		·514		0·9		0	1·4	−1·4	0	2·78	− 2·78	0	2·78	− 2·78	0	(Vizagapatam). Calingapatam.
	17	5						9	N 6° W	N 23° W	3·8	6·0	−2·2	89	+14	77	0	·463	−·027	1·5	−0·6	0	1·1	−1·1	0	0·97	− 0·97	0	0·97	−0·97	0	Gopalpur.
																																Bay Islands.
3	16	8					2	2	N 5° E					74		69		·549		2·4		0			0			0			0	P.V.Fraser.
1	5	17	5		1	1		1	N 44° E	N 55° E	† 6·0	5·3	+0·7	69	+11	75	− 6	·776	−·043	3·2	−2·1	0	7·3	−7·3	0·09	6·81	− 6·72	0·09	6·81	− 6·72	0·04	Port Blair.
	8	16	5	1				1	N 40° E		6·5			79		68		·670		4·5		1	1·6	−0·6	1·02	1·72	− 0·70	1·02	1·72	− 0·70	0·99	Slipper Island.
																																Kashmir.
	5	5	3	2	7	6	1	2	S 18° E		0·5†			10		79		·215		4·7		4			1·53			1·53			0·50	Muzaffarabad.
10	3	1		6	4		1	6	S 45° W	S 42° E	2·0	1·9	+0·1	1	−18	79	−10	·142	−·018	6·5	+0·5	2	3·5	−1·5	0·58	1·41	− 0·83	0·58	1·41	− 0·83	0·14	Srinagar.
31									(a)		0·7			(a)						4·6		7	6·1	+0·9	1·55	1·71	− 0·16	1·55	1·71	−0·16	0·32	Dras.
19	4	6	1		1				N 36° E	S 22° W	1·2	0·9	+0·3	30	+13	54	− 4	·046	−·005	6·1	+0·2	2	0·6	+1·4	0·40	0·17	+ 0·23	0·40	0·17	+ 0·23	0·18	Leh.
28				1		2			S 18° W		1·3			7		88	− 6	·112		7·1		6	1·0	+5·0	1·54	0·32	+ 1·22	1·54	0·32	+ 1·22	0·40	Skardu.
26						1	3	1	W		0·4			14		49	−12	·103	−·031	4·6	−1·8	1	0·3	+0·7	0·15	0·11	+0·04	0·15	0·11	+ 0·04	0·10	Gilgit.

stations, the elevations of which exceed 3,200 feet. † Mean of 30 days. * Uncorrected for scale error. (a) Indeterminate.

Table

(2) *Abstract of observations taken at 8 hrs. at 216 stations*

Number of subdivision.	Station.	Elevation of barometer 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Baluchistan.																						
15	Fort Sandeman		25·558		25·527	25·655	26th	25·429	18th	·226	35·7	60·4		31·8		46·1		28·6	68·9	26th	23·1	8th	45·8
	Quetta	5,502	24·767	+·021	24·727	24·866	24th	24·680	26th	·186	33·4	55·2	−1·4	31·0	+1·3	43·1	−0·1	24·2	66·1	2nd	21·2	6th & 7th.	44·9
	Chaman	4,311	25·824	−·001	25·786	25·939	24th	25·707	26th	·232	42·3	57·1	−1·5	38·7	−0·9	47·9	−1·2	18·4	67·3	4th	29·1	6th & 7th.	38·2
	Kalat	6,630	23·830		23·792	23·947	24th	23·763	26th	·184	32·2	54·5		27·7		41·1		26·8	65·0	26th	13·2	6th & 7th.	51·8
	Dalbandin	2,779	27·277		27·240	27·394	19th	27·143	26th	·251	43·3	68·3		39·8		54·1		28·5	83·8	23rd & 25th.	29·8	6th, 7th & 8th.	54·0
	Pasni		30·123		30·083	30·202	3rd	29·983	26th	·219	62·8	30·2		60·9		70·5		19·3	84·5	5th	55·0	6th & 7th.	29·5
	Panjgur		26·899		26·857	26·974	18th	26·768	26th	·206	46·2	66·3		43·8		55·1		22·5	73·8	25th	31·0	6th	42·8
	Robat		26·979		26·937	27·161	30th	26·734	9th	·427	43·1	60·0		46·5		50·2		19·5	73·0	4th	33·8	7th & 8th.	39·2
	Hill stations excluding Kashmir and Baluchistan.																						
	Chitral	*5,486*																					
	Para Chinar	6,000	24·573		24·519	24·673	14th	24·406	18th	·267	38·1	52·8		32·7		42·8		20·1	65·2	26th	22·1	8th	43·1
	Cherat	*4,256*	25·851	+·040	25·832	26·001	14th	25·707	18th	·297	46·0	53·0	−2·5	42·1	−0·5	47·5	−1·5	10·9	61·2	26th	35·4	7th & 8th.	25·8
	Drosh										35·5	47·1		31·6		39·4		15·5	59·2	3rd & 4th.	22·6	8th & 9th.	36·6
	Murree	6,333	23·947	+·030	23·915	24·045	3rd	23·786	19th	·259	43·4	50·2	−2·6	40·3	+1·3	45·3	−0·7	9·9	61·6	30th	31·2	7th & 11th.	30·4
	Simla	7,232	23·182	+·021	23·144	23·253	3rd	23·011	19th	·242	43·9	50·3	+0·9	40·5	+1·4	45·4	+1·1	9·8	56·1	24th	32·9	7th	23·2
	Sarain		23·219		23·181	23·285	3rd	23·049	19th	·236	35·7	51·7		31·6		41·7		20·1	59·3	24th	27·3	1st	32·0
	Kalabagh																						
	Chakrata	7,022	23·373	+·035	23·333	23·494	14th	23·221	19th	·273	43·7	57·9	+3·0	36·7	−2·6	47·3	+0·2	21·2	66·2	25th	31·7	8th & 9th.	34·5
	Mukteswar	7,592	22·891	−·002	22·850	23·001	14th	22·742	19th	·259	43·9	53·6	−0·4	37·6	−1·0	45·6	−0·7	16·0	60·5	25th & 30th.	29·5	7th	31·0
	Darjiling	7,376	23·050	−·025	23·005	23·126	10th	22·902	17th	·224	41·4	48·6	−0·1	37·3	+0·7	43·0	+0·3	11·3	59·3	24th	34·2	20th	25·1
	Shillong	4,920	25·230		25·182	25·317	14th	25·107	15th	·210	49·3	59·9		40·6		50·3		19·3	62·4	24th	36·7	9th	25·7
	Cherrapunji	4,309	25·793		25·744	25·863	14th	25·679	19th	·184	52·9	60·1		46·9		53·5		13·2	62·7	5th, 11th & 15th.	42·1	18th	20·6
	Maymyo	3,545	25·844	+·036	26·489	26·615	12th & 13th.	26·438	19th	·177	49·2	68·7	−0·8	42·6	+0·3	55·7	−0·3	26·1	73·0	1st	38·6	23rd	36·4
	Pachmarhi	3,528	26·613	+·034	26·560	26·708	14th	26·510	19th	·198	57·6	69·5	−0·8	44·9	−0·8	57·2	−0·8	24·6	75·0	29th & 31st.	37·6	22nd	37·4
	Mount Abu	3,945	26·206	+·033	26·156	26·288	14th	26·105	19th	·183	61·2	70·4	+1·8	54·5	+1·6	62·5	+1·7	15·9	78·2	26th	47·4	1st	30·8
	Mercara	3,781	26·292	+·006	26·225	26·334	3rd & 4th.	26·227	19th	·107	59·6	74·8	−0·4	56·6	−1·2	65·7	−0·8	18·2	78·5	21st	52·5	16th	26·0
	Ootacamund	*7,327*	23·111		23·047	23·156	3rd	23·076	17th	·080	56·4	65·9		44·3		55·1		21·6	71·5	29th	35·2	12th	36·3
	Kodaikanal	7,683	22·871	+·009	22·806	22·918	4th	22·822	19th	·096	55·6	63·7	+1·8	47·8	+0·1	55·8	+0·9	15·9	71·0	25th	41·0	11th	30·0
	Extra India																						
	Singapore (a)	10	29·956		29·887	30·029	2nd	29·913	20th	·116	81·3	86·7		73·5		80·1		13·2	90·0	4th & 12th.	72·0	9th & 12th.	18·0
	Penang (a)	17	29·895		29·840	29·962	3rd	29·852	13th	·110	81·4	88·2		73·3		80·7		14·9	90·5	9th & 25th.	71·0	2nd & 24th.	19·5
	Trincomalee	99	29·895	P	29·922	29·950	3rd	29·820	17th	·140	77·4	82·2	−0·3	75·0	0·5	78·6	+0·1	7·2	88·5	4th	68·5	17th	20·0
	Colombo	24	29·919	0	29·899	30·017	3rd	29·828	18th	·189	73·2	85·2	−1·7	71·8	−1·2	78·5	−1·5	13·4	88·5	14th & 31st.	69·0	26th	19·5
	Minicoy	7	30·001			30·055	4th	29·933	19th & 20th.	·122													
	Amini Divi	*13*	29·987	−·009	29·928	30·040	14th	29·894	19th	·146	80·0	86·6	+1·7	73·6	−0·2	80·1	+0·7	13·0	90·4	6th	68·7	25th	21·7
	Gyantse	13,120	17·170		17·131	17·259	13th	17·100	16th & 19th.	·159	18·5	42·8		1·3		22·0		41·5	51·7	20th	−3·0	5 days	54·7
	Pharijong	14,400									6·4	28·0		−11·5		8·3		39·5	42·1	19th	−24·2	10th	66·3
	Gangtok	5,560?	24·546		24·501	24·622	12th	24·416	19th	·206	47·7	58·6		43·0		50·8		15·6	62·9	24th	40·8	9th	22·1
	Gartok (c)	15,100?	17·754			17·775	5 days	17·725	16th & 27th.	·050	9·1	28·8		−1·0		13·9		29·8	39·1	27th	−14·9	31st	54·0

N.B.—Elevations in italics indicate barometrical determinations.
(a) 9 hrs. observations.
(c) Aneroid corrected.

