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ANNUAL SUMMARY, 1900.

INTRODUCTION.

The present annual summary completes the discussion of the meteorology of India for the year 1900.

It should be noted that in the monthly reviews it is attempted to present the facts and data from two different points of view. Meteorological data in India are chiefly utilized for the following purposes:—

1st.—In the discussion of the prevalence and spread of diseases, more especially of cholera and other diseases of an epidemic character.

2nd.—In connection with agricultural questions, more especially the progress and character of the crops as determined by the weather conditions of the period.

India has hence been divided into two groups of divisions from what may be termed the medical and agricultural stand-points. For the comparison of medical and meteorological statistics, India is arranged into the following provinces, which are believed to be fairly homogeneous so far as the conditions of the prevalence of the more common diseases are concerned:—

(1) Burma Coast and Bay Islands.
(2) Burma Inland.
(3) Assam.
(4) Bengal and Orissa.
(5) Gangetic Plain and Chota Nagpur.
(6) Upper Sub-Himalayas, including the sub-montane districts of the North-Western Provinces and the Punjab and the meteorological divisions of the South-East, South, Central and North Punjab.
(7) Indus Valley and North-West Rajputana.
(8) East Rajputana Central India and Gujarat.
(9) Deccan.
(10) West Coast.
(11) South India.

The data for each of these divisions are given in Table I in large figures, and the portion of each monthly review, entitled, "Summary of the chief features of the weather in India during the month," is intended to give a sketch of the broader and more important features of the weather in India for the use of those who study the relations between the prevalence and spread of diseases and the weather conditions prevailing at the time in India.

According to the second method of arrangement, India is divided into 57 meteorological districts or divisions from the agricultural standpoint, each of which is fairly homogeneous so far as the distribution of rainfall and the general character of the crops and the conditions of their growth are concerned. The following gives the two series of divisions arranged under the respective political areas or provinces to which they belong:—

Political Division or Province.	Meteorological Division or District.	Meteorological Province.
BURMA	Tenasserim and Bay Islands.	Burma Coast and Bay Islands.
	Lower Burma	
	Arakan	
	Central Burma	Burma Inland.
	Upper Burma	
ASSAM	Assam (Surma)	Assam.
	,, (Brahmaputra)	
BENGAL	East Bengal	Bengal and Orissa.
	Deltaic Bengal	
	Central Bengal	
	North Bengal	
	Orissa	
	Chota Nagpur	Gangetic Plain and Chota Nagpur.
	South Bihar	
	North Bihar	
NORTH-WESTERN PROVINCES AND OUDH.	North-Western Provinces, East	
	North-Western Provinces, Central	
	South Oudh	
	North Oudh	
	North-Western Provinces, East Sub-montane.	
	North-Western Provinces, West Sub-montane.	
PUNJAB	South-East Punjab	Upper Sub-Himalayas.
	South Punjab	
	Central Punjab	
	Punjab Sub-montane	
	North Punjab	
	West Punjab	
BOMBAY NORTH	Sind	Indus Valley and North-West Rajputana.
RAJPUTANA AND CENTRAL INDIA.	West Rajputana	East Rajputana, Central India and Gujarat.
	Central India, East	
	Rajputana, East, Central India, West.	
BOMBAY NORTH	Kathiawar	
	Gujarat	
NORTH-WESTERN PROVINCES	North-Western Provinces West.	

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Political Division or Province.	Meteorological Division or District.	Meteorological Province.
BOMBAY	Bombay Deccan	Deccan.
	Khandesh	
BERAR	Berar	
CENTRAL PROVINCES.	Central, Provinces, West	
	„ „ Central	
	„ „ East	
HYDERABAD OR THE NIZAM'S DOMINIONS.	Hyderabad, North	
	„ South	
BOMBAY	Konkan	West Coast.
	Malabar	
MADRAS	Madras, South	South India.
	„ „ Central	
	„ East, Coast, South	
	„ Central	
	„ East Coast, Central	
	„ East Coast, North	
COORG AND MYSORE	Coorg	
	Mysore	
HILL DISTRICTS	Assam Hills	Hills.
	Bengal Hills	
	North-Western Provinces Hills.	
	Punjab Hills	
	Baluchistan Hills	

The double grouping is shown in Plate I at the end of this summary.

The data of Table I in the monthly reviews and in the present annual part are obtained, with a few exceptions, from the observations telegraphed daily to Simla for publication in the Daily Weather Report. In the case of thermometric observations, they are telegraphed to the nearest half degree. Hence the maxima and minima temperature data of the second class observatories derived from these telegraphic reports and given in that table occasionally differ to some slight extent from the means of the more exact data (recorded to tenths of a degree) tabulated in the observation forms sent to the Calcutta Office, and which are used in the calculation of the mean temperature data in Table II. There is also another reason why the mean maxima and minima data in Tables I and II differ to a slight extent. In Table I the daily or 24 hours' period is assumed to end at 8 A.M., and in Table II at 4 P.M., and hence the maximum temperature in Table I for any month of thirty-one days at any station gives the mean for thirty-one periods of 24 hours ending at 8 A.M. of the 31st, and in Table II for the same number of 24 hours' periods ending at 4 P.M, on the 31st, and hence virtually of a monthly period one day in advance of the former. Similarly for months of 28, 29 or 30 days. These remarks will explain some of the slight discrepancies which may be found between the maxima and minima temperature mean data in Tables I and II, and hence also in the monthly mean variation data given in these tables in the monthly reviews and annual summary.

The methods of exposure of the instruments at observatories in India, and of the reduction of the observations and the calculation of mean data, have been fully stated and explained in the Annual Reports on the Meteorology of India, and need not be repeated. The reader is referred more especially to the Annual Report of the year 1885 and to the "Instructions to observers of the Indian Meteorological Department" for full information on this subject.

Solar Radiation.

It was stated in the Annual Report of 1889 that the observations of solar thermometers are liable to large and irregular changes which make them unfit for accurate observation except perhaps at the first class observatories in India. The instruments were hence withdrawn from use except at the following stations :—

Simla. Allahabad. Lahore.
Calcutta (Alipore). Jodhpur. Bombay.
Leh, and Aden.

Observations of the solar thermometers were made during the year 1900 at these eight stations. The monthly averages of past years and their variations from the data of 1900 are given in Tables I and II and the mean variation data for the past ten years in Table III.

TABLE I.—*Average excess of insolation over the corresponding maximum shade temperature.*

STATION.	Number of years observations used.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	YEAR.
		°	°	°	°	°	°		°	°	°	°	°	°
Simla . . .	3—6	59·7	65·5	63·0	63·9	61·4	60·9	50·9	52·7	61·9	64·0	60·8	59·1	60·3
Lahore . . .	6	53·1	62·4	63·1	63·4	59·3	55·7	58·3	61·6	59·0	58·5	56·6	54·9	58·8
Jodhpur . . .	3—4	52·9	55·2	57·0	56·8	54·8	53·8	57·4	59·9	56·9	53·2	51·3	50·1	54·9
Allahabad . .	15	56·6	60·0	59·6	57·3	57·2	57·8	58·9	61·3	58·7	56·4	55·4	56·9	58·0
Calcutta (Alipore) .	13—14	53·7	56·0	56·0	56·4	58·1	54·7	56·6	56·0	56·7	56·6	54·2	53·1	55·7
Bombay . . .	14—15	56·1	57·5	56·5	56·8	56·1	50·2	45·8	51·3	55·4	56·0	55·4	55·4	54·4
Leh . . .	7—8	59·0	65·0	64·9	65·9	64·1	59·7	55·3	56·5	57·0	58·9	57·2	56·9	60·0
Aden . . .	5—9	53·6	53·9	53·0	50·1	47·7	45·9	45·7	46·6	51·7	52·7	51·6	52·9	50·5

TABLE II.—*Comparison of excess of sun over shade temperatures in 1900, with the averages of Table I.*

STATION.	Number of years instrument, the observations of which are utilized for this comparison, has been in use.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
		°	°	°	°	°	°	°		°	°	°	°	°
Simla . .	5½	—1·3	+2·8	+10·5	+8·4	+7·5	+2·3	—3·9	—8·6	—12·8	+7·0	+10·7	—1·8	+1·7
Lahore . .	15	—4·8	—8·7	—7·4	—5·8	—6·4	—9·2	—8·2	—3·7	—7·7	—6·3	—6·9	—12·1	—7·3
Jodhpur . .	3	0	+0·2	—1·7	—1·0	+0·4	—2·4	—3·5	—3·4	—0·1	+0·3	+0·2	—0·2	—0·9
Allahabad . .	25	+1·1	—1·8	—3·5	—0·1	—0·7	—4·8	—3·5	—3·6	—1·5	—2·2	+1·1	+1·0	—1·0
Calcutta (Alipore)	8½	—6·1	—6·0	—7·2	—6·0	—8·0	—13·2	—8·2	—4·3	—10·9	—4·5	—5·1	—4·3	—7·
Bombay . .	16	—7·8	—8·9	—9·4	—9·7	—6·5	—2·8	—3·2	—10·4	—8·0	—4·2	—2·2	—4·8	—6·5
Leh . . .	9½	—1·5	+3·6	+4·1	—0·1	—1·8	+4	+5·7	+4·8	+6·6	+8·5	+6·9	+1·5	+3·6
Aden . .	10	—5·5	—6·8	—2·2	—2·3	—2·2	—5·4	—5·9	—3·8	—4·0	—2·6	—2·6	—8·5	—4·3

TABLE III.—*Comparison of the annual mean excess of sun over shade temperature for each year of the period 1890-99 with the average of the period 1890-99.*

STATION.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
	°	°	°	°	°		°	°	°	°
Simla	?	—0·4	—2·9	—1·3	—2·9	?	+2·6	+1·3	+3·5	?
Lahore	+2·5	+1·8	+0·9	+0·4	—0·4	—0·6	—0·7	—0·5	—1·0	—2·3
Allahabad	+0·8	+0·7	—0·6	—0·3	+0·1	—0·5	+0·4	+0·9	—0·6	—0·9
Calcutta (Alipore)	+0·8	?	?	+1·2	+1·2	+1·5	—0·2	—1·9	—0·1	—2·4
Bombay	+1·0	—0·5	0	+0·5	—0·1	+0·2	+0·5	+0·6	—1·0	—1·6
Leh	—6·7	—3·6	+4·3	+1·3	+2·2	+1·4	+0·7	+1·3	—1·5	+0·7
Aden		+5·2	+4·0	+1·3	+0·5	+1·0	—2·1	—4·4	—4·2	—0·9

Nocturnal Radiation.

It was stated in the Annual Report of 1890 that the observations of the terrestrial radiation thermometers in India were nearly as unsatisfactory as those of the solar radiation thermometers. Observations were only recorded of these instruments during the year 1900 at the following stations:—

Simla. Jodhpur. Calcutta (Alipore).
Lahore. Allahabad. Bombay.
Leh and Aden.

The following table, Table IV, gives the average data of past years for the above stations, Table V, the variations from the normal and Table VI, the mean annual variation data for the past ten years:—

TABLE IV.—*Average depression of monthly mean nocturnal radiation temperatures below mean minimum shade temperatures.*

Station.	Number of years observations used.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
Simla . . .	8—10	7·5	6·8	7·6	8·1	7·2	5·7	3·2	3·3	5·2	8·8	9·7	9·1	6·9
Lahore . . .	13—14	9·5	9·2	8·7	8·7	8·4	5·3	3·1	3·4	5·6	8·7	9·6	8·7	7·4
Jodhpur . . .	3—4	12·0	10·0	10·4	8·1	4·9	3·5	2·0	2·1	4·5	10·8	11·0	9·4	7·4
Allahabad . .	14	11·4	12·3	13·1	12·4	9·3	5·3	3·4	2·8	3·9	8·9	12·6	12·1	0
Calcutta (Alipore) .	13—14	9·2	8·8	7·2	5·4	3·7	2·4	2·1	2·2	2·9	5·3	8·1	9·7	5·6
Bombay . . .	16	10·1	9·3	8·0	6·7	4·8	2·8	2·2	2·4	3·3	6·4	9·5	11·1	6·4
Leh . . .	11—12	11·8	10·4	11·6	11·4	10·8	11·5	11·0	11·0	12·9	15·1	16·0	13·7	2·3
Aden . . .	8—11	3·1	2·5	2·8	2·9	2·8	2·9	2·1	2·0	3·4	3·9	4·3	3·5	3·0

TABLE V.—*Comparison of mean monthly depression of nocturnal radiation temperatures in 1900 with the averages of Table IV.*

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

TABLE VI.—*Comparison of the mean annual depression of nocturnal radiation temperatures with the average of the period 1890-99.*

Station.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
	°	°	°	°	°	°	°	°	°	°
Simla	+2·3	+2·2	+3·1	+1·8	+1·6	?	−3·3	−1·6	−3·3	−2·7
Lahore	−1·2	−1·7	−0·9	−0·7	+0·7	+1·0	−0·3	−0·2	+1·0	+2·0
Jodhpur	?	?	?	?	?	?	?	+0·1	0	−0·1
Allahabad	−0·9	−0·6	0	−1·3	−1·2	+0·2	+1·0	+0·1	+1·2	+1·6
Calcutta (Alipore)	−0·3	+0·1	−0·1	−0·5	−0·1	+0·1	+0·4	+0·2	+0·2	−0·2
Bombay	+1·4	+2·5	+0·8	−1·0	−1·8	−1·2	+0·8	−0·3	−1·0	−0·6
Leh	+3·1	+3·4	+2·9	+0·4	−2·3	−2·8	−2·0	−2·4	−0·1	−0·4
Aden	−0·4	−0·5	+0·1	+1·2	+1·1	−0·4	−0·8	−0·4	−0·3	−0·1

Temperature of the ground.

Observations of the temperature of the ground were recorded during the year 1900 at five stations—Calcutta, Allahabad, Dehra, Lahore and Jaipur.

The thermometers used for the purpose are verified standard mercurial thermometers with attached scales of porcelain, the scale being engraved also on the tube. At Allahabad, with the exception of the thermometer at nine feet, they are read three times daily at equal intervals of eight hours; at Lahore, with the exception of the thermometer at six feet, and Jaipur with the exception of the thermometers at 10, 20 and 45·6 feet, they are read four times daily at intervals of six hours and at Dehra once daily, *viz.*, at 3 P.M. and at Calcutta (Alipore) from August 1900 at 1·45 P.M.

The thermometers below the surface have their bulbs protected with pointed copper shoes which rest on the ground at the bottom of a wooden tube, inserted to the specified depth and projecting six inches above the surface, the upper ends being closed by a cap of metal or wood. Those at depths of three and six feet are attached to the lower end of a stout wooden bar of about half the diameter of the tube. Those at one foot have a brass ring attached to the top of the wooden frame by which they are lifted; and in all these the lower part of the frame around the bulb has been cut away, and the lower end fitted with the copper shoe above mentioned.

TABLE VII.—*Average monthly mean temperatures of the ground and of the air.*

		Number of years observations used.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
			°	°	°	°	°	°	°	°	°	°	°	°	°
LAHORE.	Air	28—30	52·0	56·7	67·8	79.6	87·4	91·2	88·3	86·6	83·9	74·5	62·4	53·2	73·6
	Surface	5—16	50·7	57·5	74·5	90·5	101·4	104·6	101·4	99·0	95·7	78·7	61·4	51·7	80·6
	1 foot deep	15—16	57·5	60·3	70·3	81·5	89·9	94·4	94·8	93·8	92·2	82·7	71·0	61·4	79·2
	3 feet "	15—16	62·9	63·2	69·9	78·9	86·6	91·5	92·9	92·5	91·9	85·5	76·1	67·6	80·0
	6 " "	15—16	71·4	69·2	70·6	74·9	80·3	84·9	87·5	88·4	88·9	87·0	82·1	76·3	80·1
JAIPUR.	Air	27—28	58·8	63·3	74·6	85·1	90·6	90·6	83·9	81·4	81·9	76·2	67·7	60·0	76·2
	Surface	19—20	63·3	70·1	83·6	95·2	101·7	100·3	91·8	89·6	91·6	85·4	72·6	63·9	84·1
	1 foot deep	19—20	61·7	66·7	77·5	87·5	94·3	95·2	88·8	86·6	87·4	83·2	72·9	63·4	80·4
	3 feet "	19—20	66·8	68·0	74·4	81·9	87·7	91·1	88·5	86·5	86·8	85·0	78·1	70·9	80·5
	10 " "	18—20	74·7	72·8	74·0	77·8	81·8	85·3	84·2	85·9	85·7	85·3	82·5	78·2	80·7
	20 " "	19	80·4	79·5	78·4	78·1	78·9	80·0	81·3	82·2	82·8	83·1	83·0	82·3	80·8
	45·6 " "	13—14	81·7	81·7	81·8	81·8	81·8	81·7	81·7	81·6	81·6	81·7	81·8	81·8	81·7
DEHRA.	Air	30—31	54·8	57·4	66·9	77·1	82·6	84·0	79·4	78·0	76·9	70·6	62·4	56·1	70·5
	1·1 feet deep	19—20	57·4	58·9	67·7	78·8	86·4	88·0	84·2	82·5	81·6	76·4	67·6	60·3	74·2
	3·2 " "	19—20	62·0	61·2	66·9	75·7	82·4	84·9	83·4	82·2	81·7	78·4	72·0	65·8	74·7
	6·4 " "	18—20	67·6	64·7	67·2	71·7	76·9	80·4	81·5	81·6	81·3	80·3	76·0	71·5	75·1
	12·8 " "	18—20	73·9	72·0	71·0	71·5	73·2	75·3	77·4	79·2	79·7	79·4	78·2	76·2	75·6
	25·6 " "	17—19	76·3	75·7	75·0	74·4	74·1	74·1	74·5	75·9	76·8	77·0	77·0	76·8	75·6
ALLAHABAD.	Air	29—31	60·6	65·3	77·8	87·7	92·4	90·6	84·7	83·2	83·2	78·6	69·0	60·7	77·8
	Surface	19—21	59·6	65·5	80·8	92·6	101·8	98·9	88·4	86·8	87·4	81·0	67·8	59·0	80·8
	1 foot deep	20—21	61·2	65·6	75·8	86·2	94·1	94·4	87·6	85·8	85·9	80·8	70·9	62·9	79·3
	3 feet "	20—21	66·6	68·1	74·1	82·3	89·2	91·9	88·0	86·1	85·9	83·3	76·7	70·0	80·2
CALCUTTA (ALIPORE.)	Air	16	76·9	81·6	90·4	95·4	93·5	91·3	88·0	87·1	87·4	86·6	81·2	76·1	86·3
	Surface	21	76·1	85·1	102·4	112·2	107·5	97·8	94·1	93·3	94·2	93·1	85·7	76·8	93·2
	1 foot deep	20—21	67·3	71·1	78·8	86·0	88·2	87·1	85·9	85·5	85·4	83·2	76·3	68·8	80·3
	3 feet "	20—21	71·9	73·7	78·8	84·7	87·5	87·4	86·5	86·2	86·1	85·1	80·8	75·3	82·0
	6 " "	15—17	77·1	76·3	77·7	80·9	83·9	85·3	85·3	85·2	85·3	85·1	83·6	80·4	82·2

The mean results for Calcutta in Table VII (above) show that the surface of the ground is, on the average, of the whole year 6°·9 hotter than the air at about 2 P.M. They also indicate that the temperature increases 1°·9 in passing from one foot to a depth of six feet.

At Allahabad the ground surface is on the average 3° hotter than the air. The average temperature decreases 1°·5 down to a depth of one foot, and then increases 0°·9 to a depth of three feet.