NOTE.—The barometric readings are not reduced to sea-level, in the case of hill

B—*continued.*

in India, etc., in December, 1912—continued.

Wind direction. Number of winds from: Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December, 1912.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December, 1912.	Heaviest rainfall during month.	Station.
25	25	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
																																Baluchistan.
14		1	10	4		2			S 74° E		1·7			40		66†		·143†		3·2		0			0·15			0·15			0·06	Fort Sandeman.
22	1			6	1			1	S 45° E	S 7° E	2·0	1·7	+0·3	13	+ 4	82	+ 8	·163	+·008	4·4	+1·2	6	2·2	+3·8	1·50	0·94	+ 0·56	1·50	0·94	+ 0·56	0·58	Quetta.
11			8	7	3	1		1	S 55° E	S 52° E	2·7	4·9	−2·2	46	−26	65	+10	·175	0	3·3	−0·2	6	2·8	+3·2	2·43	1·12	+ 1·31	2·43	1·12	+ 1·31	0·71	Chaman.
11				4	9	6		1	S 8° W	S 24° W	4·0			49	+ 2	82		·155		4·3		2	2·6	−0·6	1·35	1·18	+ 0·17	1·35	1·18	+ 0·17	1·03	Kalat.
5	5	6	6	1		2		6	N 25° E		4·1			40		71		·207		2·5		6			1·13			1·13			0·29	Dalbandin.
24	2	1	2					2	N 18° E		2·4			13		84		·488		4·3		2			1·54			1·54			0·82	Pasni.
3	2	16	9			1			N 57° E		4·7			76		73		·241		3·2		1			0·55			0·55			0·50	Panjgur.
13			1			2	15		S 84° W		1·4			49		75		·207		5·7		4			2·84			2·84			1·73	Robat.
																																Hill stations, excluding Kashmir and Baluchistan.
																							2·9			1·02			1·02			Chitral.
15	6	6				1		3	N 7° E		0·3			40		65		·144		5·0		5	3·3	+1·7	1·68	1·25	+ 0·43	1·68	1·25	+ 0·43	0·54	Para Chinar.
3	16	2						10	N 13° W	N 13° W	14·2	9·6	+4·6	82	+ 7	43	− 2	·127	−·015	5·5	+1·8	0	1·7	−1·7	0·13	1·49	− 1·36	0·13	1·49	− 1·36	0·07	Cherat.
18		2	4	3	3	1			S 57° E		1·5			27		71		·151		4·4	+0·3	8	2·9	+5·1	2·09	1·02	+ 1·07	2·09	1·02	+ 1·07	0·32	Drosh.
8	5	2	1	13	2				S 68° E	S 84° E	4·7	5·2	−0·5	40	+11	42	− 4	·113	−·008	5·4		2	2·6	−0·6	1·33	1·45	− 0·12	1·33	1·45	− 0·12	0·83	Murree.
																36	− 4	·098	−·008	3·7	−0·2	2	2·1	−0·1	0·37	1·24	− 0·87	0·37	1·24	− 0·87	0·27	Simla.
																69		·136		3·9		1	2·3	−1·3	1·19	2·10	− 0·91	1·19	2·10	− 0·91	1·19	Sarain.
																																Kalabagh.
13	9	2		1	5			1	N 15° E	N 28° E	3·2	3·7	−0·5	17	−20	49	0	·135	0	3·2	+0·2	1	2·3	−1·3	0·66	1·39	− 0·73	0·66	1·39	− 0·73	0·65	Chakrata.
5		2	3	1			18	2	N 82° W		6·6			46		41	− 1	·111		2·9		2	1·8	+0·2	0·55	0·83	− 0·28	0·55	0·83	− 0·28	0·35	Mukteswar.
27		2	1	1					N 77° E	S 89° E	0·3	2·1	−1·8	10	−31	83	+ 5	·216	+·019	3·7	+0·6	1	0·7	+0·3	0·10	0·22	− 0·12	0·10	0·22	− 0·12	0·10	Darjiling.
26			2		2	1			S 26° E		1·0			10		79		·274		2·3		1	0·6	+0·4	0·14	0·19	− 0·05	0·14	0·19	− 0·05	0·14	Shillong.
19	1	9	1			1			N 45° E		2·5			33		78		·310		3·2		1	0·8	+0·2	1·69	0·24	+ 1·45	1·69	0·24	+ 1·45	1·60	Cherrapunji.
28		1		1		1			S 45° E		1·1			2		96	+ 8	·341		2·2		2	0·7	+1·3	1·12	0·46	+ 0·66	1·12	0·46	+ 0·66	0·68	Maymyo.
15		5	3	1	2	3		2	N 89° E	S 52° E	1·1‡	2·0	−0·9	12	+ 2	60	+ 1	·278	−·027	0·5	−1·4	0	0·8	−0·8	0·05	0·56	− 0·51	0·05	0·56	− 0·51	0·03	Pachmarhi.
11	6	4		2	1	2	1	4	N 7° W	N 8° E				27	+13	37	− 7	·199	−·026	2·2	+0·5	0	0·4	−0·4	0	0·16	− 0·16	0	0·16	− 0·16	0	Mount Abu.
4		14	13						N 67° E	N 72° E	4·1	4·7	−0·6	82	− 1	89	+ 9	·450	+·003	5·9	+1·1	0	1·2	−1·2	0	0·85	− 0·85	0	0·85	− 0·85	0	Mercara.
8	4	5	11	2		1			N 71° E		3·1			53		49		·220		3·3		2	4·1	−2·1	0·67	2·28	− 1·61	0·67	2·28	− 1·61	0·43	Ootacamund.
	1	9	15	5				1	N 79° E		11·1*			79		58	−26	·253		3·8		9	5·9	+3·1	5·25	4·09	+ 1·16	5·25	4·09	+ 1·16	2·41	Kodaikanal.
																																Extra India.
13	3	7		1				7	N 3° E					40						5·9		17	14·2	+2·8	16·35	10·69	+5·66	16·35	10·69	+5·66	3·22	Singapore.
	4	22						5	N 28° E		8·0*			86								8	10·6	−2·6	4·31	7·15	−2·84	4·31	7·15	−2·84	1·15	Penang.
7		21	2	1					N 51° E	N 23° E	5·8*	5·3	+0·5	72	+33	86	0	·809	−·022	7·5	+2·6	11	14·0	−3·0	5·82	14·25	−8·43	5·82	14·25	−8·43	1·16	Trincomalee.
13	4	13		1					N 39° E	N 33° E	4·3*	6·1	−1·8	53	−25	91	+14	·743	−·058	6·7	+2·3	10	7·1	+2·9	5·79	5·42	+0·37	5·79	5·42	+0·37	0·99	Colombo.
	9	12	4	1	3		1	1	N 39° E	N 42° E	3·9	4·5	−0·6	61	+ 1					3·1	−0·2	5	3·5	+1·5	3·64	3·06	+0·58	3·64	3·06	+0·58	1·25	Minicoy.
2	10	12	4	2				1	N 36° E		2·8			71		74	+ 1	·759	−·049	3·3	−0·3	6	1·7	+4·3	2·81	0·84	+1·97	2·81	0·84	+1·97	0·91	Amini Divi.
20			1	7	1	2			S 26° E		0·7			29		?		?		0		0			0			0			0	Gyantse.
26	3	1			1				N 18° E		?			10						0		0			0			0			0	Pharijong.
28	1		1						N 45° E		0·6			3		82		·268		0·9		3	1·9	+1·1	1·43	0·89	+0·54	1·43	0·89	+0·54	0·53	Gangtok.
14			1	13	3				S 40° E		6·3			52						3·8		0			0			0			0	Gartok.

* Uncorrected for scale error. † Mean of 30 days. ‡ " 29 " (b) 1 wind variable.

or plateau stations, the elevations of which exceed 3,200 feet.

Table

(2) *Abstract of observations taken at 8 hrs. at 216 stations*

Number of subdivision.	Station.	Elevation 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 recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Extra India—*concld.*																						
	Kashgar (*c*) . .	4,255																					
	Kabul . .																						
	Meshed . .	3,104	26·895		30·269	27·290	24th	26·687	26th	·603	31·0	47·1		27·3	−3·5	37·1		19·8	59·4	20th	11·6	27th	47·8
	Jask . . .	13	30·124	0	30·091	30·230	18th	29·992	13th	·238	64·6	76·1	−1·9	62·4	−1·4	69·2	−1·7	13·7	83·3	2nd	57·3	21st	26·0
	Muscat . .	20	30·134	+·017	30·103	30·228	18th	30·036	14th	·192	70·6	78·7	+3·3	68·1	−2·6	73·4	+0·3	10·6	84·3	5th & 14th	64·1	28th	20·2
	Bahrein . .	18	30·173		30·145	30·347	18th	29·969	12th	·373	64·3	68·9		60·4		64·7		8·5	78·1	1st	48·7	26th	29·4
	Bushire . .	14	30·157	+·023	30·134	30·347	18th	29·968	12th	·379	56·2	65·9	−3·3	52·1	−3·3	59·1	−3·3	13·8	80·3	1st	39·5	27th	40·8
	Busrah . .	25	30·153		30·149	30·318	4th	29·982	8th	·336	53·7	62·6		47·6		55·1		15·0	72·9	8th	35·1	28th	37·8
	Kerman . .		24·566			24·820	5th	24·240	26th	·580	39·1	60·0		29·8		44·9		30·2	75·2	1st	16·3	5th	58·9
	Ispahan (*b*) (*f*) .	*5,817*	24·253			24·470	4th	24·120	14th	·350	28·7	51·4	−0·9	26·4	−2·7	38·9	−1·8	25·0	59·4	21st	20·2	27th	39·2
	Tehran (*b*) (*f*) .	*4,002*	25·816			26·025	4th & 24th.	25·625	26th	·400	33·1	45·8	−5·5	30·2	−3·7	38·0	−4·6	15·6	61·4	1st	16·5	27th	44·9
	Baghdad (*e*) (*f*) .	127	30·094	+·079	30·208	30·397	18th	29·805	7th	·592	44·2	61·1	−2·0	40·1	−2·8	50·6	−2·4	21·0	71·4	2nd	27·2	25th	44·2
	Beirut . .																						
	Aden . . .	94	29·996	+·001	30·054	30·083	19th	29·933	16th	·150	75·7	80·8	−1·0	73·4	+0·4	77·1	−0·3	7·4	84·6	20th	69·9	27th	14·7
	Zanzibar . .	72	29·952	+·023	29·950	29·993	24th	29·892	22nd	·101	80·5	84·3	−1·5	77·6	−1·9	80·9	−1·7	6·7	87·1	7th	72·7	26th	14·4

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.

(*b*) Aneroid uncorrected.
(*c*) ,, corrected.
(*f*) 7 hrs. observations.
(*e*) Mean of 29 days.

B—*concluded.*

in India, etc., in December, 1912—concluded.

Wind direction. Number of winds from Calm.	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 in inches of mercury.	Cloud. Mean cloud amount at 8 hrs.	Departure from normal.	Rainfall. Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December, 1912.	Normal rainfall for period, 1st to 31st December.	Departure from normal of period, 1st to 31st December, 1912.	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	56	57
																																Extra India —*concld.*
										N 8° W		0·7					?		?				0·2			0·09			0·09			Kashgar.
										S 56° W													1·5			0·51			0·51			Kabul.
29	1				1				(a)		0·9			(a)		85		·149		5·1	−0·4	4	2·1	+1·9	1·05	0·78	+0·27	1·05	0·78	+0·27	0·40	Meshed.
	7	11	7		1			5	N 33° E	N 23° E	6·6	7·5	−0·9	66	− 7	75	+ 5	·485	−·023	3·9	+1·5	5	2·1	+2·9	1·87	1·27	+0·60	1·87	1·27	+0·60	0·70	Jask.
18			3		1		3	6	N 53° W	S 71° W	4·1	2·9	+1·2	17	−20	66	− 2	·494	−·055	5·6	+3·6	4	1·3	+2·7	0·97	0·62	+0·35	0·97	0·62	+0·35	0·50	Muscat.
	7	3	1	1	1	1	5	12	N 31° W		5·7			53		74		·450		3·3		2	1·7	+0·3	1·82	0·81	+1·01	1·82	0·81	+1·01	1·12	Bahrein.
5	7	7	3	1				8	N 10° E	N 63° E	7·4	4·7	+2·7	56	− 2	82	+ 8	·374	−·006	3·6	+1·3	3	4·1	−1·1	1·18	3·25	−2·07	1·18	3·25	−2·07	0·44	Bushire.
2	2	8	1	2	2	1	8	5	N 30° W		2·3			29		83		·340		5·5		4	2·5	+1·5	1·46	0·82	+0·64	1·46	0·82	+0·64	0·69	Busrah.
14	5	1			4	7			S 53° W		3·9			16		68		·161		3·2		4			0·88			0·88			0·44	Kerman.
28				1			1	1	W	S 85° W	1·4	1·9	−0·5	3	−38	84	+ 3	·134	−·031	2·5	−1·3	0	1·7	−1·7	0·07	0·79	−0·72	0·07	0·79	−0·72	0·03	Ispahan.
19	4	8							N 31° E	N 11° E	1·4†	2·0	−0·6	39	+ 5	79†	+15†	·156†	−·001†	5·1	+1·5	4	3·8	+0·2	1·81	1·28	+0·53	1·81	1·28	+0·53	0·57	Tehran.
7	5	1	3	2		1	2	8	N 18° W	N 3° W	4·7	2·2	+2·5	31	+11	76	− 2	·225	−·043	4·7	+2·7	3	3·1	−0·1	1·21	1·17	+0·04	1·21	1·17	+0·04	0·51	Baghdad.
																																Beirut.
	5	2	24						N 41° E	N 76° E	8·9	9·4	−0·5	82	+10	75	+ 1	·661	+·006	5·9	+0·7	0	0·5	−0·5	0·07	0·27	−0·20	0·07	0·27	−0·20	0·04	Aden.
9	4	5	2	8	2		1		S 89° E	N 85° E	2·0	4·6	−2·6	32	− 9	82	+ 1	·856	−·016	6·0	+0·6	21	8·5	+12·5	17·82	5·54	+12·28	17·82	5·54	+12·28	4·88	Zanzibar.

† Mean of 26 days.

Table C.—Abstract of observations taken at 8 hrs. at 62 fourth and fifth class stations in India, etc., in December, 1912.

(The figures of wind velocity herein are based on factor 2·2 for the standard type of Beckley-Robinson anemograph. Until December, 1911, inclusive, the erroneous factor 3·0 was in use in India, *vide* Section on wind at page 8 of the Review for January, 1912.)

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air.													Wind direction.										
		Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	II.—Assam.																								
4	Balek	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bishnath	57·4	75·1	...	49·8	...	62·5	...	25·3	79·4	4th	44·7	16th	34·7	...	...	...	...	...	...	...	...	...	...	...
	Borjuli	57·7	76·4	...	49·0	...	62·7	...	27·4	83·7	5th	43·4	18th	40·3	...	...	...	...	...	...	...	...	...	...	...
	Chandkhira	57·4	80·8	...	50·0	...	65·4	...	30·8	85·0	1st	46·5	22nd	38·5	...	...	...	...	...	...	...	...	...	...	...
	Doom Dooma	52·0	74·4	...	49·4	...	61·9	...	25·0	79·1	4th	44·7	14th & 24th.	34·4	...	...	...	...	...	...	...	...	...	...	...
	Dikom	54·0	74·8	...	47·7	...	61·3	...	27·1	79·4	3rd & 4th	43·4	16th	36·0	...	...	...	...	...	...	...	...	...	...	...
	Golaghat	56·7	72·3	...	51·3	...	61·8	...	21·0	76·5	3rd	45·2	16th	31·3	...	...	...	...	...	...	...	...	...	...	...
	Hailakandi	57·7	79·6	...	53·7	...	66·7	...	25·9	83·6	1st	51·0	15th, 22nd & 23rd.	32·6	...	...	...	...	...	...	...	...	...	...	...
	Jorehat	56·0	73·9	...	52·5	...	63·2	...	21·4	79·3	1st	47·6	15th	31·7	...	...	...	...	...	...	...	...	...	...	...
	Lumding	54·3	73·1	...	50·4	...	61·8	...	22·7	77·4	2nd	45·4	14th	32·0	...	...	...	...	...	...	...	...	...	...	...
	Messa	65·1	78·5	...	48·2	...	63·3	...	30·3	83·2	2nd	44·0	12th	39·2	...	...	...	...	...	...	...	...	...	...	...
	Panerihat	52·1	75·5	...	49·2	...	62·3	...	26·3	79·6	1st & 4th	45·7	25th	33·9	...	...	...	...	...	...	...	...	...	...	...
	Srimangal	58·1	81·0	...	49·8	...	65·4	...	31·2	83·3	13th	46·2	14th	37·1	...	...	...	...	...	...	...	...	...	...	...
	III.—Bengal.																								
5	Comilla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brahmanbaria	66·4	80·5	...	53·8	...	67·1	...	26·7	82·8	21st	50·8	19th	32·0	...	...	...	...	...	...	...	...	...	...	...
	Faridpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goalundo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pabna	61·7	78·9	...	56·3	...	67·6	...	22·6	82·5	21st	53·7	10th	28·8	...	...	...	...	...	...	...	...	...	...	...
	Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampur Boalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Malda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dam Dim	55·6	86·0	...	46·9	...	66·5	...	39·1	88·9	6th, 11th & 26th.	43·2	25th	45·7	...	...	...	...	...	...	...	...	...	...	...
	Kalchini	64·7	77·6	...	46·9	...	62·3	...	30·7	82·1	24th & 30th.	43·9	25th	38·2	...	...	...	...	...	...	...	...	...	...	...
	Nagrakata	66·2	76·2	...	53·1	...	64·7	...	23·1	79·1	1st	51·0	4 days	28·1	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raniganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C.