At Jaipur (where the soil on which the instrument is placed is almost pure sand) the surface is as much as 7°·9 hotter than the air on the average of the whole year. In May the difference reaches the large amount of 11°·1. The mean temperature decreases to a depth of one foot and then slowly increases to a depth of 20 feet.

At Lahore the surface soil, which is similar in character to that of Jaipur, is on the average 7°·0 hotter than the air. The temperature decreases through a depth of one foot, and thence increases slowly to a depth of six feet.

TABLE VIII.—*Comparison of the mean monthly temperatures of the ground in 1900, with the averages of Table VII.*

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
		°	°	°	°	°	°	°	°		°	°	°	°
LAHORE.	Air	+0·6	+2·2	+5·5	−1·3	+1·9	+4·4	+3·5	+1·1	−1·3	+0·1	+4·6	+0·8	+1·8
	Surface	−2·4	−1·0	+2·2	−5·1	−2·5	+0·5	+2·0	−0·6	−7·0	−1·0	+1·5	−1·4	−1·2
	1 foot deep	+0·9	+1·1	+2·3	−1·8	−1·2	+0·3	+1·5	0	−2·3	−2·0	+1·3	−0·9	−0·1
	3 feet "	+1·7	+1·5	+2·0	−0·7	−1·0	−0·1	+1·0	0	−1·0	−1·9	+1·0	−0·2	+0·2
	6 " "	+1·0	+0·8	+1·3	+0·6	−0·4	−0·3	+0·4	+0·4	+0·2	−1·1	−0·1	−0·1	+0·2
JAIPUR.	Air	−0·7	+3·7	+4·7	+0·3	−0·6	+5·0	+4·8	+1·4	−1·5	+0·2	+3·8	+0·9	+1·8
	Surface	−0·3	+1·2	+4·4	−1·0	−3·2	+3·6	+4·5	+0·2	−3·2	−2·3	+2·9	+1·2	+0·7
	1 foot deep	+0·7	+3·4	+4·6	+1·9	−1·2	+3·0	+5·0	+1·2	−1·6	0	+3·2	+1·9	+1·8
	3 feet "	+3·0	+3·0	+3·0	+1·9	+0·5	+2·4	+4·5	+2·3	−0·8	−0·1	+2·0	+2·3	+2·0
	10 " "	−3·2	−1·0	+3·4	+5·8	+6·2	+7·8	+9·2	+3·4	+0·8	+0·3	−1·6	−4·3	+2·2
	20 " "	+2·2	+1·2	+0·9	+1·4	+1·7	+2·3	+2·8	+2·2	+2·5	+2·9	+1·3	+0·5	+1·8
	45·6 " "	+0·5	+0·7	+0·7	+0·8	+0·8	+0·9	+0·7	+0·8	+0·9	+0·8	+0·7	+0·8	+0·8
DEHRA.	Air	−0·9	−0·8	+2·6	−3·8	−1·0	+0·8	−0·2	−0·7	−2·6	−2·2	+0·7	−1·1	−0·8
	1·1 feet deep	+0·4	+0·8	+2·1	−2·4	+0·8	+2·3	+0·5	+0·8	−1·7	−1·2	+2·6	−0·1	+0·4
	3·2 " "	+1·0	+0·8	+1·3	−1·0	+0·1	+1·4	+0·9	+0·9	−0·8	−0·9	+1·2	+0·6	+0·5
	6·4 " "	+0·9	+1·1	+0·5	+0·4	−0·5	+0·1	+0·5	+0·3	−0·2	−1·0	+0·5	+1·4	+0·3
	12·8 " "	+1·2	+1·0	+0·7	+0·4	+0·4	+0·6	+1·0	+0·4	+0·4	+0·2	+0·1	+0·4	+0·6
	25·6 " "	+0·4	+0·2	−0·5	−0·6	−0·3	+0·2	+0·7	+0·6	+1·2	+1·4	+1·1	+0·8	+0·4
ALLAHABAD.	Air	+0·2	+0·9	+1·0	−0·3	−0·2	+3·3	+2·5	+0·5	−1·8	−2·2	+0·3	+2·0	+0·5
	Surface	+1·6	+1·7	+2·3	1·6	+1·8	+6·6	+4·4	+2·5	−1·9	−2·0	+2·0	+3·8	+2·0
	1 foot deep	+1·2	+0·7	+2·0	+1·5	+0·3	+3·7	+3·4	+0·6	−2·0	−1·9	+1·3	+3·0	+1·2
	3 feet "	+1·6	+0·6	+1·0	+0·9	−0·1	+1·2	+2·7	+0·9	−0·5	−1·8	+0·4	+2·2	+0·8
CALCUTTA (ALIPORE.)	Air	+3·8	+4·1	+2·7	+0·6	−0·1	+1·1	+1·2	+1·2	−0·3	+1·0	+0·9	+3·0	+1·6
	Surface	+7·9	+3·6	+0·1	−7·3	−6·6	−2·5	−0·6	−1·8	−4·6	+1·2	+5·2	+6·9	+0·1
	1 foot deep	+2·7	+2·8	+1·3	−1·7	−2·8	−1·7	−0·3	−0·5	−2·4	−0·8	+0·9	+4·1	+0·1
	3 feet "	+1·3	+1·4	+0·1	−1·8	−2·8	−2·4	−1·2	−1·2	−3·1	−2·2	−0·5	+1·5	−0·9
	6 " "	−0·5	−0·6	−0·7	−1·3	−2·1	−2·3	−1·7	−1·6	−2·2	−2·6	−1·9	−0·4	−1·5

Temperature.

The methods of exposing the thermometers at observatories in India and of deducing the daily and monthly means from the observed readings of the instruments are described in pages 18-19 of the Annual Report for 1890.

The variations of the mean temperature of each month from the normal given in Table II of the monthly reviews are deduced by a comparison of the actual monthly means with the normal monthly means obtained by the same methods given in Table XII of average monthly temperatures of 87 stations in India and Ceylon, etc., in pages 19 to 22 of the Annual Report for the year 1890. Average data for 134 stations will also be found in pages 39 to 42 of the Annual Report for the year 1887.

Average or normal monthly temperatures of 82 second class stations were recently re-calculated and the whole of the data up to December 1896 utilized for the determination of these values. These normal means were given in Table I of the Annual Summary for 1896.

The variations obtained by a comparison of these normal means with the actual monthly means in Table II of the monthly weather reviews for the year are given in Table I.

The mean variations given in Table II of the Geographical Summary are derived from the variation data of Table II of the monthly weather reviews of the year 1900.

In Table I published in each monthly review, as in the Daily Weather Report, the mean temperature of the day is calculated by the formula, daily mean $= \frac{\text{Maximum} + \text{Minimum}}{2}$. It differs from the true daily mean by amounts varying slightly with the season. The variations of the daily or monthly actual means obtained by this method from normal daily or monthly means similarly calculated, usually differ very little from those obtained by the more laborious computation of true daily means and the comparison of these with normal true daily means. In Table I of the monthly weather reviews of the year 1900 the variations of the monthly mean maxima and minima temperatures from the normal, as well as the variations of the monthly mean temperatures *i.e.*, $\frac{\text{Maximum} + \text{Minimum}}{2}$ are given.

Normal monthly mean maxima and minima temperatures of 94 stations calculated from the observations of the eleven years' period, 1878—1888, were given in the Annual Summary for 1891. The additional data for the years 1889—1893 have been recently utilized to furnish what are probably slightly more accurate means than those given in the 1891 Annual Summary. The re-calculated means were given in the 1894 Annual Summary, Tables I and II, and need not be repeated here. Variation data of monthly mean air temperatures in 1900 are given in Table IX.

Tables X and XI (*a*), XI (*b*) and XI (*c*) give summaries of the temperature variation data for each month of the year 1900 and for the year. In the first table (Table II) the same division has been adopted as that employed in the Annual Reports from 1881 to 1890. This enables an exact comparison to be made of the temperature data of the year 1900 with those of previous years given in the Annual Reports. In the second set of tables [Table XI (*a*), XI (*b*) and XI (*c*)] the variation data are given for the eleven meteorological provinces into which the empire is divided for the purpose chiefly of comparing meteorological and health statistics and in the last table (Table IV) the data are given for 55 of the 57 smaller divisions or areas into which India is sub-divided with a view to the comparison of meteorological and crops statistics—

TABLE IX.—*Comparison of monthly mean air temperature in 1900 with the averages of past years.*

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
Burma Coast and Bay Islands.	Port Blair	+1·5	+2·2	+1·6	+1·6	+1·3	+1·3	+1·2	+1·6	+0·7	+1·1	+1·8	+1·7	+1·5
	Rangoon	+2·0	+2·5	+1·7	+2·3	—0·4	0	+0·5	+0·5	+1·0	+0·6	—0·9	+0·7	+0·9
	Diamond Island.	+2·1	+2·1	+1·1	+1·6	+1·3	+1·5	+1·4	+1·7	+1·9	+1·9	+1·9	+2·6	+1·8
	Cocos Island	+3·4	+2·6	+1·5	+3·2	+3·2	—0·3	—0·1	+0·8	+1·1	+1·4	+1·3	+2·4	+1·7
	Akyab	?	?	?	?	?	?	—1·7	—1·4	—1·5	—1·3	—1·4	—0·1	?
Bengal and Orissa.	Chittagong	+3·4	+3·1	+1·6	+1·8	+0·5	+0·2	+0·3	+1·7	+0·5	+0·6	+0·5	+2·2	+1·4
	Calcutta (Alipore).	+3·8	+4·1	+2·7	+0·6	—0·1	+1·1	+1·2	+1·2	—0·3	+1·0	+0·9	+3·0	+1·6
	Saugor Island	+2·6	+4·2	+0·9	+0·6	—1·0	+0·4	+1·0	+0·8	—0·6	+0·1	+0·2	+2·5	+1·0
	False Point	+3·0	+4·0	+1·6	+0·6	—0·1	+1·0	+0·7	+0·5	—0·2	—0·4	—0·1	+2·9	+1·1
Gangetic Plain and Chota Nagpur.	Hazaribagh	+1·1	+1·4	+3·4	+1·0	—0·6	+1·1	+1·6	+0·3	—1·3	—0·7	?	+1·7	+0.8
	Darbhanga	—0·2	+1·4	+1·4	+0·1	+0·1	—0·2	—1·0	+1·5	—1·7	—0·9	—0·3	0	0
	Allahabad	+0·2	+0·9	+1·0	—0·3	—0·2	+3·3	+2·5	+0·5	—1·8	—2·2	+0·3	+2·0	+0.5

TABLE IX.—*Comparison of monthly mean air temperatures in 1900 with the averages of past years*—contd.

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
Upper Sub-Himalayas.	Dehra Dun	−0·9	−0·8	+2·6	−3·8	−1·0	+0·8	−0·2	−0·7	−2·6	−2·2	+0·7	−1·1	−0·8
	Roorkee	+0·2	−0·1	+3·6	−2·2	+0·4	+0·6	0	−0·3	−3·0	−2·1	+0·9	+0·2	−0·2
	Meerut	+0·9	+1·9	+3·8	−1·6	+1·6	+1·7	+0·8	+0·5	−2·7	−2·0	+1·9	+0·8	+0·6
	Lahore	+0·6	+2·2	+5·5	−1·3	+1·9	+4·4	+3·5	+1·1	−1·3	+0·1	+4·6	+0·8	+1·8
	Ludhiana	+1·1	+2·3	+5·3	−1·9	+2·4	+4·3	+1·7	−1·4	−2·7	−1·0	+3·2	+1·1	+1·2
Indus Valley and North-West Rajputana.	Peshawar	−1·5	+1·3	+3·6	−4·0	−1·4	+1·0	+2·4	+1·5	+1·4	−0·5	+3·1	+0·2	+0·6
	Jacobabad	−2·5	+3·0	+5·7	+0·4	+1·9	+4·2	+3·6	+2·3	+3·4	+1·2	+5·8	−0·1	+2·4
	Kurrachee	−2·4	+1·2	+2·3	+3·0	+0·8	+2·2	+2·9	+3·3	+2·9	+1·6	+2·4	+0·2	+1·7
East Rajputana, Central India and Gujarat.	Jaipur	−0·7	+3·7	+4·7	+0·3	−0·6	+5·0	+4·8	+1·4	−1·5	+0·2	+3·8	+0·9	+1·8
	Deesa	−1·5	+2·2	+2·2	+2·1	−0·4	+3·6	+5·8	+0·4	+0·1	+0·3	+3·4	+1·1	+1·6
Deccan	Belgaum	+1·4	+1·8	+0·8	+0·5	+1·3	+1·7	+1·3	+0·7	+0·9	+2·3	+2·6	+3·2	+1·5
	Sholapur	+4·1	+3·7	+1·7	+1·4	+2·2	+2·4	+1·6	+1·3	+2·0	+2·1	+2·0	+4·6	+2·4
	Poona	+2·4	+2·2	+1·0	+0·9	+1·7	+3·4	+1·9	+0·2	+0·1	+0·9	+2·4	+4·4	+1·8
	Akola	+5·2	+3·5	+2·8	+2·3	+1·3	+4·2	+2·4	+0·4	0	−1·7	+1·1	+6·6	+2·3
	Buldana	+3·8	+3·4	+2·4	+1·6	+1·7	+4·7	+2·4	+0·3	0	−0·5	+2·1	+4·4	+2·2
	Khandwa	+2·9	+2·9	+2·5	+2·4	+1·8	+4·7	+3·1	+0·5	−0·3	−1·3	+3·3	+7·4	+2·5
	Nagpur	+6·0	+3·5	+2·7	+2·3	+1·9	+4·8	+1·2	+0·3	−0·3	−0·4	+1·2	+5·5	+2·4
	Hyderabad (Deccan).	+5·2	+4·5	+4·2	+1·7	+2·0	+2·4	−0·1	+1·9	0	+0·6	+1·4	+3·6	+2·3
West Coast.	Bombay	−0·3	−0·7	+0·1	−0·4	+0·2	+2·3	+1·8	+0·4	+1·0	+0·2	+0·9	+1·6	+0·6
	Karwar	−1·4	0	−1·4	−0·6	+0·3	+0·1	+0·8	+1·2	+1·0	+1·8	+1·6	+2·5	+0·5
South India.	Salem	+2·5	+3·6	+3·6	+0·6	+3·1	+2·8	+0·9	+2·2	?	+1·1	+1·2	+2·6	+2·2
	Chitaldroog	+4·0	+3·5	+2·7	+2·3	+3·5	+2·0	+1·7	+1·2	+1·3	+1·6	+2·9	+3·9	+2·6
	Bangalore	+3·7	+3·5	+2·7	+1·8	+4·1	+1·9	+1·4	+1·8	+1·0	+1·1	+1·1	+2·3	+2·2
	Hassan	+2·2	+2·6	+1·2	+2·0	+3·3	+1·5	+1·5	+1·1	+0·9	+1·0	+0·1	+2·1	+1·6
	Mysore	+2·7	+3·1	+1·5	+1·9	+4·0	+1·6	+0·8	+0·6	−0·6	0	+0·6	+2·3	+1·5
	Madras	+0·4	+0·8	+0·7	−0·9	0	+2·0	+0·1	+2·9	−0·1	+0·3	−0·2	+1·2	+0·6
	Bellary	+4·0	+4·1	+2·1	+0·7	+1·7	+1·7	+0·7	+0·5	+0·6	+0·9	+1·9	+3·3	+1·9
Hill Station, Baluchistan.	Quetta	−6·6	+0·9	+3·8	−1·3	−1·2	−1·3	+1·8	+1·3	+3.5	+1·4	+3·8	−1·0	+0·4
Hill Stations, Northern India.	Leh	−2·8	−1·4	+2·6	−3·4	+1·2	−1·3	−0·7	+1·3	+4·7	−1·3	+4·3	−0·3	+0·2
	Srinagar	−1·5	+4·1	+4·4	−5·5	−2·9	−3·6	+0·8	+1·0	+4·0	−0·1	+4·3	+0·9	+0·5
	Kailang	+0·2	+0·4	+2·5	−4·3	−0·1	−1·0	−0·9	−0·4	+3·7	−1·1	+5·4	−0·5	+0·3
	Simla (Ridge)	−3·3	−1·2	+3·1	−6·0	−2·0	+1·5	+0·1	−0·2	−1·6	−1·5	+1·2	−4·1	−1·2
	Chakrata	−3·5	−1·3	+2·5	−5·1	−1·9	−0·8	−0·5	+0·1	−1·3	−1·0	+2·0	−2·7	−1·1

TABLE IX.—*Comparison of monthly mean air temperatures in 1900 with the averages of past years*—concld.

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°		°	°
Hill Stations, Northern India—*concluded.*	Ranikhet	−2·2	−0·4	+3·4	−4·1	−0·6	+0·6	+0·8	+0·8	−1·1	−0·9	+1·2	−2·4	−0·4
	Katmandu	−1·5	+0·6	+1·9	+0·7	−0·8	−0·2	−0·8	+0·3	−0·6	−0·9	+0·2	−2·7	−0·3
	Darjeeling	+0·5	+1·0	+1·5	+1·5	+0·1	?	+0·4	+1·5	+0·4	+0·8	+1·5	?	?
Hill Stations, Central India.	Mount Abu	−1·6	+1·1	+2·3	−0·5	−1·3	+4·2	+4·1	+1·3	−0·8	0	+2·8	+0·2	+1·0
	Pachmarhi	+3·5	+2·9	+3·0	+1·4	+1·4	+6·0	+2·3	0	−1·1	−1·3	+1·5	+5·2	+2·1
	Chikalda	+3·7	+3·4	+3·0	+1·4	+1·6	+5·0	+2·6	+0·5	−0·7	−0·1	+2·1	+4·2	+2·2
Hill Station, South India.	Wellington	+2·3	+2·4	+1·2	+1·1	+1·4	+0·8	+0·7	+0·8	+0·9	+0·6	+0·6	+0·9	+1·1
Extra India.	Aden	−0·4	+1·5	+1·3	+0·8	+0·3	+1·6	+0·9	+0·6	−0·5	−0·4	+1·5	+1·8	+0·8
	Perim	−0·5	+0·2	+0·2	−0·2	−0·5	+0·2	−0·5	−0·4	+0·5	−0·4	+0·9	+1·5	+0·1
	Zanzibar	+0·5	+0·8	+1·0	+1·0	+2·0	+0·7	+0·3	+0·8	+0·6	0	+1·4	−1·3	+0·7
	Port Victoria (Seychelles).	−1·3	−0·5	+1·0	+1·0	−0·4	+0·9	−0·2	−0·1	−0·5	−0·3	−0·6	−0·4	−0·1
	Mauritius (Pamplemousses).	+1·0	+1·1	+0·8	+0·3	+1·0	+0·2	−1·1	−1·0	−0·9	−0·6	+0·1	+0·7	+0·1

TABLE X.—*Geographical summary of the temperature data of Table II in the Monthly Weather Reviews of 1900.*

Meteorological Area.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
North-West Himalaya	6	−2·2	0	+3·1	−4·7	−1·1	−0·8	−0·1	+0·4	+1·4	−1·0	+3·1	−1·5	−0·3
Sikkim Himalaya and Nepal.	1—2	−0·5	+0·8	+1·7	+1·1	−0·4	−0·2	−0·2	+0·9	−0·1	−0·1	+0·9	−2·7	+0·1
Punjab Plains	3	+0·1	+1·9	+4·8	−2·4	+1·0	+3·2	+2·5	+0·4	−0·9	−0·5	+3·6	+0·7	+1·2
Gangetic Plain	5	0	+0·7	+2·5	−1·6	+0·2	+1·2	+0·4	+0·3	−2·4	−1·9	+0·7	+0·4	0
Western Rajputana	4	−2·0	+1·9	+3·1	+1·3	+0·3	+3·6	+4·1	+1·8	+1·4	+0·8	+3·6	+0·4	+1·7
Eastern Rajputana and Central India.	1	−0·7	+3·7	+4·7	+0·3	−0·6	+5·0	+4·8	+1·4	−1·5	+0·2	+3·8	+0·9	+1·8
Nerbudda Valley	1	+2·9	+2·9	+2·5	+2·4	+1·8	+4·7	+3·1	+0·5	−0·3	−1·3	+3·3	+7·4	+2·5
Chota Nagpur	1	+1·1	+1·4	+3·4	+1·0	−0·6	+1·1	+1·6	+0·3	−1·3	−0·7	?	+1·7	+0·8
Lower Bengal	2	+3·2	+4·1	+1·8	+0·6	−0·6	+0·8	+1·1	+1·0	−0·5	+0·6	+0·6	+2·8	+1·3
Orissa	1	+3·0	+4·0	+1·6	+0·6	−0·1	+1·0	+0·7	+0·5	−0·2	−0·4	−0·1	+2·9	+1·1
Central Provinces South and Berar.	5	+4·4	+3·3	+2·8	+1·8	+1·6	+4·9	+2·2	+0·3	−0·4	−0·8	+1·6	+5·2	+2·2
Konkan	2	−0·9	−0·4	−0·7	−0·5	+0·3	+1·2	+1·3	+0·8	+1·0	+1·0	+1·3	+2·1	+0·5
Deccan, Hyderabad and Mysore.	9	+3·3	+3·2	+2·0	+1·5	+2·6	+2·1	+1·2	+1·0	+0·7	+1·2	+1·7	+3·3	+2·0
East Coast and Carnatic	1—2	+1·5	+2·2	+2·2	−0·2	+1·6	+2·4	+0·5	+2·6	−0·1	+0·7	+0·5	+1·9	+1·3
Arakan and Pegu	3—4	+2·5	+2·6	+1·5	+1·9	+0·5	+0·6	+0·1	+0·6	+0·5	+0·5	0	+1·4	+1·1
Bay Islands	2	+2·5	+2·4	+1·6	+2·4	+2·3	+0·5	+0·6	+1·2	+0·9	+1·3	+1·6	+2·1	+1·6
Extra-Tropical India	24—26	−0·3	+1·5	+2·9	−1·2	−0·1	+1·5	+1·5	+0·7	−0·2	−0·6	+2·2	+0·5	+0·7
Tropical India	24—25	+2·8	+2·7	+1·8	+1·4	+1·8	+2·3	+1·1	+0·9	+0·4	+0·6	+1·2	+3·0	+1·7
Whole India	49—51	+1·2	+2·1	+2·4	0	+0·8	+1·9	+1·3	+0·8	+0·1	0	+1·7	+1·7	+1·2

TABLE XI (*a*).—*Variations of the mean monthly maximum temperature from the normal in 1900 in the eleven meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma Coast and Bay Islands	+1·3	+1·2	+0·1	+2·0	+0·2	+0·5	+0·9	+0·3	+0·9	+0·8	+0·1	+0·9	+0·8
Burma Inland . . .	+0·3	+1·6	−0·1	+2·6	+0·5	+0·5	+0·6	−0·3	−0·9	−0·5	+1·2	+1·9	+0·6
Assam	+0·8	+0·8	−1·7	−0·8	+0·7	+0·7	−2·2	+2·3	+1·0	+1·9	+1·7	+1·7	+0·6
Bengal and Orissa . .	+1·5	+2·2	+0·9	+0·6	+0·8	−0·1	+0·2	+1·5	−0·8	+0·5	+1·7	+2·3	+1·0
Gangetic Plain and Chota Nagpur.	−0·8	+1·2	+3·0	−1·3	−1·3	+0·7	+1·6	+1·1	−2·7	−1·5	+1·8	+0·9	+0·2
Upper Sub-Himalayas . .	−1·1	+1·2	+4·1	−5·3	−0·3	+2·7	+1·3	−0·2	−4·6	−2·1	+1·7	−2·8	−0·5
Indus Valley and North-West Rajputana.	−2·7	+2·1	+4·6	−3·4	−1·0	+3·4	+3·7	+2·5	−0·3	−0·7	+3·1	−3·2	+0·7
East Rajputana, Central India and Gujarat.	−1·8	+2·2	+3·0	−1·3	−0·7	+4·6	+5·9	−0·5	−2·0	−0·1	+3·5	−0·1	+1·1
Deccan	+3·7	+3·7	+2·7	+0·9	+1·7	+5·6	+3·1	−0·2	−0·6	+0·9	+3·1	+4·5	+2·4
West Coast	−1·5	−0·1	−0·1	−0·7	+0·3	+1·2	+0·9	+1·1	+0·4	+1·9	+2·4	+1·3	+0·6
South India	+2·9	+2·7	+2·3	+0·1	+0·9	+1·9	+0·8	+1·5	−0·1	+0·8	+1·3	+2·3	+1·5

TABLE XI (*b*).—*Variations of the mean monthly minimum temperature from the normal in 1900 in the eleven meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma Coast and Bay Islands .	+2·9	+3·5	+2·2	+3·5	0	+1·3	+0·8	+1·1	+0·3	+1·9	−1·7	+1·7	+1·5
Burma Inland . . .	+3·1	+2·3	+1·2	+3·1	−0·7	+0·6	+0·4	+0·8	−0·6	+0·6	−0·2	+2·6	+1·1
Assam	+1·8	+2·1	−0·8	0	−0·5	+0·3	−0·3	+1·2	−0·1	−0·8	−0·1	+1·0	+0·3
Bengal and Orissa . . .	+3·1	+4·6	+1·4	+0·6	−0·8	+0·4	+0·2	+1·2	−0·2	−0·4	−0·5	+1·8	+1·0
Gangetic Plain and Chota Nagpur.	+3·3	+2·8	+1·7	+0·6	−0·1	+1·1	−0·9	+0·9	−0·4	−1·3	+1·3	+3·6	+1·2
Upper Sub-Himalayas .	+0·6	+1·9	+3·0	−1·3	+2·9	+3·0	+1·4	+1·5	+0·9	−0·6	+4·6	+4·1	+1·8
Indus Valley and North-West Rajputana.	−2·6	+1·3	+3·2	−0·8	+1·2	+2·7	+2·9	+2·3	+2·9	0	+5·2	+2·1	+1·7
East Rajputana, Central India and Gujarat.	−0·4	+2·5	+3·3	+2·4	+1·3	+3·1	+3·0	+1·3	+1·2	−2·0	+4·5	+4·2	+2·0
Deccan	+4·1	+3·2	+2·0	+2·3	+1·4	+2·4	+1·5	+0·8	+0·8	−1·8	+1·1	+6·9	+2·1
West Coast	+0·3	+1·2	+0·2	+0·1	+1·2	+1·0	+1·3	+1·3	+1·0	+0·8	+1·2	+2·9	+1·0
South India	+2·3	+2·4	+1·8	+0·9	+1·0	+1·1	+0·8	+1·3	+0·6	+0·6	+0·4	+2·0	+1·3

TABLE XI (*c*).—*Variations of the mean monthly temperature from the normal in 1900 in the eleven meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma Coast and Bay Islands	+2·1	+2·4	+1·2	+2·8	+0·1	+0·9	+0·9	+0·7	+0·6	+1·4	−0·8	+1·4	+1·1
Burma Inland . .	+1·7	+2·0	+0·6	+2·9	−0·1	+0·5	+0·5	+0·3	−0·7	+0·1	+0·5	+2·3	+0·9
Assam	+1·3	+1·5	−1·3	−0·4	+0·1	+0·5	−1·3	+1·8	+0·4	+0·5	+0·9	+1·4	+0·5
Bengal and Orissa . . .	+2·3	+3·4	+1·2	+0·6	+0·1	+0·1	+0·2	+1·3	−0·5	+0·1	+0·6	+2·1	+1·0

TABLE XI (c).—*Variations of the mean monthly temperature from the normal in 1900 in the eleven meteorological provinces of India*—concld.

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Gangetic Plain and Chota Nagpur.	+1·3	+2·0	+2·3	−0·4	−0·6	+0·9	+1·2	+1·1	−1·6	−1·4	+1·6	+2·3	+0·7
Upper Sub-Himalayas . .	−0·2	+1·6	+3·6	−3·3	+1·3	+2·9	+1·4	+0·7	−1·9	−1·3	+3·2	+0·7	+0·7
Indus Valley and North-West Rajputana.	−2·7	+1·7	+3·9	−2·1	+0·1	+3·1	+3·3	+2·4	+1·3	−0·4	+4·2	−0·6	+1·2
East Rajputana, Central India and Gujarat.	−1·1	+2·3	+3·2	+0·6	+0·3	+3·8	+4·5	+0·4	−0·4	−1·1	+3·9	+2·1	+1·5
Deccan	+3·9	+3·5	+2·4	+1·6	+1·6	+4·0	+2·3	+0·3	+0·1	−0·4	+2·1	+5·7	+2·3
West Coast	−0·6	+0·5	+0·1	−0·3	+0·8	+1·1	+1·1	+1·2	+0·7	+1·4	+1·8	+2·1	+0·8
South India	+2·6	+2·6	+2·1	+0·6	+0·9	+1·6	+0·8	+1·4	+0·2	+0·7	+0·8	+2·2	+1·4

TABLE XII.—*Variations of the mean monthly and annual temperatures from the normal in 1900 in 55 of the 57 meteorological districts or divisions of India.*

PROVINCE.	DIVISION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
		°	°	°	°	°	°	°	°	°	°	°	°	°
BURMA	1. Tenasserim	+2·4	+2·4	+1·1	+2·4	+0·1	+1·4	+1·3	+1·0	+1·4	+1·5	+0·2	+1·2	+1·4
	2. Lower Burma Deltaic	+2·3	+2·1	+1·2	+2·1	+0·2	+0·4	+0·6	+0·7	+1·1	+1·3	−0·7	+1·4	+1·1
	3. Central do.	+0·5	+2·3	+1·7	+4·7	+0·9	+0·6	+0·4	+0·3	−0·3	+0·1	−1·3	+1·1	+1·0
	4. Upper do.	+1·7	+1·8	+0·4	+2·7	−0·4	+0·5	+0·5	+0·2	−0·9	+0·1	+0·7	+2·5	+0·3
	5. Arakan	?	?	?	?	?	?	?	?	−1·6	?	−1·6	−0·4	?
BENGAL AND ASSAM.	6. Eastern Bengal	+2·5	+3·1	+1·3	+0·9	+0·5	+0·4	−0·1	+1·8	0	+0·4	+0·5	+1·7	+1·1
	7. Assam, Surma	+2·4	+2·6	?	+0·2	+0·8	+1·3	−0·2	+3·0	+1·1	+1·0	+1·2?	+2·0	+1·4
	9. Do. Brahmaputra	+0·8	+0·9	−1·3	−0·8	−0·2	+0·2	−1·8	+1·2	+0·1	+0·3	+0·8	+1·1	+0·1
	10. Deltaic Bengal	+2·8	+4·3	+1·4	+0·6	−0·2	+0·1	+0·6	+1·0	−0·5	+0·6	+0·8	+2·3	+1·2
	11. Central do.	+2·2	+2·3	+1·7	0	−0·4	−0·6	+0·3	+1·5	−0·8	+0·2	+1·0	+2·2	+0·8
	12. North do.	+0·9	+2·7	+0·5	+1·7	+0·9	+0·4	−0·8	+3·0	−0·6	−0·4	+0·2	+0·8	+0·8
	13. Bengal hills	+0·6	+2·5	+0·6	+1·8	+0·3	?	−0·2	+1·3	+0·1	+0·9	+1·5	+0·1	+0·9
	14. Orissa	+3·3	+4·2	+1·4	−0·3	−0·5	+0·8	+1·2	+0·4	−0·4	−0·1	+0·4	+3·6	+1·2
	15. Chota Nagpur	+2·7	+3·5	+3·4	+0·5	−0·4	+0·3	+1·8	+0·4	−1·0	−1·1	+1·1	+3·6	+1·2
	16. South Bihar	+1·1	+1·2	+1·5	+0·6	−0·6	−0·5	+1·0	+0·7	−2·2	−2·0	+1·1	+2·5	+0·4
	17. North do.	+0·4	+1·5	+0·7	+1·0	+0·1	−0·4	−0·9	+1·8	−1·6	−1·0	+0·8	+0·8	+0·3
NORTH-WESTERN PROVINCES AND OUDH.	18. North-Western Provinces, East.	+1·3	+1·4	+1·2	−0·7	−0·2	+1·2	+2·3	+1·0	−1·6	−1·9	+2·1	+3·0	+0·8
	19. South Oudh	+0·8	+2·0	+2·9	−0·6	?	?	+1·1	+1·0	−1·5	−1·1	+3·3	+2·5	+1·0
	20. North do.	?	+1·9	?	−1·6	−1·3	+2·3	+0·3	+2·5	−1·2	−0·8	+1·0	+0·8	+0·4
	21. North-Western Provinces, Central.	+0·5	+3·3	+4·1	−1·3	+0·1	+3·8	+3·0	+1·1	−2·1	−1·6	+5·0	+1·2	+1·4
	22. Do. do. West	+0·7	+2·2	+3·6	−2·3	−0·2	+2·1	+2·8	+1·7	−1·9	−0·9	+3·7	+1·5	+1·1
	23. Do. do. East Submontane.	−0·1	+1·3	+0·9	−0·8	−1·7	−0·3	−0·2	+1·2	−1·8	−1·8	+1·6	+1·7	0
	24. Do. do. West Submontane.	+0·8	+1·2	+2·7	−3·0	+0·9	+1·4	+0·6	+0·6	−1·8	−1·6	+2·3	+0·9	+0·4
	25. Do. do. Hills	−2·3	−0·2	+2·6	−5·0	−0·5	+0·6	+0·8	+0·7	−0·9	−0·6	+2·5	−2·2	−0·4

TABLE XII.—*Variations of the mean monthly and annual temperatures from the normal in 1900, in 55 of the 57 meteorological districts or divisions in India*—concld.

Province.	Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
Punjab	26. South-East Punjab	−1·3	+1·6	+3·9	−3·8	+1·2	?	+2·3	+0·5	−3·7	−2·1	+2·6	−0·7	0
	27. South do.	−1·8	?	+3·4	−3·7	+1·3	+3·3	?	+1·1	−3·2	−1·4	+4·9	−0·6	+0·3
	28. Central do.	−0·2	+2·6	+4·7	−2·5	+2·5	+4·1	?	+1·5	−1·2	−0·5	+5·9	+0·5	+1·6
	29. Punjab Submontane	−0·6	+1·7	+4·0	−3·3	+1·7	+3·3	+1·6	−0·4	−2·2	−1·2	+2·7	+0·5	+0·7
	30. Do. Hills	−3·0	−0·4	+3·2	−5·9	−1·4	−0·6	+0·8	+0·3	+0·6	−1·8	+2·5	−2·0	−0·6
	31. North Punjab	−1·2	+1·0	+3·6	−5·2	−0·4	+2·1	+2·7	+1·6	+1·3	−0·5	+3·9	+1·5	+0·9
	32. West do.	−2·4	+1·8	+3·9	−4·3	−0·4	+3·0	+3·5	+2·0	+0·7	−0·8	+4·3	−1·2	+0·8
Bombay and Malabar Coast Districts (Madras.	33. Malabar	+0·7	+1·7	+1·2	+0·7	+1·9	+1·8	+0·8	+1·8	+0·3	+1·8	+2·1	+2·0	+1·4
	34. Madras, South Central	+2·1	+3·0	+2·4	+0·8	+2·5	+2·4	+0·8	+1·5	−0·6	+0·8	+0·8	+1·8	+1·5
	35. Coorg	+4·0	+2·7	+1·5	+0·4	+2·1	+0·9	+1·0	+0·2	0	+1·1	+2·2	+3·0	+1·6
	36. Mysore	+3·3	+3·0	+2·2	+1·4	+3·0	+1·8	+1·2	+0·8	+0·3	+0·8	+1·5	+2·9	+1·9
	37. Konkan	−1·6	−0·6	−1·0	−0·9	+0·1	+0·7	+1·3	+0·9	+1·0	+1·1	+1·7	+2·2	+0·4
	38. Bombay Deccan	+3·0	+2·7	+1·1	+1·0	+1·9	+2·7	+1·7	+0·5	+1·8	+1·7	+2·5	+4·9	+2·1
	40. Khandesh	+2·5	+1·8	+1·8	+1·7	+1·4	+3·7	+2·6	+0·3	+1·8	+0·1	+3·8	+6·6	+2·3
Central Provinces and Berar.)	41. Berar	+5·6	+3·8	+2·9	+2·5	+1·5	+4·4	+2·9	−0·3	−0·4	−0·6	+1·6	+8·0	+2·7
	42. Central, Provinces West	+3·7	+3·3	+2·3	+2·1	+1·7	+5·3	+3·3	+0·1	−0·5	−1·7	+2·4	+7·0	+2·4
	43. Do. Central	+4·1	+4·1	+2·7	+1·9	+1·4	+5·5	+2·4	+0·1	−0·8	−1·4	+2·1	+6·2	+2·4
	44. Do. East	+5·8	+4·4	+3·2	+1·3	−0·1	+2·4	+2·0	−0·2	−0·7	−1·6	+0·6	+5·7	+1·9
Bombay (North)	45. Gujarat	−0·6	+2·2	+2·6	+0·2	+0·6	+4·0	+5·3	−0·4	+1·1	+0·9	+4·3	+3·6	+2·0
	46. Kathiawar and Cutch	−2·3	+0·9	+1·2	+1·6	−0·6	+2·4	+3·3	−0·2	+0·6	−0·4	+2·9	+0·4	+0·8
	47. Sind	−3·2	+1·9	+3·9	+1·6	+1·0	+3·1	+2·7	+2·8	+2·6	+0·3	+4·3	−0·4	+1·7
	48. Baluchistan Hills	−6·5	+0·2	+5·7	−2·5	−1·1	−1·8	+1·6	+1·6	+2·3	+1·1	+3·3	−0·9	+0·3
Rajputana and Central India.	49. Central India, East	−0·1	+2·6	+2·7	+0·6	+0·6	+5·2	+4·0	+0·2	−1·3	−2·1	+3·3	+4·1	+1·7
	50. Rajputana East, Central India, West.	−1·2	+3·1	+4·2	+1·3	+0·8	+4·7	+5·4	+1·4	−0·8	−1·1	+4·5	+1·4	+2·0
	51. West Rajputana	−2·9	?	+4·8	−1·1	+0·9	+5·6	+5·6	+4·5	−0·8	−0·5	+4·1	−2·2?	+2·0
Madras	52. East Coast, North	+3·0	+1·5	+1·2	+0·3	−0·7	+0·7	+0·8	+0·7	−0·3	+0·3	−0·3	+2·4	+0·8
	53. Hyderabad, South	+4·7	+4·0	+2·9	+1·6	+2·7	+2·9	+1·3	+1·2	+0·5	+0·8	+1·9	+3·9	+2·4
	54. Madras, Central	+4·0	+4·1	+2·7	+0·8	+2·1	+2·7	+1·1	+0·6	+0·7	+1·8	+2·3	+3·3	+2·2
	55. East Coast, Central	+2·2	+1·5	+2·2	−0·4	−0·9	+0·9	+0·4	+2·1	+0·6	+0·7	+0·4	+2·1	+1·0
	56. Do. South	+1·5	+2·2	+1·9	+0·1	+0·1	+2·0	+1·1	+3·0	+0·5	+1·2	+0·6	+1·3	+1·3
	57. Madras, South	+1·4	+2·4	+2·2	+0·8	+0·3	+0·1	+0·1	+1·1	−0·1	+0·3	+0·3	+0·7	+0·8

In the discussion of the meteorology of India during the year 1900, the year is divided into four seasons according to the following arrangement:—

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

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

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

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

The following give a resumé of the chief features of the temperature conditions during the year:—

I.—The cold weather period.—(January and February 1900). Weather was finer and much drier than usual at the commencement of the year. Temperature was hence largely above the normal over the whole of Northern and Central India. It was in slight to moderate defect in Burma and South India. Fine dry weather continued until the 14th January in Northern India. Slight to moderate snow fell in Kashmir during feeble disturbances on the 1st and the 5th and 6th. The first disturbance was followed by a slight to moderate temporary reduction of temperature in Upper India. The effect of the second was more pronounced. The cold wave, due to that disturbance, was of considerable intensity and reduced temperature below the normal over the whole of Northern and Central India from the 8th to the 11th. Temperature increased during the same period in Southern India, and series of thunderstorms occurred from the 9th to the 11th.