at 62 fourth and fifth class stations in India, etc., in December, 1912.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December, 1912.	Normal rainfall of period, 1st to 31st December.	Departure from normal of period, 1st to 31st December 1912.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					II.—Assam.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Balek.
...	...	...	...	...	91	...	·431	...	...	...	0	1·2	−1·2	0·19	0·25	−0·06	0·19	0·25	−0·06	0·03	Bishnath.
...	...	...	...	...	86	...	·412	...	...	...	1	0	+1·0	0·43	0·06	+0·37	0·43	0·06	+0·37	0·32	Borjuli.
...	...	...	...	...	96	...	·455	...	...	...	0	1·0	−1·0	0	0·54	−0·54	0	0·54	−0·54	0	Chandkhira.
...	...	...	...	...	95	...	·370	...	...	...	2	2·0	0	0·83	0·41	+0·42	0·83	0·41	+0·42	0·49	Doom Dooma.
...	...	...	...	...	93	...	·389	...	...	...	1	1·7	−0·7	0·44	0·55	−0·11	0·44	0·55	−0·11	0·39	Dikom.
...	...	...	...	...	91	...	·422	...	...	...	2	0·7	+1·3	0·80	0·39	+0·41	0·80	0·39	+0·41	0·55	Golaghat.
...	...	...	...	...	96	...	·452	...	...	...	0	1·5	−1·5	0	0·51	−0·51	0	0·51	−0·51	0	Hailakandi.
...	...	...	...	...	97	...	·435	...	...	...	1	1·5	−0·5	0·24	0·42	−0·18	0·24	0·42	−0·18	0·13	Jorehat.
...	...	...	...	...	97	...	·406	...	...	...	2	...	...	0·61	...	...	0·61	...	...	0·36	Lumding.
...	...	...	...	...	77	...	·480	...	...	...	2	1·2	+0·8	0·84	0·33	+0·51	0·84	0·33	+0·51	0·45	Messa.
...	...	...	...	...	99	...	·388	...	...	...	3	0·7	+2·3	0·54	0·26	+0·28	0·54	0·26	+0·28	0·20	Panerihat.
...	...	...	...	...	92	...	·447	...	...	...	0	1·0	−1·0	0	0·35	−0·35	0	0·35	−0·35	0	Srimangal.
																					III.—Bengal.
...	...	...	...	...	...	...	...	...	...	...	0	0·3	−0·3	0	0·22	−0·22	0	0·22	−0·22	0	Comilla.
...	...	...	...	...	79	...	·508	...	...	...	0	1·2	−1·2	0	0·50	−0·50	0	0·50	−0·50	0	Brahmanbaria.
...	...	...	...	...	...	...	...	...	...	...	0	0·3	−0·3	0	0·08	−0·08	0	0·08	−0·08	0	Faridpur.
...	...	...	...	...	...	...	...	...	...	...	...	0·7	...	...	0·23	...	...	0·23	...	...	Goalundo.
...	...	...	...	...	82	...	·453	...	...	...	0	0·8	−0·8	0	0·19	−0·19	0	0·19	−0·19	0	Pabna.
...	...	...	...	...	...	...	...	...	...	...	0	0·3	−0·3	0	0·09	−0·09	0	0·09	−0·09	0	Sirajganj.
...	...	...	...	...	...	...	...	...	...	...	0	0·1	−0·1	0	0·03	−0·03	0	0·03	−0·03	0	Rampur Boalia.
...	...	...	...	...	...	...	...	...	...	...	0	0	0	0	0·02	−0·02	0	0·02	−0·02	0	Malda.
...	...	...	...	...	...	...	...	...	...	...	0	0·2	−0·2	0	0·04	−0·04	0	0·04	−0·04	0	Rangpur.
...	...	...	...	...	94	...	·417	...	...	...	0	0·5	−0·5	0	0·19	−0·19	0	0·19	−0·19	0	Dam Dim.
...	...	...	...	...	74	...	·462	...	...	...	0	0·8	−0·8	0	0·33	−0·33	0	0·33	−0·33	0	Kalchini.
...	...	...	...	...	67	...	·433	...	...	...	0	0·8	−0·8	0	0·38	0·38	0	0·38	−0·38	0	Nagrakata.
...	...	...	...	...	...	...	...	...	...	...	0	0·3	−0·3	0	0·07	−0·77	0	0·07	−0·07	0	Cooch Behar.
...	...	...	...	...	...	...	...	...	...	...	0	0·2	−0·2	0	0·06	−0·06	0	0·06	−0·06	0	Krishnagar.
...	...	...	...	...	...	...	...	...	...	...	0	0·2	−0·2	0	0·09	−0·09	0	0·09	−0·09	0	Bankura.
...	...	...	...	...	...	...	...	...	...	...	0	0·3	−0·3	0	0·09	−0·09	0	0·09	−0·09	0	Raniganj.

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	IV.—Bihar and Orissa.																								
7	Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Bhagalpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	V.—United Provinces of Agra and Oudh.																								
9	Ballia	56·0	72·8	...	48·1	...	60·5	...	24·7	75·7	9th	45·6	15th	30·1	...	...	...	...	...	...	...	...	...	...	...
10	Meerut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dehra Dun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IX.—Rajputana.																								
18	Udaipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	XII.—Central Provinces.																								
3	Chhindwara	52·8	77·6	...	46·5	...	62·1	...	31·1	83·7	31st	41·3	1st & 23rd	42·4	...	2	3	1	...	...	6	11	8	N 74° W	...
	XV.—Madras.																								
31	Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Anantapur	67·9	83·8	...	60·0	...	71·9	...	23·8	87·0	30th	54·7	20th	32·3	...	...	...	...	...	...	...	...	...	...	...
33	Guntur	69·0	85·2	...	62·3	...	73·8	...	22·9	88·2	30th	59·0	16th	29·2	...	...	...	...	...	...	...	...	...	...	...
	Bay Islands.																								
1	Car Nicobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kashmir.																								
13	Jammu	56·6	66·5	...	49·5	...	58·0	...	17·0	72·1	30th & 31st.	44·8	23rd	27·3	...	13	13	...	...	1	...	4	...	N 13° E	...
	Sonamarg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kargil	18·6	35·0	...	11·9	...	23·4	...	23·1	42·9	7th	—1·0	22nd & 30th.	43·9	...	8	...	10	10	...	2	...	1	N 89° E	...
	Astor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

C—*continued.*

at 62 fourth and fifth class stations in India, etc., in December, 1912—continued.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December, 1912.	Normal rainfall of period, 1st to 31st December.	Departure from normal of period, 1st to 31st December, 1912.	Heaviest rainfall during month.	Station.
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					IV.—Bihar and Orissa.
...	...	...	...	...	...	...	...	...	...	...	0	0·4	—0·4	0	0·22	—0·22	0	0·22	—0·22	0	Hazaribagh.
...	...	...	...	...	...	...	...	...	...	...	0	0·1	—0·1	0	0·04	—0·04	0	0·04	—0·04	0	Bhagalpur.
...	...	...	...	...	...	...	...	...	...	...	0	0·1	—0·1	0	0·05	—0·05	0	0·05	—0·05	0	Muzaffarpur.
...	...	...	...	...	...	...	...	...	...	...	0	0·4	—0·4	0	0·16	—0·16	0	0·16	—0·16	0	Motihari.
...	...	...	...	...	...	...	...	...	...	...	0	0·3	—0·3	0	0·13	—0·13	0	0·13	—0·13	0	Chapra.
...	...	...	...	...	...	...	...	...	...	...	0	0·4	—0·4	0	0·17	—0·17	0	0·17	—0·17	0	Arrah.
...	...	...	...	...	...	...	...	...	...	...	0	0·4	—0·4	0	0·23	—0·23	0	0·23	—0·23	0	Dehri.
																					V.—United Provinces of Agra and Oudh.
...	...	...	...	...	83	...	·371	...	...	...	...	...	...	No	rain g	auge.	...	...	...	...	Ballia.
...	...	...	...	...	...	...	...	...	...	...	0	1·3	—1·3	0·03	0·49	—0·46	0·03	0·49	—0·46	0·03	Meerut.
...	...	...	...	...	...	...	...	...	...	...	1	1·6	—0·6	0·44	0·87	—0·43	0·44	0·87	—0·43	0·44	Dehra Dun.
																					IX.—Rajputana.
...	...	...	...	...	...	...	...	...	...	...	0	0·4	—0·4	0·01	0·11	—0·10	0·01	0·11	—0·10	0·01	Udaipur.
																					XII.—Central Provinces.
0·3	...	...	58	...	76	...	·307	...	0·5	...	1	...	...	0·33	...	...	0·33	...	...	0·33	Chhindwara.
																					XV.—Madras.
...	...	...	...	...	...	...	...	...	...	...	3	5·1	—2·1	2·01	3·33	—1·32	2·01	3·33	—1·32	0·99	Tinnevelly.
...	...	...	...	...	77	...	·529	...	5·2	...	0	...	...	0	...	...	0	...	...	0	Anantapur.
...	...	...	...	...	89	...	·627	...	1·6	...	0	...	...	0	...	...	0	...	...	0	Guntur.
																					Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	19	7·9	+1·1	7·45	6·91	+0·54	7·45	6·91	+0·54	1·88	Car Nicobar.
																					Kashmir.
...	...	...	71	...	60	...	·273	...	2·8	...	3	...	...	0·93	...	...	0·93	...	...	0·66	Jammu.
...	...	...	...	...	...	...	...	...	...	...	12	6·8	+5·2	6·07	5·87	+0·20	6·07	5·87	+0·20	1·12	Sonamarg.
...	...	...	48	...	97	...	·104	...	5·7	...	2	...	...	0·58*	...	...	0·58	...	...	0·24	Kargil.
...	...	...	...	...	...	...	...	...	...	...	5	3·3	+1·7	1·17	1·05	+0·12	1·17	1·05	+0·12	0·40	Astor.

* Snow water.

Table

Abstract of observations taken at 8 hrs.

Number of subdivision.	Station.	Temperature of air. Mean of 8 hrs. temperature.	Mean maximum.	Departure from normal.	Mean minimum.	Departure from normal.	Monthly mean of mean between maximum and minimum.	Departure from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.	Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Resultant direction.	Normal direction.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Hill stations, exclusive of Kashmir.																								
	Panighatta	60·1	74·1	...	54·8	...	64·5	...	19·3	77·9	26th	53·0	9th	24·9	...	...	...	...	...	...	...	...	...	...	...
	Kurseong	50·7	57·6	...	46·4	...	52·0	...	11·2	63·3	24th	44·4	12th	18·9	...	...	...	...	...	...	...	...	...	...	...
	Gnatong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lachung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ringim	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Poo	...	45·9	...	28·0	...	36·9	...	17·9	51·8	31st	23·3	8th	28·5	16	5	...	6	...	...	...	4	...	N 22° E	...
	Kailang	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakloh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pishin	...	56·3	...	32·6	...	44·5	...	23·7	68·7	18th	20·4	7th	48·3	...	...	...	...	...	...	...	...	...	...	...
	Extra India.																								
	Ahwaz	...	62·3	...	48·5	...	55·4	...	13·8	74·4	1st	40·4	25th	34·0	...	...	...	...	...	...	...	...	...	...	...
	Birjand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chumbi*	26·9	46·8	...	20·7	...	33·8	...	26·1	60·2	18th	17·2	18th	43·0	...	...	...	...	...	...	...	...	...	...	...
	Kirmanshah	31·2	42·9	...	27·0	...	34·9	...	15·9	52·8	1st	17·6	26th	35·2	...	...	...	...	...	...	...	...	...	...	...
	Koweit	...	64·9	...	49·7	...	57·3	...	15·2	79·4	1st	36·2	27th	43·2	2	4	...	2	...	6	2	4	11	N 70° W	...
	Maidan	...	62·5	...	45·1	...	53·8	...	17·4	69·7	5th	37·0	26th	32·7	...	...	...	...	...	...	...	...	...	...	...
	Muhammerah	...	66·7	...	48·6	...	57·7	...	18·1	76·2	3rd	36·8	25th	39·4	...	...	...	...	2	...	1	...	22	N 49° W †	...
	Pemba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prison Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Seistan	...	57·9	...	37·8	...	47·9	...	20·1	68·4	1st	28·3	7th	40·1	12	5	1	1	1	...	1	2	8	N 31° W	...

* Mean of 14 days.
† 6 variable winds.

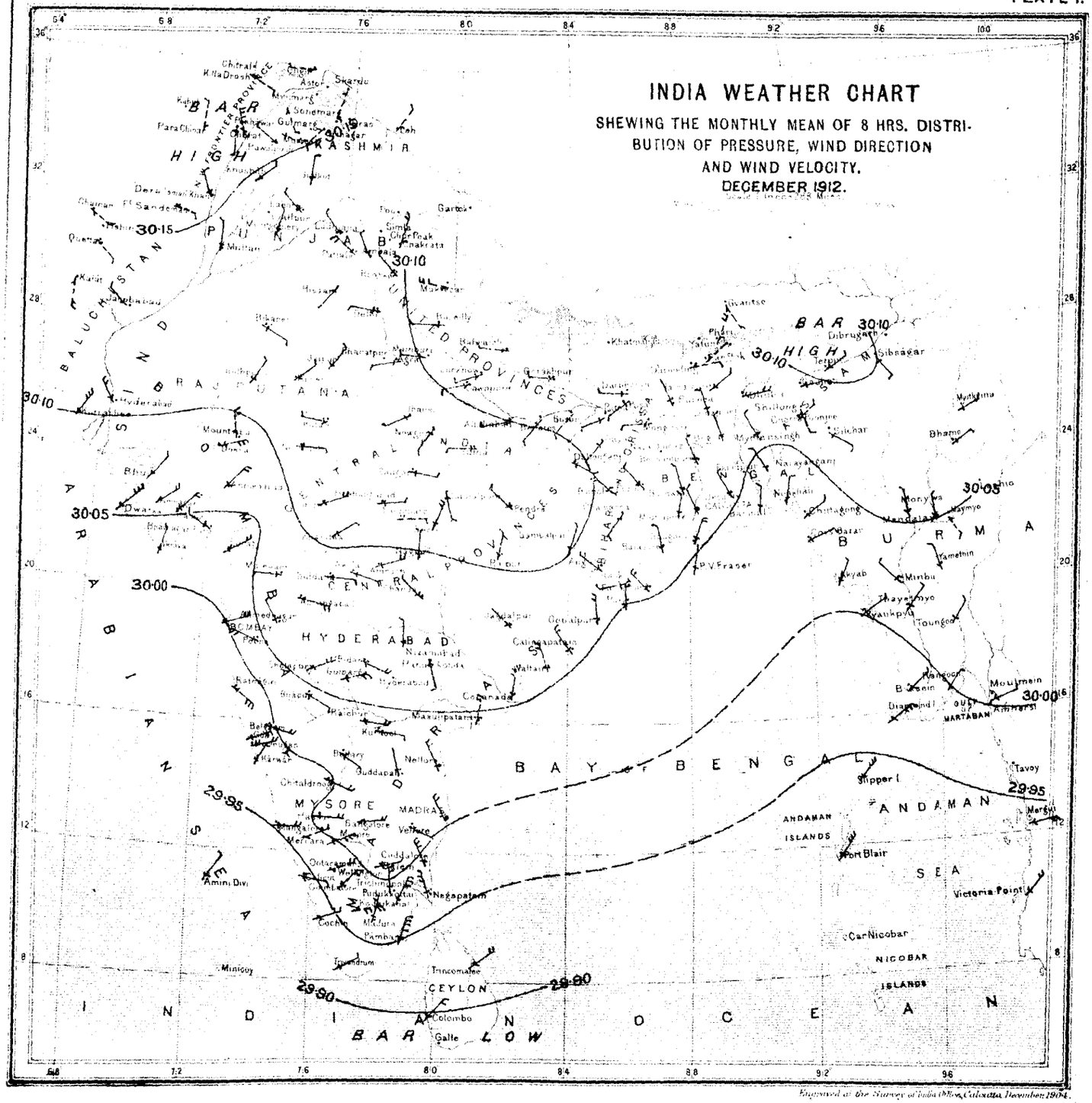
C—*concluded.*

at 62 fourth and fifth class stations in India, etc., in December, 1912—concluded.

Wind velocity.			Wind steadiness.		Hygrometry, 8 hrs.				Cloud.		Rainfall.										Station.
Mean velocity, miles per hour.	Normal.	Departure from normal.	Actual percentage.	Departure from normal.	Mean humidity at 8 hrs.	Departure from normal.	Mean vapour tension at 8 hrs. in inches of mercury.	Departure from normal in inches of mercury.	Mean cloud amount at 8 hrs.	Departure from normal.	Number of rainy days.	Normal number of rainy days.	Departure from normal.	Rainfall of month.	Normal rainfall of month.	Departure from normal.	Total rainfall from 1st to 31st December, 1912.	Normal rainfall of period, 1st to 31st December.	Departure from normal of period, 1st to 31st December, 1912.	Heaviest rainfall during month.	
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					Hill stations, exclusive of Kashmir.
...	...	...	...	...	71	...	·368	...	...	...	0	0·8	−0·8	0·03	0·44	−0·41	0·03	0·44	−0·41	0·03	Panighatta.
...	...	...	...	...	77	...	·282	...	...	...	1	1·2	−0·2	0·14	0·62	−0·48	0·14	0·62	−0·48	0·14	Kurseong.
...	...	...	...	...	...	...	...	...	...	...	2	...	...	1·56	...	...	1·56	...	...	1·26	Gnatong.
...	...	...	...	...	...	...	...	...	...	...	1	...	...	0·20	...	...	0·20	...	...	0·10	Lachung.
...	...	...	...	...	...	...	...	...	...	...	5	...	...	2·26	...	...	2·26	...	...	0·72	Ringim.
...	...	...	19	...	...	...	...	...	5·0	...	2	2·5	−0·5	0·58	0·83	−0·25	0·58	0·83	−0·25	0·32	Poo.
...	...	...	...	...	...	...	...	...	...	...	...	2·3	...	...	1·00	...	...	1·00	...	...	Kailang.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Bakloh.
...	...	...	...	...	...	...	...	...	3·5	...	9	2·7	+6·3	3·28	1·27	+2·01	3·28	1·27	+2·01	0·75	Pishin.
																					Extra India.
...	...	...	...	...	...	...	...	...	4·1	...	3	...	...	1·46	...	...	1·46	...	...	0·62	Ahwaz.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Birjand.
...	...	...	...	...	78	...	·116	...	...	...	0	...	...	0·02	...	...	0·02	...	...	0·02	Chumbi.
...	...	...	...	...	86*	...	·184*	...	...	...	6	...	...	2·52‡	...	...	2·52	...	...	0·82	Kirmanshah.
...	...	...	39	...	...	...	...	...	3·7	...	2	...	...	0·58	...	...	0·58	...	...	0·44	Koweit.
...	...	...	...	...	...	...	...	...	...	...	6	...	...	2·58	...	...	2·58	...	...	0·52	Maidan.
...	...	...	61	...	...	...	...	...	...	...	5	...	...	2·10	...	...	2·10	...	...	1·15	Muhammerah.
...	...	...	...	...	...	...	...	...	...	...	21	10·4	+10·6	16·86	7·36	9·50	16·86	7·36	+9·50	2·41	Pemba.
...	...	...	...	...	...	...	...	...	...	...	...	9·2	...	...	5·67	...	...	5·67	...	...	Prison Island.
3·3	...	...	39	...	...	...	...	...	...	...	4	...	...	1·37	...	...	1·37	...	...	0·85	Seistan.

‡ Snow water.

* Mean of 12 days.



Engraved at the Survey of India Office, Calcutta, December 1904.

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

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

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

Wind strengths are based on factor 2·2 for the standard type of Beckley Robinson anemograph, instead of 3·0 as used for this plate upto December 1911 inclusive.

Engraved at the Survey of India Office, Calcutta, December 1904.

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

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

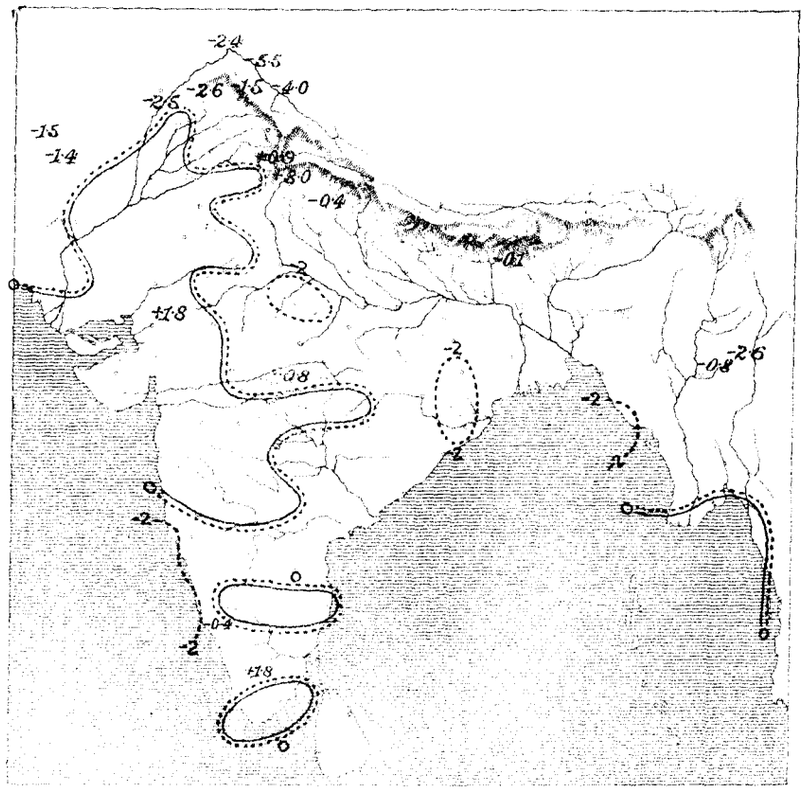


CHART SHEWING THE DEPARTURE FROM NORMAL
OF THE MONTHLY MEAN OF DAILY
MINIMUM TEMPERATURE.