A cold weather storm which apparently formed in Persia on the 11th advanced eastwards across Baluchistan on the 12th January into Northern India. A secondary depression formed in the Punjab on the 14th. The double disturbance gave much snow in the North-Western Himalayas and light to moderate rain over the greater part of Northern and Central India. This disturbance was followed by a cold wave of considerable intensity. It appeared in Baluchistan on the 16th and advanced rapidly eastwards. Remarkably low night temperatures were recorded in the hills and plains of North-Western India during the period from the 16th to the 20th.

The disappearance of this storm was almost immediately followed by a second storm of similar intensity.

It apparently formed in the Persian area on the 17th and 18th of January and entered Lower Sind on the 20th. A secondary depression formed on the 20th and 21st in the East Punjab. The primary depression advanced eastwards to West Bengal where it filled up on the 24th. The double disturbance gave heavier snow in the hills of North-Western India than the preceding storm and also general light to moderate rain over Northern India. The advance of the primary depression was followed by a vigorous cold wave. The reduction of temperature due to this cold wave was greatest in Baluchistan on the 23rd and 24th, in Rajputana and the Punjab on the 24th and 25th, and in the Gangetic Plain on the 25th and 26th.

Fine weather obtained in Northern India during the remainder of the month. During the second-half of the month, when temperature was more or less steadily below the normal in that area, it was, on the other hand, in moderate to considerable excess in Southern India and Burma

Weather was slightly more disturbed than usual in February by the advance of a series of six depressions from the Persian area across Northern India. Two of the depressions were very feeble and gave no rain in Northern India. Of the remaining four, only one was followed by a well-marked cold wave. This was a storm which formed in Persia on the 21st. It advanced eastwards during the next four days and filled up in Bengal on the 26th. A secondary depression formed in the Punjab on the 24th and filled up on the 25th. Moderately heavy snow fell on the Western Himalayas. The accompanying cold wave advanced from Baluchistan on the 24th and 25th to Bengal on the 28th.

A noteworthy feature of the period was the contrast between the temperature conditions and variations in Tropical and Extra-Tropical India, which is the rule rather than the exception in the cold weather.

It was strikingly exhibited in the month of January. The mean temperature of that month was 2°.8 above the normal in Tropical India, and was 0°.3 below it in Extra-Tropical India. The contrast was less marked in February.

This contrast is due to the fact that the drift of cool air from the west which follows in the rear of the storms of the period is comparatively shallow and rarely crosses the West Ghats and Satpuras. Hence the cooling effect of these waves is restricted to Northern and Central India and the West Coast (usually as far south as Karwar and Mangalore).

The snowfall of the period was less than usual in Baluchistan, Afghanistan and the Western Himalayas. The rainfall in the plains of Northern and Central India was scanty in North-Western India, but was above the normal of the period in the eastern and central districts of the North-Western Provinces, Bihar and Chota Nagpur, which received thunder-showers from the cold weather disturbances in Northern India during the last fortnight of January.

The temperature conditions of the period were directly related to the chief abnormal features of the period which were:—

(1) Fewer cold weather storms than usual, in January. The storms were also of feeble intensity in February.

(2) The warm and cool waves accompanying the storms were, with three exceptions, feeble and exercised little or no influence on the mean temperature conditions of the period.

The following gives a summary of the chief features of these conditions:—

(1) The mean maximum or day temperature was in defect in North-West and West India and was in considerable to large excess in the interior of the Peninsula in January. The excess was largest in the Central Provinces, Berar and the Deccan, ranging between 2° and 7°. It was in general excess in February by amounts ranging between 2° and 6° over the whole of the interior. The excess was greatest in Berar and the Central Provinces where it averaged 4°.5 and 3°.9 respectively.

The following gives comparative data for the various provinces:—

Area.	Variation of mean maximum temperature from normal in		
	January.	February.	Cold weather period January and February.
	°	°	°
Burma	+0·9	+1·4	+1·2
Assam	+0·8	+0·8	+0·8
Bengal	+1·6	+2·0	+1·8
Orissa	+2·4	+2·6	+2·5
Bihar	—1·7	+0·2	—0·8
Chota Nagpur	+1·3	+3·6	+2·5
North-Western Provinces and Oudh	—1·3	+0·7	—0·3
Punjab	—1·8	+1·5	—0·2
Sind	—3·4	+3·1	—0·2
Rajputana	—2·4	+2·2	—0·1
Gujarat	—1·1	+2·4	+0·7
Central India	—2·8	+1·9	—0·5
Central Provinces	+3·6	+3·9	+3·8
Berar	+6·0	+4·5	+5·3
West Coast	—1·5	—0·1	—0·8
Bombay Deccan	+3·6	+3·6	+3·6
Mysore	+4·2	+3·3	+3·8
Madras Coast	+2·1	+1·9	+2·0
Madras Deccan	+4·7	+3·7	+4·2
South India	+2·1	+2·7	+2·4

The variations of the maximum temperature of the period were larger than usual and such as accompany a milder cold weather than usual. The most important variation was a large excess of nearly 4° in the large area including Berar, the Central Provinces, the Bombay and Madras Deccan and Mysore. Data for representative stations in these areas are given below:—

Station.	Variation of mean maximum temperature from normal in		
	January.	February.	Cold weather period January and February.
	°	°	°
Chanda	+6·1	+5·6	+5·9
Nagpur	+6·1	+4·8	+5·5
Akola	+6·4	+4·5	+5·5
Cuddapah	+5·7	+5·1	+5·4
Raipur	+5·4	+4·5	+5·0
Amraoti	+5·6	+4·3	+5·0
Bijapur	+4·9	+4·9	+4·9
Bangalore	+5·2	+3·[illegible]	+4·6
Seoni	+3·6	+5·0	+4·3
Hyderabad (Deccan)	+5·1	+3·3	+4·2
Chitaldroog	+4·6	+3·6	+4·1
Poona	+4·1	+3·6	+3·9
Bellary	+4·2	+3·5	+3·9
Sambalpur	+4·3	+2·9	+3·6
Sholapur	+3·8	+3·3	+3·6
Kurnool	+3·3	+3·1	+3·5
Raichur	+3·6	+2·9	+3·3

(2) The mean minimum or night temperature was in excess over the whole area except North-West India and Baluchistan (where it was in slight to considerable defect) in January and in general excess in February. The mean variations of the period were moderate to large in amount. The variations were most pronounced in the Central Provinces, Berar and the Madras Deccan (where the night temperature was in considerable to large excess in January and in moderate to considerable excess in February) and also in Orissa. They averaged 4° in amount for the period in the area including the Central Provinces, Berar, Hyderabad and the Madras Deccan, and 5° in Orissa. The following gives comparative data for the various provinces:—

Area.	Variation of mean minimum temperature from normal in		
	January.	February.	Cold weather period January and February.
	°	°	°
Burma	+3·0	+2·8	+2·9
Assam	+1·8	+2·1	+2·0
Bengal	+2·8	+4·2	+3·5
Orissa	+4·2	+5·8	+5·0
Bihar	+2·9	+2·4	+2·7
Chota Nagpur	+4·0	+3·3	+3·7
North-Western Provinces and Oudh	+2·6	+2·7	+2·7
Punjab	—1·0	+2·0	+0·5
Sind	—3·0	+0·6	—1·2
Rajputana	—0·6	+4·0	+1·7
Gujarat	—2·3	+0·7	—0·8
Central India	+2·6	+3·2	+2·9
Central Provinces	+5·0	+3·8	+4·4
Berar	+5·1	+3·1	+4·1
West Coast	+0·3	+1·2	+0·8
Bombay Deccan	+2·0	+1·7	+1·9
Mysore	+2·3	+2·7	+2·5
Madras Coast	+2·2	+1·1	+1·7
" Deccan	+4·0	+4·3	+4·2
South India	+1·6	+2·8	+2.2

(3) The variations of the maximum and minimum temperatures were similar in character over nearly the whole

of India during the months of January and February. The mean temperature of both months was hence above the normal over the whole area except Upper India and the West Coast. The variations were greater than 3° in Chota Nagpur, Orissa, Berar, the Central Provinces, Mysore and the Deccan. The following gives comparative data for the various provinces :—

Area.	Variation of mean temperature from normal in		
	January.	February.	Cold weather period January and February.
	°	°	°
Burma	+2.0	+2·1	+2·1
Assam	+1·3	+1·5	+1·4
Bengal	+2·2	+3·1	+2·7
Orissa	+3·3	+4·2	+3·8
Bihar	+0·6	+1·3	+1·0
Chota Nagpur	+2·7	+3·5	+3·1
North-Western Provinces and Oudh	+0·7	+1·7	+1·2
Punjab	—1·4	+1·8	+0·2
Sind	—3·2	+1·9	—0·7
Rajputana	—1·5	+3·1	+0·8
Gujarat	—1·7	+1·6	—0·1
Central India	—0·1	+2·6	+1·3
Central Provinces	+4·3	+3·9	+4·1
Berar	+5·6	+3·8	+4·7
West Coast	—0·6	+0·6	0
Bombay Deccan	+2·8	+2·7	+2·8
Mysore	+3·3	+3·6	+3·2
Madras, Coast	+2.2	+1·5	+1·9
Madras, Deccan	+4·4	+4·0	+4·2
South India	+1·9	+2·8	+2·4

The following gives comparative data for the area of decreased temperature in Upper India and Baluchistan and for five hill stations :—

Station.	Variation of mean daily temperature from normal in		
	January.	February.	Cold weather period January and February.
	°	°	°
Bushire	—1·5	+1·5	0
Quetta	—6·5	+0·7	—2·9
Hyderabad (Sind)	—4·3	+1·5	—1·4
Kurrachee	—3·2	+1·0	—1·1
Dera Ismail Khan	—2·8	+0·3	—1·3
Murree	—4·4	—1·4	—2·9
Leh	—4·8	—3·7	—4·3
Simla	—2·6	—0·3	—1·5
Chakrata	—3·1	—0·2	—1·7
Ranikhet	—1·5	—0·1	—0·8

The preceding data show that the effect of the cool waves accompanying the storms of the period was small and practically restricted to the north-west frontier and the hill districts and Baluchistan.

The following gives a brief statement of the cool waves of the period :—

(1) *Cool wave of the 16th to the 20th of January.*—This cool wave followed the first cold weather storm of that month which gave heavy snow in the Upper India mountain districts. The reduction of temperature was greatest in Baluchistan on the 17th and in Sind and Rajputana on the 18th.

This cool wave was of unusual character as it affected only North-Western and Western India and did not extend to North-Eastern India.

The following gives temperature variation data for the areas in which temperature was reduced below the normal by the advance of this cool wave :—

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	16th January.	17th January.	18th January.	19th January.	20th January.
	°	°	°	°	
Baluchistan	—7·0	—15·0	—12·2	—3·1	—11·2
Sind	+0·7	—8·6	—11·1	—6·6	—6·4
Punjab	+1·3	—1·3	—7·6	—6·3	—2·2
Rajputana	—3·0	—4·6	—8·5	—8·1	—6·4
Gujarat	—2·4	—4·9	—9·1	—7·4	—2·5
West Coast	—0·3	—1·8	—3·5	—2·1	+0·9

The following gives data showing the greatest reduction of temperature accompanying the passage of the warm and cool waves accompanying this disturbance :—

Station.	Largest excess of temperature due to warm wave.	Date.	Largest defect of temperature due to cool wave.	Date.	Total range of variation of temperature during period.
	°		°		°
Quetta	+4·2	12th	—15·4	17th	19·6
Jacobabad	+3·8	16th	—8·9	18th	12·7
Mount Abu	+6·1	13th	—14·6	18th	20·7
Kurrachee	+1·8	15th	—12·4	18th	14·2
Rajkot	+2·6	13th	—11·4	15th	14·0
Malegaon	+0·9	13th	—8·0	17th	17·9
Bombay	+5·0	12th	—5·7	18th	10·7
Ratnagiri	+1·6	13th	—6·9	18th	8·5
Mangalore	+2·5	14th	—2·9	18th	5·4

The preceding data illustrate clearly the extension of the cool wave along the West Coast of India.

(2)—*The cool wave of the 20th to the 26th of January.*—The reduction of temperature following the disturbance of the 15th to the 18th was restricted to North-Western

and Western India and was large, although diminishing on the 19th, when the second disturbance of the month began to affect the temperature conditions of Upper India. This storm advanced along the Mekran Coast into Lower Sind and passed eastwards into Bengal. It gave the heaviest snowfall of the cold weather season in the Western Himalayas. It hence gave rise to a vigorous cool wave, which being superimposed on the former occasioned unusually low temperatures over the whole of North-Western India. The following data illustrate the progress of the cool wave:—

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of							
	21st January.	22nd January.	23rd January.	24th January.	25th January.	26th January.	27th January.	28th January.
Baluchistan	−9°4	−13°6	−21°8	−20°7	−18°2	−7°8	−6°5	−2°2
Punjab	−4·6	−3·1	−6·4	−7·8	−7·7	−6·8	−2·9	−0·8
Sind	−10·2	−7·4	−11·2	−12·0	−11·1	−8·9	−3·2	−4·8
Rajputana	−1·3	−3·5	−8·2	−11·2	−9·6	−7·9	−3·1	−1·1
Central India	+4·5	+0·9	−0·4	−3·7	−10·6	−7·2	−3·9	−0·7
Gujarat	+0·7	−3·6	−8·6	−10·3	−11·5	−5·6	−3·7	−1·6
North-Western Provinces and Oudh.	+2·4	−1·3	+0·2	−1·6	−2·6	−4·5	−4·0	−4·0
Bihar	+2·2	+3·8	+4·3	+2·6	+4·5	−1·1	−2·6	−1·8
Konkan	+3·2	−1·6	−2·4	−2·8	−0·9	+2·2	+1·5	+0·6

The data indicate that the reduction of temperature below the normal was greatest in Baluchistan on the 23rd, in the Punjab, Sind and Rajputana on the 24th, in Gujarat and Central India on the 25th, in the North Western Provinces on the 26th, and in Bihar on the 27th They show that the reduction of temperature was only large in amount in the areas affected by the previous cool wave.

The following gives data for ten representative stations:—

Station.	Least deficiency or greatest excess of temperature in front of storm.	Date.	Greatest deficiency of temperature in rear of storm.	Date.	Total range of variation of temperature during period.
Quetta	−2°2	19th	−26°6	24th	24°4
Jacobabad	−3·6	19th	−10·3	24th	6·7
Mount Abu	+3·0	21st	−14·0	24th	17·0
Rajkot	−0·8	21st	−12·0	25th	11·2
Jaipur	−0·2	21st	−11·8	24th	11·6
Lahore	+2·8	20th	−7·6	25th	10·4
Indore	+6·1	21st	−13·5	25th	19·6
Malegaon	+6·7	22nd	−9·7	25th	16·4
Bombay	+2·4	21st	−6·7	25th	9·1
Karwar	+4·7	21st	−4·2	25th	8·9

The absolute minimum temperatures of the year were generally recorded in North-Western and Western India during the period of advance of this cool wave.

The following gives examples of the abnormally low minimum temperatures in that area:—

Station.	Lowest minimum temperature recorded in January 1900.	Date on which recorded.	Lowest minimum temperature recorded in January previous to 1900.	Year in which recorded.
Quetta	3°3	24th	9°3	1897
Simla	22·2	18th	19·2	1893
Murree	21·5	23rd and 24th	18·0	1897
Mooltan	34·0	24th	29·0	1878
Jaipur	33·0	24th	35·0	1888
Kurrachee	40·1	18th	40·5	1899
Montgomery	31·0	25th	31·5	1895
Ajmer	33·9	24th	31·0	1867
Peshawar	30·9	24th	82·8	1878 and 1880
Sirsa	33·5	26th	30·0	1878

(3) *Cool wave of the 23rd to the 28th February.*—Several cold weather depressions and disturbances affected North-Western India during the monthof February. They were unusually feeble and the precipitation accompanying them was generally small in amount. They hence exercised little influence on the temperature which was above the normal during nearly the whole of the month, with one exception, *viz.*, the period of the depression which originated in Persia on the 21st and passed across Northern India between the 23rd and 25th.

The advance of the cool wave following this storm is indicated by the following data:—

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.					
	23rd February.	24th February.	25th February.	26th February.	27th February.	28th February.
Baluchistan	+2°6	−4°1	−6°2	−2°2	?°	+7°9
Punjab	+5·6	+2·6	−1·3	+0·2	+1·0	+4·2
Sind	+6·5	+1·5	−0·4	−0·1	+1·9	+1·7
Rajputana	+4·5	+4·3	−0·3	−2·0	−1·1	+1·1
North-Western Provinces and Oudh.	+0·1	+3·7	+2·9	+1·2	−0·5	−0·4
Bihar	−0·9	+0·4	+2·3	−0·1	+0·6	−2·5
Chota Nagpur	−1·0	+3·3	+0·5	+2·8	−0·5	−2·5
Bengal	−1·0	−0·4	+0·5	+0·6	+2·1	−1·9

The cool wave was hence of slight intensity compared with the cool waves of the preceding month of January.

There were in all six depressions in February which marched from west to east across Northern India. They were unusually feeble and gave very light snow in the hills. Hence the chief feature of these depressions was the warm waves in their front.

The following data for Quetta will illustrate the characteristic difference between the warm and cool waves in these six feeble storms of February :—

Period of depression in India.	Largest excess of temperature at Quetta in front of storm.	Date on which recorded.	Largest defect of temperature at Quetta in rear of storm.	Date on which recorded.	Range of variation.
	°		°		°
5th to 9th February.	+ 1·9	1st	—10·1	5th Feb.	12·0
9th to 12th " .	+ 8·3	10th	— 2·9	12th "	11·2
16th to 18th " .	+ 10·2	16th	— 2·2	18th "	12·4
20th and 21st " .	+ 4·8	19th	— 1·3	21st "	6·1
22nd to 25th " .	+ 3·6	23rd	— 5·6	25th "	9·2
27th to 1st March " .	+ 9·3	28th	— 2·7	4th Mar.	12·0

The preceding data hence indicate that the warm waves are most marked when the storms do not give much snow in the hills and the cool waves when the storms give heavy and general snow.

II.—The hot weather period.—At the commencement of the month of March temperature was above the normal in North-West India and the Peninsula and was in defect in North-Eastern India, where thunderstorms were of frequent occurrence. A slight disturbance which affected the Punjab on the 3rd and 4th gave a moderate fall of snow in the Punjab and Kashmir Hills. A feeble cool wave advanced across Northern India during the period, the 6th to the 10th. Temperature was excessive during the period in the Deccan and Southern India, as is shown by the following data :—

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	6th March.	7th March.	8th March.	9th March.	10th March.
	°	°	°	°	°
Bombay Deccan . .	+ 2·7	+ 2·9	+ 2·9	+ 2·9	+ 3·8
Madras Deccan . .	+ 7·9	+ 5·9	+ 6·9	+ 5·9	+ 3·5
Mysore . . .	+ 5·4	+ 3·2	+ 4·5	+ 3·7	+ 2·5

A rapid increase of temperature occurred on the 9th and following days and temperature was very largely above the normal over the whole of North-Western India. The following gives comparative data for the 24 hours preceding 8 A.M. of the 17th, the hottest day of the period :—

Province or Division.	Variation from normal of		
	Mean maximum temperature of 24 hours preceding 8 A.M. of 17th March.	Mean minimum temperature of 24 hours preceding 8 A.M. of 17th March.	Mean temperature.
	°	°	°
Baluchistan	+ 17·9	+ 14·5	+ 16·2
Punjab	+ 12·3	+ 11·4	+ 12·1
Sind	+ 6·0	+ 8·5	+ 7·3
Rajputana	+ 6·2	+ 7·5	+ 6·9
North-Western Provinces . . .	+ 8·8	+ 3·9	+ 6·4
Central India	+ 5·1	+ 4·1	+ 4·6
Bihar	+ 4·5	+ 3·6	+ 4·1
Chota Nagpur	+ 8·1	+ 4·0	+ 6·1
Bengal	+ 0·7	+ 4·9	+ 2·8

The chief feature of the period was the remarkably high temperature (accompanying excessive dryness of the air) in the Punjab and Baluchistan. These conditions apparently did not extend into the interior of Persia or to Asiatic Turkey (represented by Baghdad).

A feeble disturbance of the hot weather type advanced westwards from Sind on the 19th to the foot of the Punjab hills on the 20th. It gave some snow on the hills and light showers on the plains and was followed by a considerable reduction of temperature on the 21st and 22nd over Upper India.

Frequent thundershowers occurred in Bengal and Assam from the 20th to 31st, during which period temperature was generally below the normal in those areas.

A hot weather depression, accompanying large excess of temperature, formed in Sind on the 26th. It advanced eastwards to the foot of the Simla and Mussooree hills and gave light showers in Baluchistan and the North-Western Himalayas. It was hence followed by a temporary moderate reduction of temperature in Upper India.

The mean temperature of the month of March was normal or in slight detect in the West Coast districts, East Bengal an Assam and was more or less in excess over the whole of the interior. The excess ranged between 4° and 7° in the Punjab, Rajputana and Upper Sind, where it was largest in amount.

Weather was feebly unsettled in the beginning of April in Baluchistan and Upper India. Rain fell in Baluchistan, the West and Central Punjab and Upper India hills, reducing temperature considerably below the normal in these areas on the 3rd and 4th.

A depression appeared on the 6th in Sind and advanced eastwards to the South Punjab on the 9th and a second depression formed on the 6th and 7th in the Central Provinces. The double disturbance gave heavy general rain over the whole of the Northern India on the 8th and 9th. As usual in the hot weather this rainfall reduced the day temperature very largely below the normal. At some

stations in North-Western India on the 9th and 10th the defect ranged from 20° to 30°.

Fine weather with increasing temperature held generally from the 10th to the 19th or 20th. Weather was feebly unsettled in the hill districts of Upper India and occasional rain or snow was received. This was followed on the 22nd, 23rd and 24th by a large reduction of temperature in North-Western India and temperature was more or less considerably below the normal over the whole of Northern India during the next four days.

The variations of the mean temperature conditions of the month were small in amount over the greater part of India. The only important features were a moderate to considerable deficiency in the Punjab and North-Western Provinces due to the frequent falls of rain and snow on the adjacent hills and a moderate excess in Burma.

Weather was disturbed in Burma during the first week of May. A feeble cyclonic storm formed in the Andaman sea on the 2nd and advanced northwards into Lower Burma on the 5th. It gave a moderate burst of rain in that area which reduced temperature largely below the normal on the 4th, 5th and 6th.

Temperature increased over Northern and Central India during this period and was in large excess on the 5th and 6th. A hot weather depression of unusual intensity formed on the 5th and 6th in Upper Sind. It drifted eastwards on the 6th and 7th and gave abnormally heavy and general rain in Kashmir, the North-West Himalayas and North-Western India. A cold wave of considerable intensity advanced eastwards from the Punjab on the 7th to Bihar and Bengal on the 10th. The following data illustrate its progress:—

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	6th May.	7th May.	8th May.	9th May.	10th May.	11th May.
	°	°	°	°	°	°
Sind	+3·2	—2·6	—2·0	—1·1	—0·8	+0·8
Punjab	+4·7	—8·7	—9·4	—7·1	—3·3	+0·9
Rajputana	+4·3	—0·4	—2·3	—3·0	—1·9	+1·6
North-Western Provinces and Oudh.	+4·4	+4·7	+2·2	—0·8	—3·1	—0·8
Chota Nagpur	+3·1	+1·4	+0·3	—2·0	—5·5	—2·6
Orissa	+2·2	+1·2	+1·7	—1·2	—4·6	+1·5
Bihar	+3·7	+2·2	+3·9	+1·6	—3·8	—1·0
Bengal	+2·7	+0·4	+1·7	+0·2	—1·3	+0·2

The disappearance of this depression was followed by a disturbance of unusual character. Thunderstorms with rain commenced in Kathiawar on the 12th and the feeble disturbance gradually extended eastwards and northwards, so that on the 17th, 18th and 19th thundershowers were received over the greater part of Northern and Central India. The rainfall caused a very large reduction of temperature (more especially of the day temperature). The mean temperature was hence more or less below the normal from the 13th to the 19th or 20th over Northern and Central India, after which it increased rapidly and was in large excess on the 23rd and 24th. On the 25th another depression developed over the Punjab and rain again fell over Baluchistan, the Punjab and the North-Western Himalayas. This fall of rain was succeeded by a rapid fall of temperature in the north-west districts of India. This cold wave did not, however, extend beyond the Punjab and by the 29th had altogether disappeared. On the 30th there occurred a very general rise of temperature except in the north-east and on the 31st temperature was more or less excessive over the greater part of the country. The mean temperature conditions of the month generally differed very slightly from the normal, the only important feature being a moderate excess in the Deccan and Mysore.

The following gives a summary of the more important temperature conditions of the period.

(1) Temperature was considerably to largely above the normal in March and was in largish defect in April and normal or in slight excess in May in the Punjab and North-Western Provinces. On the mean of the period it was normal or in slight excess in North-Western and Central India, as is shown by the following data:—

Area.	Variation of mean temperature from normal in			
	March.	April.	May.	Hot Weather period, March to May.
	°	°	°	°
Baluchistan (Quetta)	+4·1	—1·5	—0·2	+0·8
Punjab	+3·9	—4·0	+0·6	+0·2
Sind	+3·9	+1·4	+1·0	+2·1
North-Western Provinces and Oudh.	+2·8	—1·7	—0·2	+0·3
Rajputana	+4·3	+0·7	+0·8	+1·9
Central India	+2·7	+0·6	+0·6	+1·3

The preceding data show that the deficiency of temperature was most marked in April. It was slightly greater in amount in the day than in the night temperature.

The following gives data for the area in which the deficiency was greatest in April:—

Station.	Variation from normal of		
	Maximum temperature, April 1900.	Minimum temperature, April 1900.	Mean temperature, April 1900.
	°	°	°
Rawalpindi	—6·3	—5·1	—5·7
Montgomery	—8·5	—2·9	—5·7
Khushab	—6·3	—4·1	—5·2
Cherat	—7·8	—6·1	—7·0
Murree	—8·6	—5·9	—7·3
Chakrata	—6·5	—5·1	—5·8

(2) Temperature was normal or slightly in excess on the mean of the period in North-Eastern India and Burma. The monthly variations were small in amount throughout the period. The following table gives data in illustration :—

Area.	Variation of mean temperature from normal in			
	March.	April.	May.	Hot weather period, March to May.
	°	°	°	°
Bihar	+1·1	+0·8	—0·2	+0·6
Chota Nagpur	+3·4	+0·5	—0·4	+1·8
Orissa	+1·4	—0·3	—0·5	+0·2
Bengal	+1·2	+0·8	+0·2	+0·7
Assam	—1·3	—0·4	—0·2	—0·6
Lower Burma	+1·2	+2·1	+0·2	+1·2
Upper Burma	+0·3	+2·7	—0·3	+0·9

(3) The mean temperature was above the normal in the Peninsula, including Berar and the Central Provinces, throughout the whole period. The excess was moderate in March and May and slight in April. The following table gives data showing the variations of the mean temperature of that large area from the normal :—

Area.	Variation of mean temperature from normal in			
	March.	April.	May.	Hot weather period, March to May.
	°	°	°	°
Berar	+2·9	+2·5	+1·5	+2·3
Central Provinces	+2·6	+1·9	+1·2	+1·9
Bombay Deccan	+1·4	+1·2	+1·7	+1·4
West Coast	+0·1	—0·3	+0·8	+0·2
Madras Deccan	+2·8	+1·2	+2·4	+2·1
Madras Coast	+1·6	0	—0·8	+0·3
South India	+2·5	+0·8	+1·4	+1·6

The highest temperatures in India are usually recorded in the months of May and June in the dry area, including the Punjab, Sind and Rajputana. In 1900 the period of high temperature was unusually long and protracted in that area due to the great delay in the advance of the humid winds from the Bombay Coast into North-Western India.

The following gives data of the chief periods of greatest excess of temperature and of high temperature in that area :—

(1) *The 1st to the 6th May.*—The following table gives variation data of the mean daily temperature for this period in North-Western India, Berar and the Central Provinces :—

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	1st May.	2nd May.	3rd May.	4th May.	5th May.	6th May.
	°	°	°	°	°	°
Punjab	+3·7	+6·6	+6·7	+6·9	+6·6	+4·7
Sind	+4·7	+1·6	+2·2	+2·6	+3·6	+3·2
Rajputana	+4·3	+6·0	+6·5	+5·7	+4·1	+4·3
North-Western Provinces, West.	—0·8	+2·9	+5·4	+4·3	+2·5	+5·6
Central Provinces	—1·5	+0·1	+1·6	+2·7	+2·3	+2·0
Berar	—3·4	—0·1	+3·8	+5·0	+3·5	+2·0
Central India	+0·4	+1·5	+3·5	+4·2	+2·7	+2·4

The highest maximum temperatures registered at the hottest stations in that area were as follows :—

Station.	Date.	Highest maximum temperature recorded from 1st to 6th May.	Variation from normal.
		°	°
Jacobabad	1st	117·1	+10·1
Mooltan	2nd	112·9	+10·8
Lahore	3rd	113·1	+11·9
Akola	3rd	112·6	+5·2
Nagpur	5th	113·2	+4·7
Chanda	5th	113·2	+3·8

(2). *The 23rd to the 25th May.*—During this period temperature was excessive over the whole of Northern and Central India and the North Deccan. The excess was most pronounced in Orissa, Chota Nagpur, Bihar, the North-Western Provinces and Punjab. The following gives variation data for these areas from the 23rd to the 25th.

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		
	23rd May.	24th May.	25th May.
	°	°	°
Orissa	+2·1	+3·8	+4·7
Chota Nagpur	+2·4	+6·5	+8·1
Bihar	+5·2	+5·1	+2·8
North-Western Provinces and Oudh	+3·1	+6·0	+4·9
Punjab	+3·0	+5·2	+6·1

The excess was, on the whole, not so large during this as during the preceding period. The following gives

the more noteworthy maximum temperatures recorded during this period:—

Station.	Date.	Highest maximum temperature recorded during period, 23rd to 25th May.	Variation from normal.
		°	°
Jacobabad	25th	117·1	+5·1
Mooltan	25th	113·4	+8·3
Lahore	25th	112·6	+9·2
Lucknow	25th	112·3	+8·0
Cawnpore	25th	112·0	+6·7
Allahabad	25th	112·1	+5·6
Chaibassa	25th	110·1	+10·2
Gaya	25th	110·5	+6·3
Cuttack	24th	109·0	+8·9

(3) *The 1st to the 11th June.*—The period from the 1st to the 11th June was characterized by very high temperature over the whole of the Peninsula and from the 7th to the 11th over Northern and Central India. This period of excessive heat, was immediately antecedent to the commencement of the monsoon rains on the Malabar Coast (*viz.*, the 12th of June).

The following gives variation data for the larger provinces:—

Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	7th June.	8th June.	9th June.	10th June.	11th June.
	°	°	°	°	°
Burma	+1·6	+0·6	+0·2	+0·9	+0·3
Assam	+1·8	+0·4	+1·6	+3·1	+4·7
Bengal	+1·9	+3·0	+2·4	+3·1	+4·0
Orissa	+1·3	+2·3	+3·2	+1·9	+1·3
Bihar	+4·9	+3·6	+2·9	+4·3	+6·5
Chota Nagpur	+2·0	+1·5	+1·0	+2·3	+3·5
North-Western Provinces and Oudh.	+2·0	+3·9	+4·1	+1·8	+5·0
Punjab	+3·5	+3·3	+1·5	+3·3	+4·1
Sind	+4·2	+3·5	+2·8	+3·6	+7·0
Rajputana	+3·7	+3·8	+1·8	+4·1	+6·3
Gujarat	+1·6	+0·6	+1·0	+1·9	+3·7
Central India	+3·8	+4·8	+3·0	+4·1	+6·6
Central Provinces	+5·7	+5·0	+4·4	+5·2	+5·3
Berar	+1·5	+1·5	+1·3	+7·1	+3·1
West Coast	+4·1	+4·2	+2·9	+2·2	+2·0
Bombay Deccan	+5·2	+5·3	+1·9	+1·3	+2·8
Mysore	+2·3	+3·4	+3·8	+3·1	+3·1
Madras Coast	+2·1	+2·5	+2·2	+1·9	+3·1
Madras Deccan	+5·7	+3·9	+3·3	+3·0	+3·7
South India	+2·3	+3·9	+4·1	+3·0	+2·6

Very dry hot weather continued over the whole of North-Western India during the remainder of the month, and the influence of the sea winds extended very slowly into the interior.

The following gives variation data for every third day from the 12th to the 30th in that area:—

Area.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of						
	12th.	15th.	18th.	21st.	24th.	27th.	30th.
	°	°	°	°	°	°	°
Punjab	+5·2	+1·5	—0·3	+8·7	—1·3	+0·2	+8·4
Sind	+5·1	+5·3	+4·6	+2·9	+1·5	+1·1	+1·4
Rajputana	+9·0	+5·9	+5·2	+6·4	+4·6	+5·1	+8·5
North-Western Provinces	+5·6	—0·5	+3·3	+6·2	—2·8	+1·5	+8·2

Very high day temperatures were recorded in Sind and Rajputana on the 13th and 14th. At some stations they were the highest recorded during the year. The following gives the highest day temperatures recorded in these areas during this period. They were also the absolute maximum temperatures of the year at these stations:—

Station.	Date.	Highest maximum temperature recorded in year.	Variation from normal.
		°	°
Jacobabad	14th June	124·5	+11·7
Hyderabad (Sind)	" "	122·2	+18·3
Pachpadra	" "	121·3	+14·1
Jodhpur	" "	118·8	...
Bikaner	" "	118·3	+12·0
Deesa	13th "	118·1	+15·8

The following gives the variation of the maximum, minimum and mean daily temperature from the normal values on the 14th June at these stations:—

Station.	Variation from normal of		
	Maximum temperature of 24 hours preceding 8 A.M. of 14th June.	Minimum temperature of 24 hours preceding 8 A.M. of 14th June.	Mean temperature of 24 hours preceding 8 A.M. of 14th June.
	°	°	°
Jacobabad	+11·7	—0·7	+5·5
Hyderabad	+18·3	+2·6	+10·5
Pachpadra	+14·1	+2·8	+8·5
Bikaner	+12·0	+8·9	+10·5
Deesa	+15·5	+1·1	+8·3

The data hence indicate that the excess in temperature was chiefly a feature of the day hours. Very high maximum temperatures were also recorded in the interior of the

Peninsula during this period from the 1st to the 11th June. The following gives the more noteworthy:—

STATON.	Highest maximum temperature recorded in June 1900	Variation from normal.	Date on which recorded.
	°	°	
Nellore	114·8	+ 9·6	3rd June
Chanda	114·7	+ 8·4	1st "
Nagpur	112·7	+ 7·6	4th "
Akola	112·6	+ 11·1	6th "
Hoshangabad	112·0	+ 8·4	6th "
Raipur	112·0	+ 7·2	1st "

The influence of the sea winds was later in reaching the Punjab, and the absolute maximum temperatures of the year at stations in that area were registered during two periods, *viz.*, the 21st and 22nd June, and the 2nd and 3rd July. The following gives the highest maximum temperatures recorded on the 21st and 22nd in that area (absolute maximum readings of the year being indicated by an asterisk):—

STATION.	Date.	Highest maximum temperature recorded in June.
		°
Lahore	21st	118·6*
Ludhiana	22nd	114·4
Sialkot	21st and 22nd	117·5
Rawalpindi	21st	116·5
Peshawar	22nd	115·5
Khushab	22nd	118·4*

The following table gives variation data for the Punjab stations for the 22nd, the hottest day of the year in that area:—

STATION.	VARIATION FROM NORMAL OF		
	Maximum temperature of 24 hours preceding 8 A.M. of 22nd June.	Minimum temperature of 24 hours preceding 8 A.M. of 22nd June.	Mean temperature of 24 hours preceding 8 A.M. of 22nd June.
	°	°	°
Delhi	+ 5·0	+ 5·2	+ 5·1
Sirsa	+ 6·6	+ 9·2	+ 7·9
Umballa	+ 7·9	+ 5·2	+ 6·6
Ludhiana	+ 0·7	+ 10·5	+ 5·6
Lahore	+ 13·5	+ 11·6	+ 12·6
Sialkot	+ 13·5	+ 8·4	+ 11·0
Rawalpindi	+ 12·4	+ 7·9	+ 10·2
Peshawar	+ 9·0	+ 4·8	+ 6·9
Dera Ismail Khan	+ 10·6	+ 8·6	+ 9·6
Khushab	+ 10·5	+ 3·8	+ 7·2
Mooltan	+ 5·6	+ 5·9	+ 5·8

The first burst of the monsoon rains occurred in the Punjab on the 6th or 7th of July. Abnormally hot weather preceded this burst in Upper India during the first three days of July and the highest temperatures of the year were recorded at several stations in the Punjab during that period. The following gives data in illustration:—

STATION.	Date	Highest maximum temperature recorded during the year.
		°
Ludhiana	3rd July	115·4
Sailkot	2nd and 3rd July	118·5
Rawalpindi	2nd and 3rd "	117·0
Peshawar	2nd "	118·0
Dera Ismail Khan	3rd "	118·2

Very dry hot weather held more or less steadily in North Western and Central India during the first ten days of July. The following gives mean temperature data of that area and of Berar and the Central Provinces for this period:—