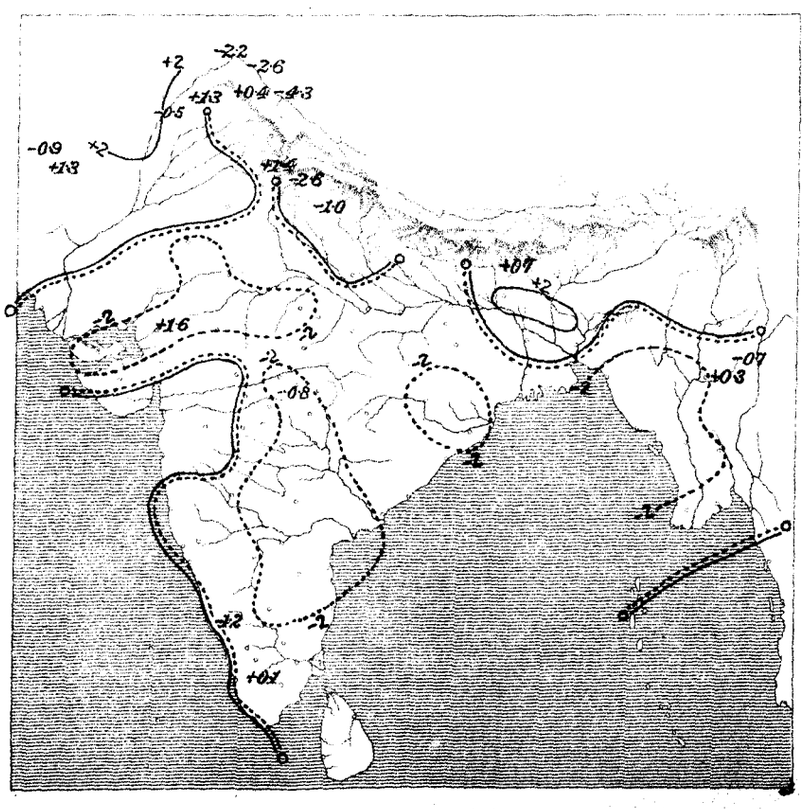


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF DAILY MEAN TEMPERATURE.

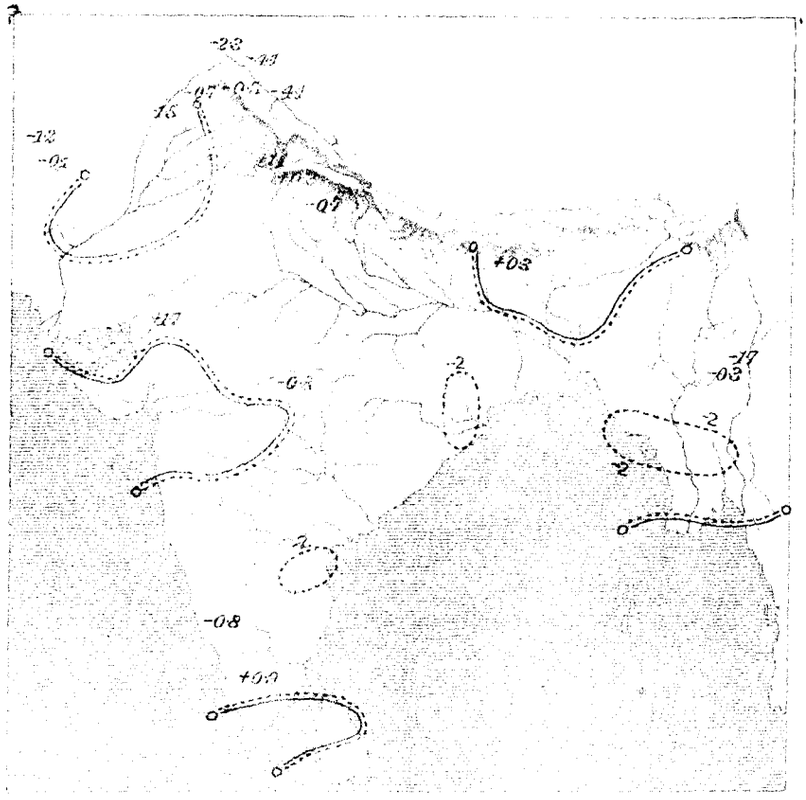


CHART SHEWING THE MONTHLY MEAN OF PRESSURE AND RESULTANT WIND DIRECTION.

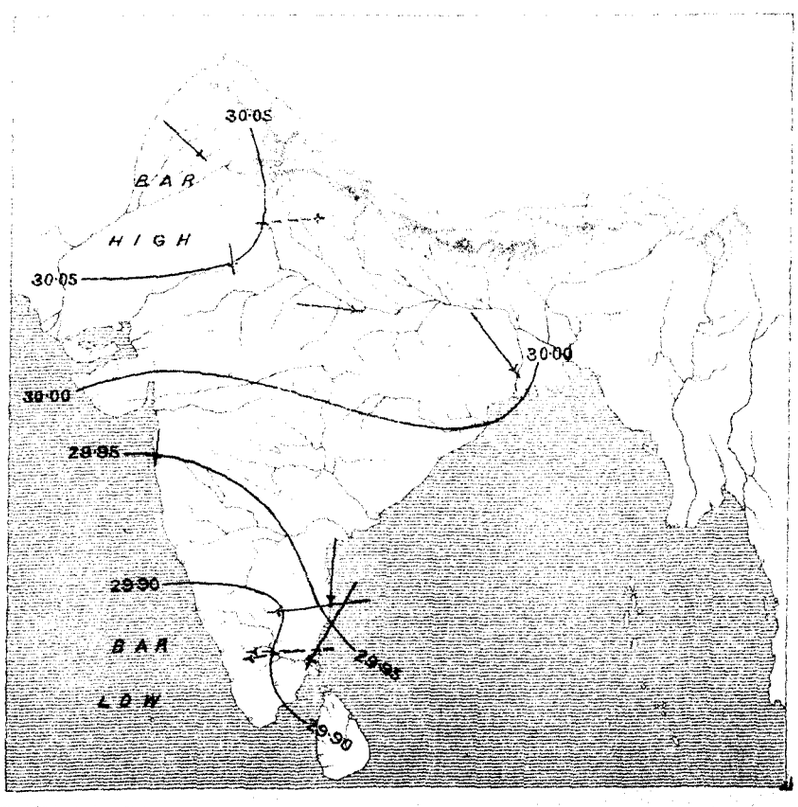


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF ABSOLUTE HUMIDITY AT 8 HRS.

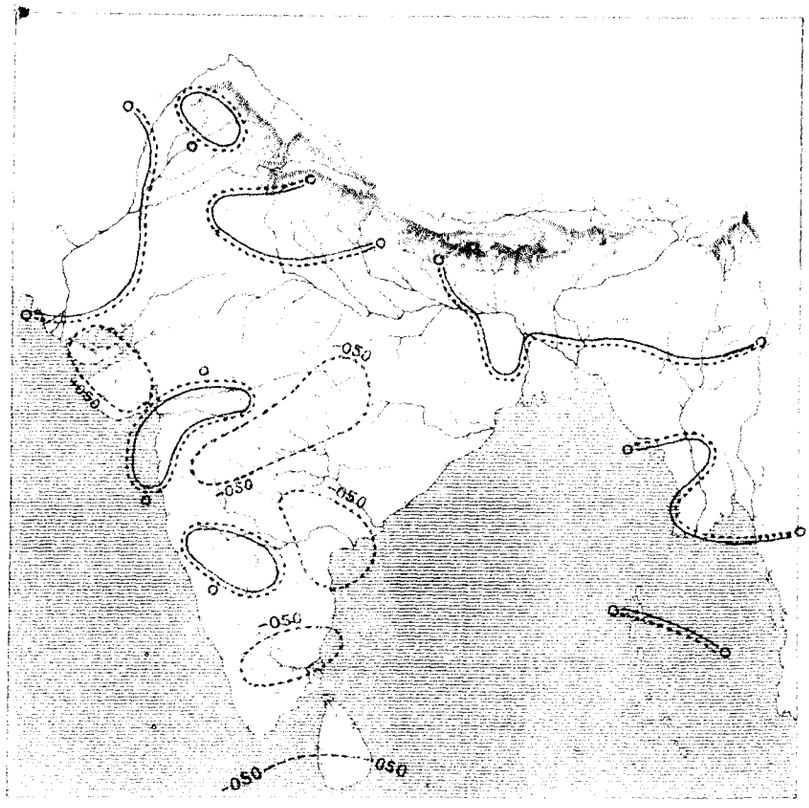


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF RELATIVE HUMIDITY AT 8 HRS.