AREA.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF JULY									
	1st	2nd.	3rd.	4th.	5th	6th.	7th.	8th.	9th.	10th.
	°	°	°	°	°	°	°	°	°	°
Punjab	+ 9·7	+ 11·0	+ 11·8	+ 10·4	+ 5·5	—0·6	+ 0·2	+ 3·3	+ 4·9	+ 3·0
Rajputana	+ 9·3	+ 10·8	+ 8·7	+ 8·3	+ 6·9	+ 5·7	+ 5·7	+ 5·6	+ 5·6	+ 6·6
North-Western Provinces.	+ 10·2	+ 9·6	+ 8·9	+ 4·1	+ 2·3	+ 1·6	+ 1·3	+ 0·3	+ 4·2	+ 4·7
Bihar	+ 2·5	— 0·2	+ 1·0	— 3·0	—2·8	+ 1·8	+ 1·6	+ 2·5	+ 2·3	+ 2·5
Chota Nagpur	+ 5·3	+ 8·2	+ 6·3	+ 4·7	+ 0·8	—0·1	+ 0·2	+ 1·0	+ 1·2	+ 1·5
Central India	+ 11·1	+ 11·6	+ 9·9	+ 6·6	+ 5·4	+ 1·9	+ 5·1	+ 5·4	+ 3·9	+ 5·4
Berar	+ 9·1	+ 9·7	+ 7·5	+ 7·8	+ 3·8	+ 7·6	+ 6·2	—1·2	—4·8	—7·0
Central Provinces.	+ 10·1	+ 10·1	+ 7·8	+ 5·0	+ 2·2	+ 2·8	+ 2·3	—0·1	—0·7	—1·7

Very high maximum temperatures were recorded during this period, in some cases higher than have been previously registered in July. The following gives data:—

STATION.	Highest maximum temperature recorded in July 1900.	Date on which recorded.	Highest maximum temperature recorded in July previous to 1900.	Year in which recorded.
	°		°	
Jhansi	113·9	1st July	113·2	1876
Agra	112·5	1st	111·0	1891
Allahabad	111·6	1st and 3rd	113·4	1876
Benares	110·3	3rd	116·0	1873
Mainpuri	109·2	3rd	108·3	1897
Cawnpore	109·0	2nd and 3rd	109·1	1891
Meerut	108·6	3rd	110·0	1876
Roorkee	107·2	2nd	113·2	1876
Sialkot	118·5	2nd and 3rd	119·5	1878

Station.	Highest maximum temperature recorded in July 1900.	Date on which recorded.	Highest maximum temperature recorded in July previous to 1900.	Year in which recorded.
D. I. Khan . . .	118°2	3rd July	120°5	1891 and 1892.
Peshawar . . .	118·0	2nd	117·0	1892
Khushab . . .	117·9	2nd	119·1	1891
Montgomery . .	117·0	3rd	120·4	1891
Rawalpindi . . .	117·0	2nd and 3rd	115·0	1897
Lahore . . .	116·6	2nd and 3rd	117·8	1891
Ludhiana . . .	115·4	3rd	117·8	1881
Sirsa	115·3	4th	118·4	1891
Umballa . . .	111·9	2nd	108·0	1897
Jacobabad . . .	123·0	2nd	120·0	1899
Bikaner . . .	112·9	2nd	114·3	1891
Kotah	112·6	2nd	108·1	1897
Jaipur	112·2	2nd	111·3	1891
Sambhar . . .	111·0	2nd	110·0	1891
Nowgong . . .	110·5	1st and 2nd	108·8	1878
Sutna	108·6	1st	106·5	1876
Ahmedabad . . .	106·3	3rd	102·3	1897
Rajkot . . .	104·9	2nd	103·9	1892
Bhavnagar Para . .	104·1	4th	101·1	1899

A brief temporary advance of humid winds lasting from the 10th to the 16th July into North-Western India caused a considerable reduction of temperature. This was followed by a partial break of the Bombay current lasting until the 26th, when the permanent advance occurred reducing temperature to the normal conditions of the rains.

The following gives examples of the excessive temperature variations during this hot period :—

Date.	Station.	Variation from normal of		
		Maximum temperature.	Minimum temperature.	Mean temperature.
21st	Bikaner	+13°7	+7°3	+10°5
	Khandwa	+13·3	+4·3	+ 8·8
	Ahmedabad . . .	+12·7	+6·4	+ 9·6
22nd	Agra	+11·6	+7·7	+ 9·7
	Jhansi	+13·4	+5·2	+ 9·3
25th	Deesa	+15·2	+3·4	+ 9·3
	Jaipur	+14·5	+3·5	+ 9·0
	Sambhar	+13·9	+1·4	+ 7·7
	Lahore	+11·2	+6·2	+ 8·7
	Ahmedabad . . .	+ 4·5	+1·7	+ 8·1
	Jhansi	+12·7	+3·5	+ 8·1

III.—The south-west monsoon period.—The temperature variations of this period are usually small in amount and depend upon the distribution and amount of the rainfall. During the monsoon period of 1900 they were unusually large over the area which usually receives its rain from the Bombay monsoon current due to its unusual weakness in June and July and its strength in August and September. The monsoon rains set in somewhat later than usual in the Arabian Sea and extended to the Malabar Coast on the 12th June. During the first half of the period the Bombay monsoon current failed to extend to North-Western India, and the rainfall was hence very scanty. It was, on the other hand, abundant in August and September. The rainfall was heavy on the Malabar Coast from the 16th to the 20th June. It extended to Bombay on the 24th and gave eight to moderate rain in the Deccan and Central Provinces until the 10th July. Practically no rain fell in North-Western India during June.

A further advance occurred on the 10th July and following days carrying rain into Gujarat, Central India and Rajputana. This continued until the 19th, when a partial break occurred. Finally about the 26th the Bombay current set in in full strength, and rapidly advanced over the whole area dependent upon it, and held until the end of September.

The Bay current set in about the normal date and began to give general rain to Bengal and the Gangetic Plain from the 13th. It was fairly vigorous until September.

In the months of June and July, when the Bombay current was weak, the Bay current was chiefly determined to North-Eastern India and Burma which areas hence received more abundant rain than usual. On the other hand, in August and September, it was determined more largely than usual to the Gangetic Plain and Upper India. As usual under these conditions the rainfall in Assam and North and East Bengal was in considerable defect. West Bengal, Chota Nagpur and the Gangetic Plain, on the other hand, received abundant rain.

The preceding remarks hence indicate that the meteorological conditions of the first two months of the monsoon period differed very largely from those of the second half. It is hence necessary to state the more important features of the temperature conditions of these two periods separately.

(A.) The following gives the chief features of the temperature conditions of the first period, June and July 1900:—

1st.—Temperature was more or less considerably above the normal over the whole area dependent upon the Bombay monsoon current during the period. The excess was somewhat greater in the day than in the night temperature. The following table gives data in illustration :—

Area.	Actual mean temperature.		Variation of mean temperature from normal in		
	June.	July.	June.	July.	Period June and July.
Baluchistan (Quetta) . .	73°3	80°6	−1°7	+1°4	−0°2
Punjab	95°6	91°3	+3°2	+2°6	+2°9
Sind	96°0	93°1	+3°1	+2°7	+2°9
Rajputana	96°5	91°2	+4°9	+5°4	+5°2

Area,	Actual mean temperature.		Variation of mean temperature from normal in		
	June,	July.	June.	July.	Period, June and July.
	°	°	°	°	°
Central India	93·9	85·0	+5·2	+4·0	+4·6
Gujarat	91·1	87·7	+2·9	+4·0	+3·5
Central Provinces	92·2	83·2	+4·7	+2·6	+3·7
Berar	91·3	83·3	+4·4	+2·9	+3·7
West Coast	81·8	80·0	+1·1	+1·1	+1·1
Bombay Deccan	82·7	78·2	+3·1	+1·9	+2·5
Madras Deccan	88·4	83·1	+2·7	+1·2	+2·0

The area of greatest excess of temperature during this period hence included Rajputana, Central India, Gujarat, the Central Provinces and Berar.

The following gives comparative data of stations in that area at which the excess was most marked:—

Station.	Variation of mean temperature from normal in		
	June.	July.	Period, June and July.
	°	°	°
Ahmedabad	+5·3	+6·4	+5·9
Bikaner	+5·6	+5·6	+5·6
Sambhar	+5·3	+5·4	+5·4
Jhansi	+5·3	+5·1	+5.2
Sutna	+6·4	+4·0	+5·2
Ajmer	+5·5	+4·8	+5·2
Hoshangabad	+5·3	+4·7	+5·0
ndore	+5·4	+4·1	+4·8
Neemuch	+4·4	+4·3	+4·4

2nd.—Temperature was generally normal or in slight excess in Burma and North-Eastern India which areas received fairly heavy monsoon rain in June and July. As is usual in the rains, the variations were slightly larger in amount in the day than in the night temperature.

The following gives comparative data in illustration:—

Area.	Variation of mean temperature from normal in		
	June.	July.	Period, June and July.
	°	°	°
Bihar	—0·4	+0·1	—0·2
Chota Nagpur	+0·3	+1·8	+1·1
Orissa	+0·8	+1·2	+1·0
Bengal	+0·1	+0·1	+0·1
Assam	+0·5	—1·3	—0·4
Upper Burma	+0·5	+0·5	+0·5
Lower Burma	+0·4	+0·6	+0·5

The variations were small in Southern India and at the hill stations in Northern India.

(B.) The chief features of the temperature conditions of the months of August and September were as follows:—

(1) Temperature was, on the whole, normal or in slight defect over the Gangetic Plain and Upper and Central India, as is shown by the following data:—

Area.	Variation from normal of mean temperature in		
	August.	September.	Period, August and September.
	°	°	°
Punjab	+1·1	—0·9	+0·1
Rajputana	+2·2	—0·9	+0·7
Central India	+0·2	—1·3	—0·6
North-Western Provinces and Oudh.	+1·1	—1·8	—0·4
Bihar	+1·2	—1·9	—0·4
Chota Nagpur	+0·4	—1·0	—0·3

(2) Temperature was normal or in very slight excess in North-Eastern India and Burma, as shown below:—

Area.	Variation from normal of mean temperature in		
	August.	September.	Period, August and September.
	°	°	°
Bengal	+1·6	—0·4	+0·6
Assam	+1·8	+0·5	+1·2
Burma	+0·2	0	+0·1

(3) Temperature was normal or in slight excess in the Peninsula, as is shown by the following data :—

Area.	Variation of mean temperature from normal in		
	August.	September.	Period, August and September.
	°	°	°
Berar	—0·3	—0·4	—0·4
Central Provinces	0	—0·7	—0·4
West Coast	+1·2	+0·7	+1·0
Bombay Deccan	+0·4	+1·8	+1·1
Madras Deccan	+1·0	+0·6	+0·8
Madras Coast	+1·9	+0·3	+1·1
South India	+1·5	—0·1	+0·7

The data hence indicate that the variations were not large but were such as accompany slightly stronger monsoon currents than usual and the determination of these currents to a greater extent than usual to Upper India.

IV.—The retreating South-West Monsoon period.—At the commencement of the period temperature was lower than usual over the whole of Northern and Central India, following the heavy rainfall of the previous month. A cyclonic storm which passed from the Bay into North-East India on the 9th and 10th October further reduced temperature in that area. Temperature continued below the normal over Northern and Central India until the 16th, when it began to increase rapidly, and was on the 20th and following days above the normal over the whole of North-Western India. The excess in he Punjab was chiefly due to abnormally high night temperature. During this period, from the 9th to the 19th, temperature was steadily in considerable to large excess in the centre and south of the Peninsula. Rain fell in that area on the 20th and 21st reducing temperature.

This effect soon passed away, and higher temperatures than usual prevailed during the remainder of the month in the Peninsula.

During the period from the 20th to the end of the month the mean daily temperature continued steadily below the normal in Northern India, due chiefly to low night temperature accompanying unusual dryness of the air.

The variations of the mean temperature conditions of the month of October were nowhere large but were well marked. The more important were :—

(1) Lower night and day temperature than usual in the North-Western and Central Provinces.

(2) Higher night and lower day temperature than usual in the Punjab.

(3) Higher day and lower night temperature than usual in North-Eastern India and the North Deccan.

(4) Higher day and night temperature than usual in the centre and south of the Peninsula.

November was exceptionally free from disturbance over the whole of India, and temperature was hence on the mean of the month generally largely above the normal. A very feeble disturbance in Upper India gave some rain form the 14th to the 16th followed by a brief moderate reduction of temperature in North-Western India. Temperature was steadily in excess during the remainder of the month, more especially in North-Western India. The excess was, on the whole, as large in amount in the night as in the day temperature in the areas of decreased humidity of the air, including North-Eastern India and the north of the Peninsula.

The period from the 19th to the 26th was characterized by a moderate excess of temperature during the day hours, and a very large excess at night over the greater part of North-West and Central India. The following gives comparative data for typical stations in that area :—

Station.	Variation from normal during period 19th to 26th November of		
	Maximum temperature.	Minimum temperature.	Mean temperature.
	°	°	°
Jacobabad	+4·4	+9·6	+7·0
Khushab	+2·0	+5·9	+4·0
Sirsa	+1·9	+9·4	+5·7
Lahore	+3·7	+8·2	+6·0
Jaipur	+2·1	+8·7	+5·4
Ajmer	+2·2	+10·7	+6·5
Rajkot	+4·4	+10·1	+7·3
Indore	+4·6	+9·9	+7·3
Saugor	+4·3	+7·9	+6·1

The mean temperature of the month was practically identical with the normal in Burma, North-Eastern India and the eastern half of the Peninsula. It was in moderate to large excess over the remainder of India, the excess being greatest in the Punjab, Upper Sind and Rajputana where it ranged between 4° and 7°. The following gives comparative data for stations at which the excess was 5° or upwards :—

Station.	Variation from normal of		
	Maximum temperature, November 1900.	Minimum temperature, November 1900.	Mean temperature, November 1900.
Jacobabad	+5·4°	+7·7°	+6·6°
Quetta	+1·7	+8·3	+5·0
Rawalpindi	+3·0	+9·0?	+6·0?
Jhansi	+3·2	+6·8	+5·0

At the commencement of the month of December temperature was generally above the normal, the excess being large in Central India, Rajputana, the Central Provinces, Berar, Khandesh and the North Deccan. The excess was most pronounced in the night temperature,

which was from 12° to 20° above the normal at severa stations in that area during the first fortnight of the month. No important change occurred in the temperature conditions until the 19th. Three depressions advanced from Persia across Baluchistan into Upper India during the remainder of the month. The second and third storms gave moderate snow in Baluchistan, Kashmir and the Punjab hills, and were hence followed by a considerable reduction of temperature in Northern India, and temperature was more or less considerably below the normal in Upper India from the 25th to the end of the month. Temperature, on the other hand, continued excessive in the north and centre of the Peninsula. The mean temperature of the month was in slight defect in Upper India and in slight to moderate excess in Burma and North-Eastern India. It was in considerable to large excess over the interior of the Peninsula. The following gives data for stations in the area of greatest excess of temperature which included Khandesh, Berar and the eastern and central districts of the Central Provinces.

Station.	Variation from normal of		
	Maximum temperature, December 1900.	Minimum temperature, December 1900.	Mean temperature, December 1900.
	°	°	°
Khandwa	+6·4	+10·8	+8·6
Malegaon	+7·8	+9·2	+8·5
Akola	+6·6	+9·4	+8·0
Chanda	+5·2	+10·3	+7·8
Nagpur	+5·6	+7·8	+6·7
Jubbulpore	+3·6	+9·7	+6·7
Raipur	+5·5	+7·0	+6·3
Seoni	+4·7	+7·4	+6·1

The chief features of the mean temperature conditions of the period are given below:—

(1) Temperature on the mean of the period differed only slightly from the normal conditions in North-Eastern India and Burma. The following gives data in illustration:—

Area.	Variation of mean temperature from normal in			
	October.	November.	December.	Period, October to December.
	°	°	°	°
Bihar	—1·5	+1·1	+1·6	+0·4
Chota Nagpur	—1·1	+1·1	+3·6	+1·2
Bengal	+0·2	+0·6	+1·8	+0·9
Orissa	—0·1	+0·4	+2·6	+1·3
Assam	+0·6	+0·9	+1·4	+1·0
Burma	+0·8	0	+1·8	+0·9

(2) Temperature differed slightly on the mean of the whole period from the normal in North-Western India.

Temperature was normal or below it to a slight extent in that area in October and December and was in considerable to large excess in November, and hence on the mean of the whole period the variations were as small as in North-Eastern India. The following gives data:—

Area.	Variation of mean temperature from normal in			
	October.	November.	December.	Period, October to December.
	°	°	°	°
Baluchistan	+1·0	+5·0	—0·6	+1·8
Punjab	—1·0	+4·0	—0·1	+1·0
Sind	+0·3	+4·3	—0·4	+1·4
Rajputana	—1·0	+4·3	+1·4	+1·6
North-Western Provinces	—1·5	+2·7	+1·6	+0·9

(3) Temperature was in increasing excess throughout the period in the area including Berar, Central India, the Central Provinces, the Bombay Deccan and the Madras Deccan, and was in very large excess over the greater part of that area in the month of December. The following gives data:—

Area.	Variation of mean temperature from normal in			
	October.	November.	December.	Period October to December.
	°	°	°	°
Central India	—2·1	+3·2	+4·1	+1·7
Berar	—1·1	+1·6	+8·0	+2·8
Central Provinces	—1·6	+1·8	+6·3	+2·2
Bombay Deccan	+1·2	+2·8	+5·4	+3·1
Madras Deccan	+1·3	+2·1	+3·4	+2·3

The following gives comparative data for the stations at which the excess on the mean of the period was greatest:—

Station.	Variation from normal during period, October to December, of		
	Maximum temperature	Minimum temperature.	Mean temperature.
Malegaon	+5·4°	+2·8°	+4·1°
Akola	+3·7	+1·5	+2·6
Amraoti	+3·0	+2·6	+2·8
Khandwa	+4·9	+2·4	+3·7
Nagpur	+3·1	+1·9	+2·5
Chanda	+2·8	+2·8	+2·8
Sholapur	+3·6	+2·6	+3·1

The year.—The following table gives the variations of the mean temperature of Extra-Tropical and Tropical India and also of the whole of India from the normal, month by month, during the year 1900:—

Month.	Variation from normal of mean daily temperature in		
	Extra-Tropical India from Table II.	Tropical India from Table II.	Whole India from Table II.
	°	°	°
January	−0·3	+2·8	+1·2
February	+1·5	+2·7	+2·1
March	+2·9	+1·8	+2·4
April	−1·2	+1·4	0
May	−0·1	+1·8	+0·8
June	+1·5	+2·3	+1·9
July	+1·5	+1·1	+1·3
August	+0·7	+0·9	+0·8
September	−0·2	+0·4	+0·1
October	−0·6	+0·6	0
November	+2·2	+1·2	+1·7
December	+0·5	+3·0	+1·8
Whole year	+0·7	+1·7	+1·2

The preceding data indicate the chief variations of the mean temperature of the Indian land area from month to month during the year.

The most important feature of the mean temperature of the year was the excess over the whole Indian area.