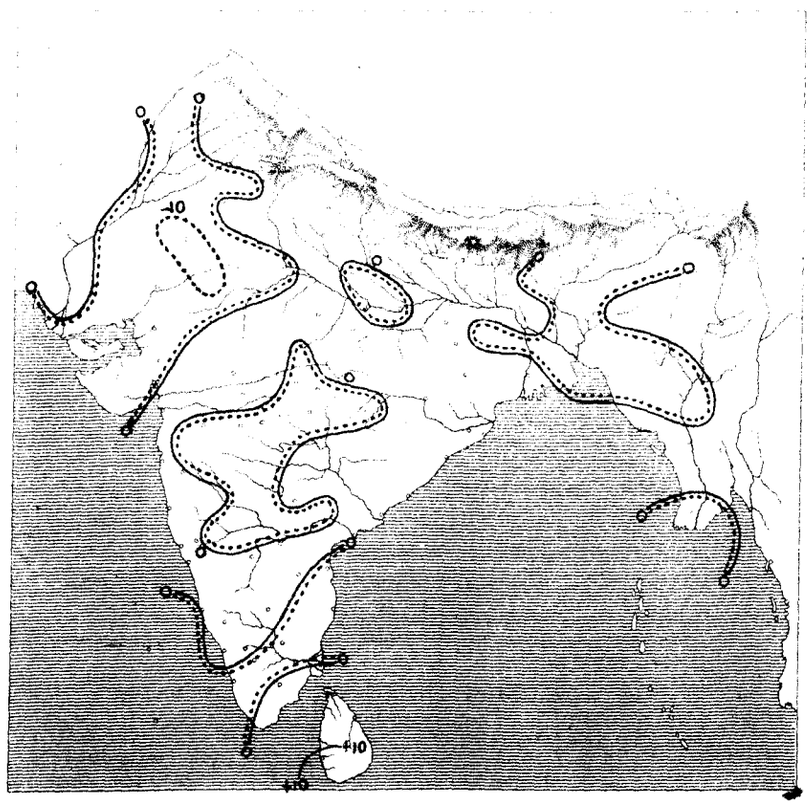


CHART SHEWING THE DEPARTURE FROM NORMAL OF THE MONTHLY MEAN OF CLOUD AMOUNT AT 8 HRS.

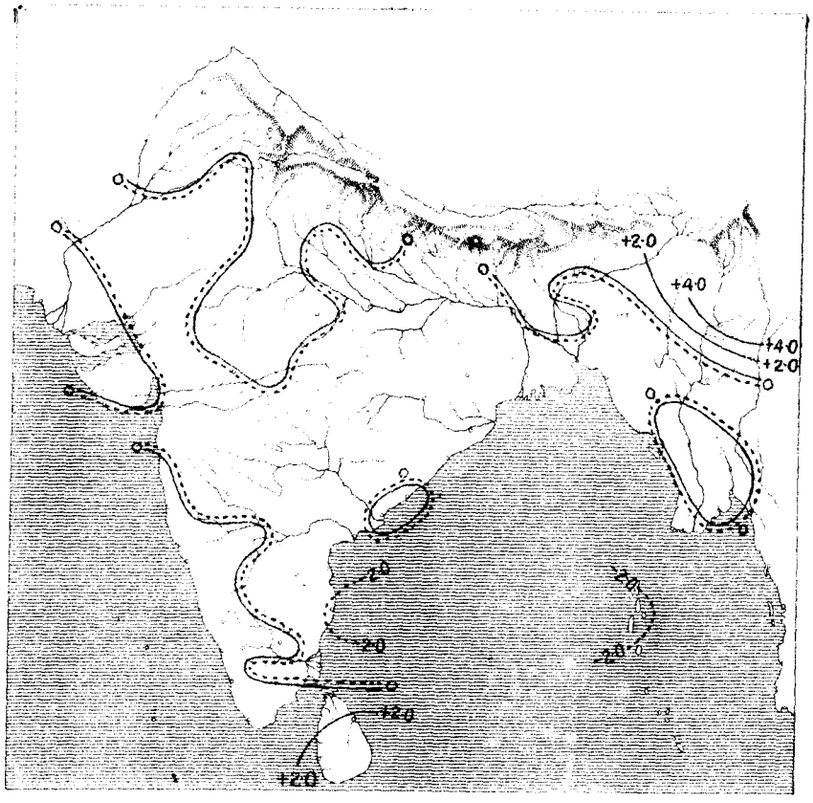
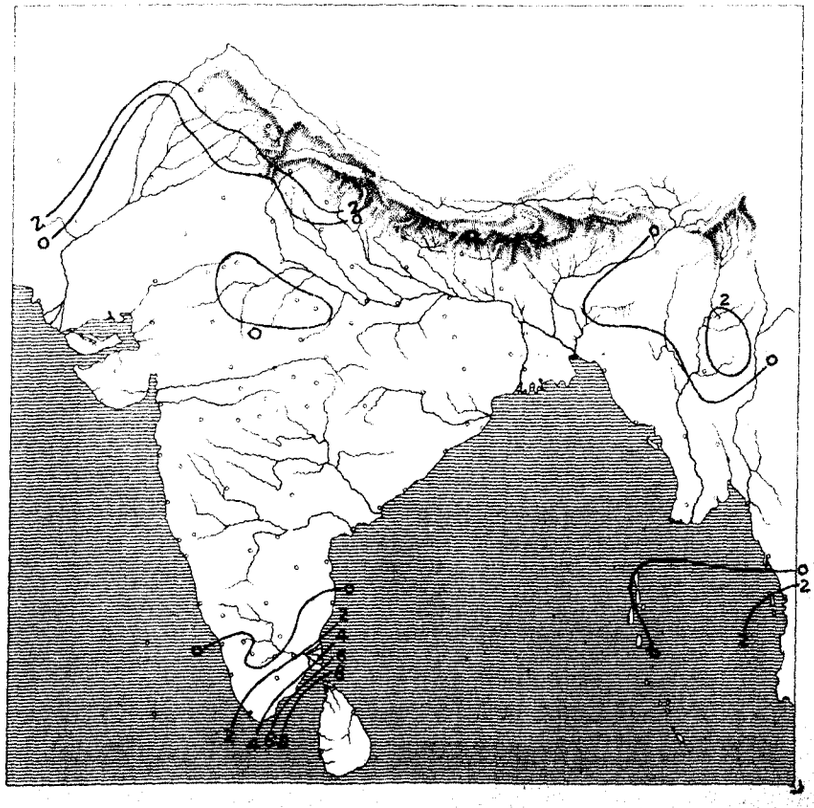
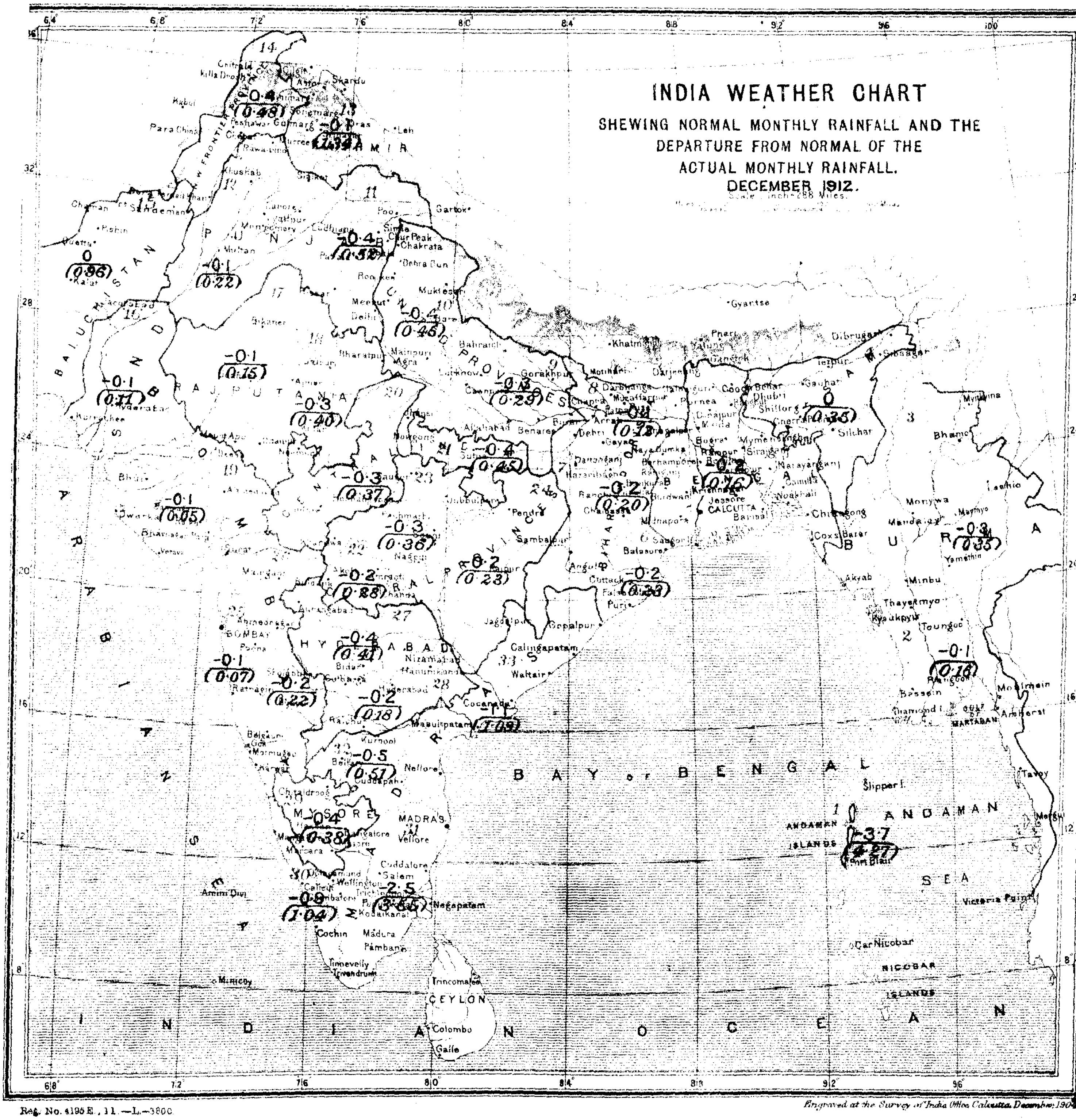


CHART SHEWING THE TOTAL NUMBER OF DAYS IN THE MONTH ON WHICH RAINFALL EQUALLED OR EXCEEDED 0·10 INCH.

(BASED ON THE RETURNS OF TABLE B.)





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Engraved at the Survey of India Office, Calcutta, December 1904.

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 monthly 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
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

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

INDIA WEATHER REVIEW.

ANNUAL SUMMARY, 1912.

CONTENTS.

	Page.
Introduction	123
Solar, Magnetic and Seismic Activity	124
Solar Radiation	129
Nocturnal Radiation	130
Temperature of the ground	130
Temperature	131
Atmospheric pressure	141
Storms	147
Winds	148
Humidity	152
Cloud	161
Snowfall	166
Rainfall	166
Table A.—Abstract of observations taken at 10 hrs., and 16 hrs., at 20 stations in India, etc., in the year 1912	cccxxxi
Table B.—Abstract of observations taken at 8 hrs., at 222 stations in India, Burma, etc., in the year 1912	cccxxxv
Table C.—Abstract of observations taken at 8 hrs., at 67 fourth and fifth class stations in India, etc., in the year 1912	ccclii
Addenda sheet	ccclix
Corrigenda in India Monthly Weather Reviews for the year 1912	ccclxvii
Plates I—VI	...
Publications of the Department	*a* to *d*

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METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

JANUARY, 1912

CONTENTS.

	Page.
Introduction	1
Summary of the chief features of the weather in India during the month	1
Solar, seismic and magnetic disturbances	2
Weather in the Indian monsoon region	4
Depressions and cyclonic storms	4
Pressure	4
Temperature	5
Winds	8
Humidity and cloud	8
Rainfall	9
Snowfall	11
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 16 stations in India, etc., in January, 1912	i
Table B.—Abstract of observations taken at 8 hrs., at 235 stations in India, etc., in January, 1912	v
Table C.—Abstract of observations taken at 8 hrs., at 43 fourth and fifth class stations in India, etc., in January, 1912	xxi

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Instructions to Observers of the India Meteorological Department, 2nd Edition. (1902) . . . . Price Rs. 3	Sir John Eliot.
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Continued on page iii of this cover.

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW FEBRUARY, 1912

CONTENTS.

	Page.
Introduction	13
Summary of the chief features of the weather in India during the month	13
Solar, seismic and magnetic disturbances	13
Weather in the Indian monsoon region	15
Depressions and cyclonic storms	15
Pressure	16
Temperature	16
Winds	18
Humidity and cloud	18
Rainfall	19
Snowfall	21
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 17 stations in India, etc., in February, 1912	xxvii
Table B.—Abstract of observations taken at 8 hrs., at 235 stations in India, etc., in February, 1912	xxxi
Table C.—Abstract of observations taken at 8 hrs., at 44 fourth and fifth class stations in India, etc., in February, 1912	xlvii

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Continued on page iii of this cover.

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

MARCH, 1912

CONTENTS.

	Page.
Introduction	23
Summary of the chief features of the weather in India during the month	23
Solar, seismic and magnetic disturbances	23
Weather in the Indian monsoon region	26
Depressions and cyclonic storms	26
Pressure	26
Temperature	27
Winds	28
Humidity and cloud	29
Rainfall	29
Snowfall	31
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 16 stations in India, etc., in March, 1912	liii
Table B.—Abstract of observations taken at 8 hrs., at 236 stations in India, etc., in March, 1912	lvii
Table C.—Abstract of observations taken at 8 hrs., at 44 fourth and fifth class stations in India, etc., in March, 1912	lxxiii

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Continued on page iii of this cover.

44

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

APRIL, 1912

CONTENTS.

	Page.
Introduction	33
Summary of the chief features of the weather in India during the month	33
Solar, seismic and magnetic disturbances	33
Weather in the Indian monsoon region	36
Depressions and cyclonic storms	36
Pressure	36
Temperature	37
Winds	38
Humidity and cloud	39
Rainfall	40
Snowfall	41
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 16 stations in India, etc., in April, 1912	lxxix
Table B.—Abstract of observations taken at 8 hrs., at 218 stations in India, etc., in April, 1912	lxxxiii
Table C.—Abstract of observations taken at 8 hrs., at 58 fourth and fifth class stations in India, etc., in April, 1912	xcix

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Continued on page iii of this cover.

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

MAY, 1912

CONTENTS.

	Page.
Introduction	43
Summary of the chief features of the weather in India during the month	43
Solar, seismic and magnetic disturbances	43
Weather in the Indian monsoon region	46
Depressions and cyclonic storms	46
Pressure	46
Temperature	47
Winds	49
Humidity and cloud	49
Rainfall	50
Snowfall	51
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 17 stations in India, etc., in May, 1912	cvii
Table B.—Abstract of observations taken at 8 hrs., at 219 stations in India, etc., in May, 1912	cxi
Table C.—Abstract of observations taken at 8 hrs., at 62 fourth and fifth class stations in India, etc., in May, 1912	cxxvii

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Continued on page iii of this cover.

44

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

JUNE, 1912

CONTENTS.

	Page.
Introduction	53
Summary of the chief features of the weather in India during the month	53
Solar, seismic and magnetic disturbances	53
Weather in the Indian monsoon region	56
Depressions and cyclonic storms	56
Pressure	57
Temperature	57
Winds	59
Humidity and cloud	59
Rainfall	60
Snowfall	62
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 17 stations in India, etc., in June, 1912	cxxxv
Table B.—Abstract of observations taken at 8 hrs., at 221 stations in India, etc., in June, 1912	cxxxix
Table C.—Abstract of observations taken at 8 hrs., at 63 fourth and fifth class stations in India, etc., in June, 1912	clv

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Continued on page iii of this cover.

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

JULY, 1912.

CONTENTS.

	Page.
Introduction	63
Summary of the chief features of the weather in India during the month	63
Solar, seismic and magnetic disturbances	63
Weather in the Indian monsoon region	66
Depressions and cyclonic storms	66
Pressure	66
Temperature	67
Winds	68
Humidity and cloud	69
Rainfall	69
Snowfall	71
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 17 stations in India, etc., in July, 1912	clxiii
Table B.—Abstract of observations taken at 8 hrs., at 220 stations in India, etc., in July, 1912	clxvii
Table C.—Abstract of observations taken at 8 hrs., at 61 fourth and fifth class stations in India, etc., in July, 1912	clxxxiii

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Continued on page iii of this cover.

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

AUGUST, 1912.

CONTENTS.

	Page.
Introduction	73
Summary of the chief features of the weather in India during the month	73
Solar, seismic and magnetic disturbances	73
Weather in the Indian monsoon region	76
Depressions and cyclonic storms	76
Pressure	77
Temperature	77
Winds	79
Humidity and cloud	79
Rainfall	80
Snowfall	82
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 18 stations in India, etc., in August, 1912	cxci
Table B.—Abstract of observations taken at 8 hrs., at 220 stations in India, etc., in August, 1912	cxcv
Table C.—Abstract of observations taken at 8 hrs., at 62 fourth and fifth class stations in India, etc., in August, 1912	ccxi

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Continued on page iii of this cover.

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW SEPTEMBER, 1912.

CONTENTS.

	Page.
Introduction	83
Summary of the chief features of the weather in India during the month	83
Solar, seismic and magnetic disturbances	84
Weather in the Indian monsoon region	86
Depressions and cyclonic storms	86
Pressure	86
Temperature	87
Winds	88
Humidity and cloud	89
Rainfall	89
Snowfall	91
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 17 stations in India, etc., in September, 1912	ccxix
Table B.—Abstract of observations taken at 8 hrs., at 220 stations in India, etc., in September, 1912	ccxxiii
Table C.—Abstract of observations taken at 8 hrs., at 66 fourth and fifth class stations in India, etc., in September, 1912	ccxxxix

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Continued on page iii of this cover.

GOVERNMENT OF INDIA

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OCTOBER 1912.

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CONTENTS.

	Page.
Introduction	93
Summary of the chief features of the weather in India during the month	93
Solar, seismic and magnetic disturbances	93
Weather in the Indian monsoon region	96
Depressions and cyclonic storms	96
Pressure	96
Temperature	97
Winds	99
Humidity and cloud	99
Rainfall	100
Snowfall	101
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 18 stations in India, etc., in October, 1912	ccxlvii
Table B.—Abstract of observations taken at 8 hrs., at 220 stations in India, etc., in October, 1912	ccli
Table C.—Abstract of observations taken at 8 hrs., at 65 fourth and fifth class stations in India, etc., in October, 1912	cclxvii

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Continued on page iii of this cover.

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NOVEMBER 1912.

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CONTENTS.

	Page.
Introduction	104
Summary of the chief features of the weather in India during the month	104
Solar, seismic and magnetic disturbances	105
Weather in the Indian monsoon region	107
Depressions and cyclonic storms	107
Pressure	107
Temperature	108
Winds	110
Humidity and cloud	110
Rainfall	110
Snowfall	112
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 18 stations in India, etc., in November, 1912	cclxxv
Table B.—Abstract of observations taken at 8 hrs., at 220 stations in India, etc., in November, 1912	cclxxix
Table C.—Abstract of observations taken at 8 hrs., at 61 fourth and fifth class stations in India, etc., in November, 1912	ccxcv

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Continued on page iii of this r

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW

DECEMBER 1912.

CONTENTS.

	Page.
Introduction	113
Summary of the chief features of the weather in India during the month	113
Solar, seismic and magnetic disturbances	113
Weather in the Indian monsoon region	116
Depressions and cyclonic storms	116
Pressure	116
Temperature	117
Winds	118
Humidity and cloud	118
Rainfall	119
Snowfall	120
Table A.—Abstract of observations taken at 10 hrs. and 16 hrs., at 16 stations in India, etc., in December, 1912	cccii
Table B.—Abstract of observations taken at 8 hrs., at 216 stations in India, etc., in December, 1912	cccvii
Table C.—Abstract of observations taken at 8 hrs., at 62 fourth and fifth class stations in India, etc., in December, 1912	ccexxiii

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