The following gives comparative data in illustration:—

Area.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Baluchistan (Quetta)	+0·1	+0·9	+0·5
Punjab	−0·3	+2·1	+0·9
Rajputana	+1·0	+2·7	+1·9
Sind	+1·8	+1·5	+1·7
Central India	+1·4	+2·3	+1·9
Chota Nagpur	+0·7	+1·5	+1·1
Central Provinces	+2·1	+2·4	+2·3
Berar	+3·0	+2·2	+2·6
West Coast	+0·2	+0·9	+0·6
Bombay Deccan	+3·1	+1·2	+2·2
Madras Coast	+1·0	+0·8	+0·9
Madras Deccan	+2·6	+2·1	+2·4
South India	+1·2	+1·4	+1·3

The excess was most pronounced in the areas including Upper Sind, South Rajputana, Khandesh, Central India, Berar, the west and south of the Central Provinces and the Deccan, in which it ranged between 2°·0 and 3°·1. It was 2°·5 or upwards at stations for which data are given below:—

Station.	Variation from normal of		
	Maximum temperature.	Minimum temperature.	Mean temperature.
	°	°	°
Jacobabad	+2·5	+2·8	+2·6
Malegaon	+3·7	+1·3	+2·6
Akola	+3·3	+1·9	+2·6
Amraoti	+2·7	+2·4	+2·6
Nagpur	+2·9	+2·4	+2·7
Chanda	+2·8	+3·4	+3·1
Sholapur	+2·6	+2·6	+2·7
Bijapur	+3·7	+1·5	+2·6
Secunderabad	+2·8	+2·6	+2·7
Cuddapah	+3·4	+1·7	+2·5

The mean temperature of the year at the hill stations in the West Himalayas was generally slightly below the normal. At the remaining hill stations in Northern and Central India the excess was less than at the neighbouring plains stations.

The following gives comparative data for the Himalayan stations:—

Station.	Variation from normal of		
	Maximum temperature.	Minimum temperature.	Mean temperature.
	°	°	°
Murree	−2·2	−0·6	−1·4
Leh	−2·7	−0·1	−1·4
Kailang	−0·1	+0·9	+0·4
Simla	−0·7	−0·3	−0·5
Chakrata	−1·3	−0·5	−0·9
Ranikhet	−0·3	+0·4	+0·1
Darjeeling	+1·2	+0·4	+0·8

The data hence indicate that the feature of higher temperature than usual on the mean of the year was exhibited in the lower atmospheric strata, and that in the middle and higher atmospheric strata the mean temperature of the year was probably lower than usual.

The following table gives the progressive variation of the mean actual temperature of India during the past 26 years :—

Year.	Number of stations.	Mean anomaly.	Progressive variation.
		°	°
1875	72	—0·29	...
1876	72	—0·08	+0·21
1877	74	+0·17	+0·25
1878	74	+0·62	+0·45
1879	70	—0·13	—0·75
1880	106	+0·13	+0·26
1881	110	—0·01	—0·14
1882	113	—0·11	—0·10
1883	122	—0·48	—0·37
1884	122	—0·61	—0·13
1885	118	—0·29	+0·32
1886	122	+0.08	+0·37
1887	126	—0·23	—0·31
1888	127	+0·36	+0·59
1889	81	+0·86	+0·50
1890	85	+0·13	+0·73
1891	72	—0·03	—0·16
1892	74	+0·66	+0·69
1893	68	—1·33	—1·99
1894	66	+0·11	+1·44
1895	69	+0·35	+0·24
1896	67	+1·30	+0·95
1897	75	+0·90	—0·40
1898	75	+0·65	—0·25
1899	52	+0·78	+0·13
1900	50	+1·17	+0·39

A remarkable feature of the meteorology of India during the past seven years 1894—1900 has been the persistent excess of temperature (averaging for the whole period 0·75°).

Atmospheric Pressure.

Full information of the barometers in use at Indian observatories and of the methods of reducing the observations and obtaining the mean daily and monthly pressures will be found in the annual reports formerly issued by the Department (*e.g.*, pages 58 and 59 of the report for 1890) and also in page 10 of the monthly review for January 1900.

In Table II of each monthly review the monthly mean daily pressure (corrected for temperature) is given in the fifth figure column, and the variation from the normal in the sixth figure column. The normal monthly mean pressure values were recalculated for all first and second class stations in 1896, and will be found in Table VI of the Annual Summary for that year. The additional data for the years 1891—1896 were utilized in calculating these means, which are hence based upon the whole of the available data up to the year 1896. The variation data in the monthly reviews for the year 1900 were obtained by a comparison of the actual monthly means with the corresponding normal monthly means published in the Annual Summary for 1896, and the variations of the monthly pressures of all first and second class stations in 1900 are given in Table XIII (below). The figures in the fifth and sixth figure columns of Table II appended to the present Annual Summary, giving data of the mean pressure of the air and its variations from the normal for all first and second class stations, are comparable with the corresponding data of previous years published in the annual reports and summaries.

In the seventh figure column of Table II in each monthly review the mean pressures reduced to sea-level and corrected to constant gravity (Lat. 45°) are given. These, it should be noted, are not comparable with the sea-level pressure values of the years 1875—90 as given in the annual reports for those years, for previously to 1891 no correction was made to reduce the monthly pressure means to standard gravity.

In Table I of each monthly review, and also in that appended to the Annual Summary, the pressure data are given for a fixed hour (*viz.*, 8 A.M. local time) of the day. The second figure column in those tables gives the mean 8 A.M. pressures for the month corrected for temperature. In the third figure column the variations of the mean 8 A.M. pressures from the normal mean 8 A.M. pressures are exhibited.

Normal 8 A.M. mean monthly data for the great majority of stations will be found in the Annual Summary of 1894, Tables VII and VIII.

The mean pressure data for the year 1900 will be found under the headings "Pressure" in Tables I and II appended to the present Annual Summary :—

TABLE XIII.—*Comparison of monthly mean pressures in 1900 with the averages of past years.*

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
Burma Coast and Bay Islands.	Port Blair	+·023	+·010	+·032	+·033	+·055	+·005	+·010	+·001	+·037	+·021	−·004	+·034	+·021
	Rangoon	−·010	−·012	+·018	+·013	+·034	−·017	0	−·041	+·014	+·004	−·015	+·012	0
	Diamond Island	0	−·004	+·019	+·021	+·042	−·019	−·001	−·032	+·025	+·005	−·010	+·011	+·005
	Cocos Island	−·032	−·018	+·026	+·056	?	?	?	+·021	?	?	+·026	+·032	?
	Akyab	−·013	−·013	+·017	+·011	+·033	?	+·006	−·054	+·031	+·019	−·018	+·002	+·002
Bengal and Orissa.	Chittagong	−·011	−·014	+·014	+·018	+·046	−·012	+·020	−·057	+·026	+·017	−·017	+·024	+·005
	Calcutta (Alipore)	+·001	−·010	+·002	+·027	+·076	−·007	+·028	−·040	+·038	+·045	−·020	+·011	+·013
	Saugor Island	0	−·011	+·007	+·028	+·074	−·014	+·022	−·052	+·024	+·037	−·017	+·005	+·009
	False Point	−·015	−·030	−·005	+·021	+·057	−·030	+·001	−·067	0	+·023	−·018	+·001	−·005
Gangetic Plain and Chota Nagpur.	Hazaribagh	+·004	−·001	+·017	+·015	+·057	+·006	+·021	−·036	+·014	+·044	−·020	+·008	+·011
	Darbhanga	0	−·029	−·005	+·009	+·059	+·007	+·019	−·021	+·043	+·030	−·027	+·006	+·008
	Allahabad	−·004	−·022	−·007	+·026	+·061	−·008	−·004	−·047	+·017	+·044	−·029	+·003	+0·03
Upper Sub-Himalayas.	Dehra Dun	−·003	−·014	+·003	+·024	+·050	−·006	−·001	−·014	+·047	+·035	−·027	+·017	+·009
	Roorkee	−·006	−·019	−·001	+·043	+·063	+·003	+·009	−·014	+·058	+·045	−·031	+·018	+·014
	Meerut	−·020	−·031	−·013	+·030	+·054	?	−·008	−·036	+·047	+·040	−·039	+·010	+·003
	Lahore	−·010	−·014	−·007	+·051	+·062	−·006	−·008	−·020	+·056	+·052	−·039	+·015	+·011
	Ludhiana	−·004	−·013	−·007	+·036	+·052	?	−·015	−·025	+·042	+·038	−·021	+·027	+·010

TABLE XIII.—*Comparison of monthly mean pressures in 1900 with the averages of past years*—contd.

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
Indus Valley and North-West Rajputana.	Peshawar	−·016	−·012	−·006	+·057	+·080	+·022	−·001	−·014	+·033	+·048	−·028	+·016	+·015
	Jacobabad	+·027	−·020	−·011	+·032	+·056	−·004	−·012	−·035	+·015	+·046	−·040	+·027	+·007
	Kurrachee	+·031	−·002	−·003	+·012	+·081	−·002	+·015	−·040	+·019	+·057	−·020	+·016	+·014
East Rajputana, Central India and Gujarat.	Jaipur	−·006	−·012	+·008	+·030	+·068	+·002	+·013	−·043	+·031	+·052	−·019	+·002	+·011
	Deesa	+·004	−·002	+·012	+·008	+·068	0	+·006	−·050	+·016	+·052	−·022	−·005	+·007
Deccan	Belgaum	−·007	−·007	+·015	+·008	+·044	+·007	−·009	−·012	+·022	+·030	−·008	+·002	+·007
	Sholapur	−·024	−·024	+·007	+·009	+·054	−·008	−·003	−·024	+·009	+·037	−·006	−·007	+·002
	Poona	−·009	+·002	+·028	+·017	+·057	+·014	−·003	−·029	+·026	+·044	−·007	−·005	+·011
	Akola	−·034	−·020	+·017	+·012	+·061	−·005	+·003	−·032	+·012	+·051	−·002	−·010	+·005
	Buldana	−·020	−·013	+·021	+·015	+·059	−·005	−·001	−·037	+·009	+·054	−·004	−·008	+·006
	Khandwa	−·014	−·005	+·028	+·019	+·068	−·009	−·003	−·047	+·006	+·061	−·006	−·015	+·007
	Nagpur	−·026	−·014	+·019	+·024	+·062	−·002	+·014	−·035	−·003	+·060	−·001	−·001	+·008
	Hyderabad (Deccan).	−·012	−·019	+·020	+·026	+·048	+·006	0	−·014	+·013	+·047	−·017	−·013	+·007
West Coast	Bombay	+·005	+·008	+·028	+·026	+·066	+·023	−·002	−·035	+·028	+·043	−·019	−·003	+·014
	Karwar	+·012	+·014	+·040	+·028	+·066	+·023	+·002	+·013	+·035	+·040	−·004	+·019	+·024
South India	Salem	0	−·016	+·003	+·003	+·025	−·010	−·021	−·018	+·011	+·024	−·001	+·015	+·001
	Chitaldroog	+·005	−·015	+·026	+·010	+·034	+·015	−·016	−·003	+·025	+·033	−·022	−·009	+·007
	Bangalore	−·003	−·007	+·013	+·011	+·044	+·005	−·011	0	+·017	+·022	−·002	+·013	+·009
	Hassan	+·015	−·004	+·033	+·017	+·033	+·024	−·012	+·001	+·024	+·021	−·016	+·006	+·012
	Mysore	+·005	−·011	+·032	+·013	+·027	+·023	−·012	+·006	+·027	+·025	−·015	+·006	+·011
	Madras	+·002	−·012	+·011	+·022	+·056	−·011	−·005	−·016	+·016	+·032	+·004	+·019	+·010
	Bellary	−·021	−·025	+·016	+·005	+·041	−·006	−·014	−·013	+·013	+·025	−·009	+·004	+·001
Baluchistan	Quetta	+·013	+·018	+·035	+·022	+·042	+·043	+·020	−·004	+·027	+·045	−·009	−·016	+·020
Hill Stations, Northern India.	Leh	−·044	+·028	+·074	−·028	+·056	+·035	+·031	+·012	+·027	+·034	+·030	−·014	+·020
	Srinagar	−·021	+·003	+·044	+·016	+·069	+·059	+·012	+·008	+·009	+·040	−·033	−·032	+·015
	Simla (Ridge)	−·013	+·006	+·047	+·026	+·059	+·028	+·021	+·016	+·050	+·052	+·017	+·008	+·026
	Chakrata	−·021	−·001	+·047	+·031	+·095	+·042	+·036	+·012	+·035	+·038	−·002	+·012	+·027
	Ranikhet	+·015	+·004	+·036	+·020	+·063	+·011	+·010	−·001	+·045	+·052	+·001	+·034	+·024
	Darjeeling	+·049	+·023	+·040	+·033	+·081	+·033	+·043	+·030	+·063	+·065	+·026	+·044	+·044
Hill Stations, Central India.	Mount Abu	−·053	−·021	+·012	−·006	+·043	+·009	+·004	−·054	+·007	+·031	−·024	−·032	−·007
	Pachmarhi	−·016	−·009	+·019	+·015	+·055	+·004	+·014	−·053	−·021	+·045	−·001	+·003	+·005
	Chikalda	−·023	−·010	+·016	+·015	+·055	+·004	+·004	−·041	−·015	+·039	−·004	−·002	+·003

TABLE XIII.—*Comparison of monthly mean pressures in 1900 with the averages of past years*—concld.

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
Hill Station, Southern India.	Wellington	+·014	+·007	+·028	+·014	+·055	+·019	—0·03	+·008	+·024	+·032	+·007	+·029	+·020
Extra Indian Stations.	Aden	+·015	—·022	+·011	+·013	+·051	+·058	+·027	+·018	+·001	+·036	—·030	—·029	+·012
	Perim	+·029	+·002	—·007	—·032	+·035	+·075	+·039	+·037	+·025	+·070	+·019	+·015	+·025
	Zanzibar	+·022	+·025	+·032	+·040	+·006	+·020	—·005	+·010	+·026	+·026	—·023	+·009	+·016
	Port Victoria (Seychelles).	+·005	—·002	+·030	+·004	+·002	+·034	—·003	+·030	+·025	+·023	—·020	—·006	+·010
	Mauritius	+·041	+·019	—·014	—·018	—·017	—·022	+·024	+·009	—·002	+·036	+·004	+·056	+·01

The following tables give summaries of the pressure variation data according to the two groups of divisions employed in the corresponding tables of temperature variation data, that is, for the sixteen divisions for which the variation data were given in the "Geographical Summaries" in the annual reports previous to 1891 and the eleven meteorological provinces in Table I of each monthly review:—

TABLE XIV.—*Geographical Summary of the pressure variation data of Table II in the monthly weather reviews of 1900.*

Meteorological Province.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
North-West Himalaya	5	—·017	+·008	+·050	+·013	+·068	+·035	+·022	+·009	+·033	+·043	+·003	+·002	+.022
Sikkim Himalaya and Nepal.	1	+·049	+·023	+·040	+·033	+·081	+·033	+·043	+·030	+·063	+·065	+·026	+·044	+·044
Punjab Plains	2—3	—·010	—·013	—·007	+·048	+·065	+·008	—·008	—·020	+·044	+·046	—·029	+·019	+·012
Gangetic Plain	4—5	—·007	—·023	—·005	+·026	+·057	—·001	+·003	—·026	+·042	+·039	—·031	+·011	+·007
Western Rajputana	4	+·002	—·011	+·003	+·012	+·062	+·001	+·003	—·045	+·014	+·047	—·027	+·002	+·005
Eastern Rajputana and Central India.	1	—·006	—·012	+·008	+·030	+·068	+·002	+·013	—·043	+·031	+·052	—·019	+·002	+·011
Nerbudda Valley	1	—·014	—·005	+·028	+·019	+·068	—·009	—·003	—·047	+·006	+·061	—·006	—·015	+·007
Chota Nagpur	1	+·004	—·001	+·017	+·015	+·057	+·006	+·021	—·036	+·014	+·044	—·020	+·008	+·011
Lower Bengal	2	+·001	—·011	+·005	+·028	+·075	—·011	+·025	—·046	+·031	+·041	—·019	+·008	+·011
Orissa	1	—·015	—·030	—·005	+·021	+·057	—·030	+·001	—·067	0	+·023	—·018	+·001	—·005
Central Provinces South and Berar.	5	—·024	—·013	+·018	+·016	+·058	—·001	+·007	—·040	—·004	+·052	—·002	—·004	+·005
Konkan	2	+·009	+·011	+·034	+·027	+·066	+·023	0	—·011	+·032	+·042	—·012	+·008	+·019
Deccan, Hyderabad and Mysore.	9	—·006	—·012	+·021	+·013	+·042	+·009	—·009	—·010	+·020	+·032	—·011	0	+·007
East Coast and Carnatic.	2	+·001	—·014	+·007	+·013	+·041	—·011	—·013	—·017	+·014	+·028	+·002	+·017	+·006
Arakan and Pegu	3—4	—·009	—·011	+·017	+·016	+·039	—·016	+·006	—·046	+·024	+·011	—·015	+·012	+·002
Bay Islands	1—2	—·005	—·004	+·029	+·045	+·055	+·005	+·010	+·011	+·037	+·021	+·011	+·033	+·023
Extra-Tropical India	22—24	—·005	—·009	+·013	+·023	+·065	+·008	+·010	—·024	+·031	+·044	—·017	+·008	+·012
Tropical India	23—25	—·007	—·009	+·021	+·018	+·048	+·003	—·002	—·020	+·017	+·033	—·007	+·007	+·009
Whole India	45—49	—·006	—·009	+·017	+·020	+·056	+·006	+·004	—·022	+·024	+·038	—·012	+·007	+·010

TABLE XV.—*Variations of the mean monthly pressure from the normal in 1900 in the eleven meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
	"	"	"	"	"	"	"	"	"	"	"	"	"
Burma Coast and Bay Islands	—·004	—·007	+·010	+·008	+·037	—·014	—·001	—·040	+·026	+·007	0	+·019	+·003
Burma Inland . . .	+·029	+·012	+·008	+·019	+·052	+·005	+·012	—·033	+·057	+·027	—·008	+·011	+·016
Assam	—·004	—·008	+·012	+·019	+·055	—·011	+·015	—·026	+·060	+·035	—·007	+·013	+·013
Bengal and Orissa . .	—·003	—·015	+·002	+·021	+·066	—·014	+·022	—·037	+·039	+·038	—·001	+·018	+·011
Gangetic Plain and Chota Nagpur.	—·008	—·019	—·005	+·025	+·069	+·003	+·011	—·032	+·031	+·047	—·014	+·016	+·010
Upper Sub-Himalayas . .	—·012	—·008	—·007	+·037	+·061	+·001	—·001	—·012	+·050	+·047	—·019	+·023	+·013
Indus Valley and North-West Rajputana.	+·002	—·006	—·010	+·036	+·068	+·002	—·007	—·017	+·038	+·055	—·028	+·016	+·012
East Rajpurana, Central India and Gujarat.	—·010	—·006	+·011	+·019	+·073	+·007	+·019	—·046	+·019	+·052	—·013	—·006	+·010
Deccan	—·015	—·013	+·012	+·019	+·064	+·004	+·010	—·033	+·008	+·054	+·007	+·004	+·010
West Coast	0	+·002	+·023	+·021	+·061	+·013	—·003	—·003	+·026	+·029	—·004	+·003	+·014
South India	—·002	—·007	+·014	+·015	+·052	0	—·003	—·005	+·019	+·029	+·013	+·020	+·012

I.—The cold weather period.—The mean pressure of the Indian area was normal or in very slight defect in January and February.

Weather was less disturbed and drier than usual in January. It was, on the other hand, somewhat more unsettled than usual in February in parts of North-Western India due to the advance of a series of six cold weather depressions across Baluchistan and Northern India during the month. They were, however, very feeble, and the accompanying precipitation of the month was generally below the normal over the plains of India.

Pressure varied from the normal over the Indian area in January by amounts averaging —·007″ for Tropical India and—·005″ for Extra-Tropical India, and in February it was in defect by amounts averaging —·009″ both in Tropical India and Extra-Tropical India. The mean pressure of the whole Indian area for the period was only ·008″ below the normal.

Pressure, on the mean of the period, was in slight relative excess in Gujarat, Kathiawar, Cutch and Sind and also in the centre and south of the Bay of Bengal. It was also in slight relative excess locally in the North Punjab and (if the observations can be accepted) in considerable excess in Upper Burma, and normal in North-East India. It was in slight relative defect over the remainder of India, including nearly the whole of the interior. The following table gives the mean pressure anomalies in different parts of India for the period :—

AREA.	PRESSURE ANOMALY.		
	January.	February.	Period, January and February.
	"	"	"
Baluchistan (Quetta)	+·010	+·025	+·018
Punjab	—·005	+·006	+·001
Sind	+·026	+·004	+·015
North-Western Provinces and Oudh .	—·009	—·013	—·011
Rajputana	—·004	—·002	—·003
Gujarat	0	+·017	+·009
Central India	—·015	—·002	—·009
Central Provinces	—·015	—·006	—·011
Berar	—·021	+·007	—·007
Bihar	+·004	—·014	—·005
Chota Nagpur	0	+·007	+·004
Bengal	+·002	—·005	—·002
Assam	0	0	0
Orissa	—·008	—·024	—·016
Bombay Deccan	—·003	+·002	—·001
West Coast	+·004	+·010	+·007
Madras Deccan	—·008	—·013	—·011
Madras Coast	+·004	—·001	+·002
South India	+·005	+·004	+·005
Burma	+·012	+·008	+·010
Andamans (Port Blair) . . .	+·025	+·018	+·022
Ceylon (Colombo)	+·003	0	+·002

The only important local feature of the pressure conditions was a considerable excess in Upper Burma. Comparative data are given below for stations in that area, but

it is doubtful whether they can be accepted, as the observations taken at these stations have been more or less unsatisfactory from the beginning, and hence the means based on these observations are of very doubtful validity :—

Station.	Pressure anomaly.		
	January.	February.	Period, January and February.
	"	"	"
Bhamo	+·068	+·051	+·060
Kindat	+·044	+·030	+·037
Mandalay	+·056	+·034	+·045

Pressure in January was generally in slight relative defect at the level of the hill stations in Northern India and in moderate excess in February, and was hence in slight excess on the mean of the period in the case of the majority of the hill stations in the North-West Himalayas and in Baluchistan. The following gives data for eight pairs of stations :—

Hill and Plain Stations.	Vertical pressure anomaly.		
	January.	February.	Period, January and February.
	"	"	"
Leh and Lahore	—·049	+·049	0
Murree and Peshawar	+·024	+·045	+·035
Simla and Ludhiana	—·006	+·011	+·003
Ranikhet and Bareilly	+·021	+·028	+·025
Chakrata and Roorkee	0	+·030	+·015
Darjeeling and Dhubri	+·052	+·056	+·054
Mount Abu and Deesa	—·037	—·003	—·020
Quetta and Jacobabad	—·015	+·040?	+·013?

The following data for eleven meteorological provinces illustrate the local conditions in India in January and February :—

Meteorological Province.	Pressure anomaly.		
	January.	February.	Period, January and February.
	"	"	"
Burma Coast and Bay Islands	0	+·001	+·001
Burma Inland	+·033	+·020	+·027
Assam	0	0	0
Bengal and Orissa	+·001	—·007	—·003
Gangetic Plain and Chota Nagpur	—·004	—·011	—·008
Upper Sub-Himalayas	—·008	0	—·004
Indus Valley and North-West Rajputana.	+·006	+·002	+·004
East Rajputana, Central India and Gujarat.	—·005	+·002	—·002
Deccan	—·011	—·005	—·008
West Coast	+·004	+·010	+·007
South India	+·002	+·001	+·002

II.—The hot weather period.—Weather was less disturbed and much drier than usual in March over Northern India. Three storms or depressions formed or appeared in Upper India during the month, but they were of slight intensity, and hence affected the weather very slightly in Upper India. April was unusually disturbed, and the rainfall of the month was considerably above the average over the greater part of the country. In some parts of Southern India the rainfall of the month was three to four times the normal of the month.

May was hotter than usual. A cyclonic storm passed into Lower Burma from the Bay on the 5th and was followed by moderate rain during the next two days. Frequent series of thunderstorms occurred in Bengal and Assam during the second and third weeks of the month. Weather was also unusually disturbed in Upper India due to three hot weather depressions.

The mean pressure of the Indian area was in increasing excess throughout the period, and was in May largely above the normal of the month over the whole Indian area, as is shown by the following statement :—

Month.	Mean pressure variation.			
	Whole India.		Tropical India.	Extra-Tropical India.
	From data of Table I.	From data of Table II.		
	"	"	"	"
March	+·006	+·017	+·021	+·013
April	+·021	+·020	+·018	+·023
May	+·061	+·056	+·048	+·065

Pressure averaged ·029″ in excess for the whole period.

The following table gives the corresponding temperature variation data for the whole of India :—

Month.	Mean temperature variation from data of Table II.		
	Whole India.	Tropical India.	Extra-Tropical India.
	°	°	°
March	+2·4	+1·8	+2·9
April	0	+1·4	—1·2
May	+0·8	+1·8	—0·1

Temperature was hence on the mean of the whole of India in excess in March and May and normal in April.

The pressure variations were opposite in character to those which usually accompany increased temperature

and were hence not due to abnormal features of the local temperature conditions in India but probably to more general actions or conditions.

The following gives local pressure variations or anomalies for each month and for the whole period in each of the eleven meteorological provinces :—

Meteorological Province.	Pressure anomaly.			
	March.	April.	May.	Period, March to May.
	"	"	"	"
Burma Coast and Bay Islands	+·004	—·013	—·024	—·011
Burma Inland	+·002	—·002	—·009	—·003
Assam	+·006	—·002	—·006	—·001
Bengal and Orissa	—·004	0	+·005	0
Gangetic Plain and Chota Nagpur	—·011	+·004	+·008	0
Upper Sub-Himalayas	—·013	+·016	0	+·001
Indus Valley and North-West Rajputana.	—·016	+·015	+·007	+·002
East Rajputana, Central India and Gujarat.	+·005	—·002	+·012	+·005
Deccan	+·006	—·002	+·003	+·002
West Coast	+·017	0	0	+·006
South India	+·008	—·006	—·009	—·002

The above data show that the anomalies of the pressure distribution in India changed considerably from month to month during the greater part of the period, and that the only common feature throughout the period was a deficiency of pressure in Burma. The chief features indicated by the mean pressure anomalies of the period were—

(1) A slight to moderate relative deficiency of pressure in North-Eastern India and Burma and a slight excess in the Andamans. The deficiency was most persistent in Lower Burma and the excess in the Andamans.

The following gives comparative data for these areas :—

Area.	Pressure anomaly.			
	March.	April.	May.	Period, March to May.
	"	"	"	"
Port Blair	+·017	+·005	+·003	+·008
Lower Burma	+·005	—·010	—·024	—·010
Upper Burma	+·011	—·003	—·009	0
Bengal	—·004	—·003	+·001	—·002
Assam	+·006	—·002	—·006	—·001

This feature of deficient pressure in North-Eastern India, it may be noted, was well marked in April and May, and it is almost certain was influential in determining the Bay current in the earlier months of the rains more largely than usual to Burma, Assam and East Bengal.

(2) A relative excess of pressure in Kathiawar and Cutch, Gujarat, the Konkan, Central India, Berar, the central and western districts of the Central Provinces and the West Deccan, most persistent and marked in Berar, Central India, Kathiawar and Cutch.

The following gives comparative data for that area :—

Area.	Pressure anomaly.			
	March.	April.	May.	Period March to May.
	"	"	"	"
Central Provinces (West and Central).	+·007	—·003	+·009	+·004
Berar	+·023	+·007	+·010	+·013
Central India	+·009	+·006	+·011	+·009
Kathiawar and Cutch	+·013	—·017	+·012	+·003
Gujarat	+·011	—·018	+·012	+·002
Konkan	+·017	—·001	+·008	+·008
Bombay Deccan	+·012	—·001	+·001	+·004

This feature was well marked in March and May, but tended to disappear in April. It was chiefly a product of the temperature conditions of the Indian area during the period.

A similar contrast of the local anomalies (*viz.*, the contrast between the local excess of pressure in the west and north-west of the Peninsula and the local deficiency in North-Eastern India) obtained in the hot weather periods of 1899, 1898, 1897, 1896, 1895, 1894, 1892, 1890 and 1880.

(3) A local excess of pressure in the Punjab. It was very feebly marked in May, but was fairly well marked in April. It was probably of little importance.

The following gives data in illustration :—

Area.	Pressure anomaly.			
	March.	April.	May.	Period. March to May.
	"	"	"	"
Punjab	—·013	+·024	+·003	+·005

This feature, it may be noted, does not appear to have extended into Baluchistan or Persia, an illustration of an important fact that the persistent and abnormal features of the pressure conditions in the hot weather are, as a rule, restricted to India and do not affect the plateau of Central Asia or the Persian area.

(4) Pressure varied very slightly from the normal in the Gangetic Plain, Rajputana and Sind, as shown by the following data:—

Area.	Pressure anomaly.			
	March.	April.	May.	Period, March to May.
	"	"	"	"
Bihar	—·018	—·007	+·009	—·005
Chota Nagpur	+·005	+·003	+·003	+·004
North-Western Provinces and Oudh.	—·014	+·008	+·005	0
Sind	—·014	+·002	+·010	—·001
Rajputana	—·005	—·001	+·016	+·003

(5). An interesting feature of the pressure distribution of the period was the vertical pressure anomalies. They were positive and moderate on the mean of the period for the hill stations in North Western India. They were moderate to large in amount in March and small and generally negative in April and May.

The following gives the vertical pressure anomalies as determined from the pressure variations of eight pairs of stations in Northern and Central India:—

Hill and Plain Stations.	Vertical pressure anomaly.			
	March.	April.	May.	Period, March to May.
	"	"	"	"
Quetta and Jacobabad	+·053	—·009	—·004	+·013
Leh and Lahore	+·070	—·082	—·007	—·006
Murree and Peshawar	+·047	—·026	+·007	+·009
Simla and Ludhiana	+·049	—·007	+·022	+·021
Ranikhet and Bareilly	+·040	—·009	—·002	+·010
Chakrata and Roorkee	+·054	—·004	+·049	+·033
Mount Abu and Deesa	—·006	—·011	—·028	—·015
Pachmarhi and Hoshangabad	—·011	—·009	—·011	—·010

A comparison of the vertical pressure anomalies of the period with the temperature variations will show that excess or positive values of the one accompanied positive values of the other, and that they were roughly proportional. This is shown more clearly by the following statement:—

Month.	Mean vertical pressure anomaly, (Murree, Simla and Ranikhet). (a)	Mean temperature variation (North-Western Provinces and Punjab). (b)	Ratio of (a) to (b).
	"	"	
March	+·045	+3·4	·013
April	—·014	—2·9	·005
May	+·009	+0·2	·045
Mean of period	+·013	+0·2	·065

The following gives a fuller statement of the abnormal features of the pressure conditions of May.

The mean pressure of the Indian area in May was largely above the normal (·061″). Pressure was, relatively to the general condition, more or less in defect in Assam and Burma and in Southern India and the South Deccan, and was in excess in the remainder of India. The local deficiency was most marked in Lower Burma and the Madras Deccan, and the local excess was greatest in Cutch, Kathiawar, Lower Sind, South-West Rajputana and the western half of Central India. The following gives data for stations in the areas of greatest excess and deficiency of pressure:—

Area.	Station.	Pressure anomaly in May.		
		1900.	1899.	1898.
		"	"	"
Burma area of deficient pressure.	Moulmein	—·030	—·002	—·029
	Rangoon	—·036	—·009	—·029
	Bassein	—·021	—·012	—·015
	Tavoy	—·049	—·016	—·038
South India and South Deccan area of deficient pressure.	Kurnool	—·025	+·008	—·001
	Cuddapah	—·030	+·014	—·004
	Salem	—·023	+·013	—·001
Western and Central India area of excessive pressure.	Kurrachee	+·022	—·005	+·024
	Bhuj	+·026	+·018	?
	Rajkot	+·021	+·025	+·025
	Deesa	+·021	+·022	+·027
	Indore	+·023	+·029	+·025

The pressure variations in May 1887, 1894, 1895, 1896, 1897, 1898 and 1899 were similar in general character to those of May 1900, the chief difference being that they were slightly less marked in the year 1900 than in those years. The local deficiency in Southern India was a special feature of the year.

III.—The south-west monsoon period.—The south-west monsoon currents were established in the Arabian Sea much later than usual and were much below their normal strength until nearly the end of July. They began to give heavy rain on the Malabar Coast from the 12th and were strong until the 20th, when they fell off considerably in intensity. They strengthened again on the 24th and advanced northwards up the Konkan Coast as far as Bombay. The rainfall also extended during this period into the interior of the Peninsula and Central Provinces. Practically no monsoon rain fell in June over the large area comprising Gujarat, Kathiawar, Central India, West Rajputana, Sind or the South and West Punjab.

The Bay current was established at the head of the Bay on the 10th and 11th June and advanced rapidly up the Gangetic plain as far as Bihar during the next five days. A further advance accompanied the second storm of the month in the last week of the month and carried the rains over the greater part of the Gangetic plain and the East Punjab.

The Bombay current was weak during the first ten days of July. It increased on the 11th and advanced in moderate strength between the 11th and 16th over a considerable part of North-Western India. A second partial break occurred from the 19th to the 26th followed by a strong and fairly steady advance up to the limits of its extension in the Punjab.

The Bombay current was, during the next two months, stronger than usual and gave general and heavy rain over the whole of North-Western and Central India and the North Deccan.

The Bay current was of normal strength in July but was diverted more largely than usual to North-Eastern India. During the months of August and September, when the Bombay current was strong, the Bay current was diverted to some extent from Assam, North and East Bengal and was largely determined to the Gangetic Plain and Cen ral Indi·.

The following gives a brief statement of the more important variations of the mean pressure conditions in India during the months of June and July, when the Bombay current was greatly delayed and was feeble as a rain giving current, or as estimated by the area of extension of cloud and high humidity.

1st.—The mean pressure of the Indian area in both months was almost exactly normal, as shown below :—

Month.	Mean variation of pressure from normal.		
	Extra-Tropical India.	Tropical India.	Whole India.
	"	"	"
June	+·008	+·003	+·006
July	+·010	—·002	+·004

2nd.—The local pressure variations in June and July before the complete establishment of the monsoon were on the whole similar to those of the preceding month of May.

The following gives data in illustration :—

Province.	Pressure anomaly.		
	May.	June.	July.
	"	"	"
Burma	—·020	—·006	—·004
Assam	—·006	—·011	+·008
Bengal	+·001	—·015	+·015
Orissa	+·015	—·016	+·014
Bihar	+·009	+·002	+·009
Chota Nagpur	+·003	—·004	+·009
North-Western Provinces and Oudh	+·005	+·004	—·002
Punjab	+·003	+·001	—·012
Sind	+·010	+·002	—.001
Rajputana	+·016	+·005	+·004
Gujarat	+·012	+·013	+·014
Central India	+·011	+·003	+·010
Central Provinces	+·008	0	+·006
Berar	+·010	+·010	+·006
West Coast	0	+·013	—·010
Bombay Deccan	+·001	+·012	0
Mysore	—·015	+·012	—·016
Madras Coast	+·003	—·005	—·005
Madras Deccan	—·019	—·002	—·009
South India	—·017	+·004	—·011

The most important local persistent features were the following :—

(1) Slight deficiency of pressure in Lower Burma and the Andaman Sea. This is shown by the data for six stations in that area :—

Station.	Pressure anomaly.		
	May.	June.	July.
	"	"	"
Mergui	—·028	—·007	—·011
Moulmein	—·030	—·010	—·010
Rangoon	—·036	—·019	—·009
Diamond Island	—·015	—·016	—·006
Bassein	—·021	—·018	—·005
Port Blair	+·003	—·002	—·005

(2) Slight deficiency of pressure over the greater part of Southern India, as shown below :—

Station.	Pressure anomaly.		
	May.	June.	July.
	"	"	"
Madras	—·012	—·014	—·018
Bangalore	—·008	—·001	—·021
Salem	—·023	—·006	—·022
Negapatam	—·008	0	—·009
Colombo	—·017	+·008	—·010

(3) A slight persistent excess of pressure over the area defined by the stations for which data are given below, and

including Gujarat, Cutch, Kathiawar, South-West Rajputana and the western districts of Central India :—

Station.	Pressure anomaly.		
	May.	June.	July.
	"	"	
Veraval	—·010	+·028	+·012
Bhuj	+·026	+·010	+·020
Rajkot	+·021	+·014	+·015
Deesa	+·021	+·015	+·018
Neemuch	+·010	+·001	
Indore	+·023	+·021	+·022
Surat	+·003	+·012	+·002
Ahmedabad	+·018	?	+·026

(4) The vertical pressure anomalies were positive and moderate in amount at the hill stations in Northern India, indicating that there were no marked abnormal features in the vertical distribution of pressure. The excess of pressure at the level of the hill stations was a result of the high temperature in the adjacent plains.

(5) Pressure was in moderate defect in June at Mauritius and in moderate excess at the Seychelles and Zanzibar or gradients in the intermediate area were much below their normal intensity or strength. These abnormal conditions passed away in July. The following gives data :—

Station.	Variation of pressure from normal.		
	May.	June.	July.
	"	"	"
Mauritius	—·017	—·022	+·024
Zanzibar	+·006	+·020	—·005
Seychelles	+·002	+·034	—·003

The following gives the chief features of the mean pressure in India during the months of August and September, when both monsoon currents were vigorous, and were giving abundant rain over the greater part of the country.

(1) Pressure was in considerable defect in August and in considerable excess in September on the me an of he whole Indian area, as shown below :—

Month.	Extra-Tropical India.	Tropical India.	Whole India
	"	"	"
August	—·024	—·020	—·022
September	+·031	+·017	—·024

(2) The local pressure variations or anomalies in the months of August and September were of opposite character or sign over the greater part of India to those of the two preceding months. The following gives data :—

Province or Division.	Pressure anomaly.			
	Mean of June and July.	August.	September.	Mean of August and September
	"	"	"	"
Burma	—·005	—·017	+·012	—·003
Assam	—·002	—·001	+·032	+·016
Bengal	0	—·012	+·015	+·002
Orissa	—·001	—·027	—·010	—·019
Bihar	+·006	+·002	+·012	+·007
Chota Nagpur	+·003	—·012	—·020	—·016
North-Western Provinces and Oudh.	+ 001	—·005	+·011	+·003
Funjab	—·006	+·016	+·020	+·018
Sind	+·001	—·001	—·003	—·002
Rajputana	+·005	—·015	—·006	—·011
Gujarat	+·014	—·023	—·007	—·015
Central India	+·007	—·026	—·019	—·023
Central Provinces	+·003	—·018	—·034	—·026
Berar	+·008	—·002	—·016	—·009
West Coast	+·002	+·022	—·002	+·010
Bombay Deccan	+·006	+·002	—·007	—·003
Mysore	—·002	+·022	—·006	+·008
Madras Coast	—·005	+·016	—·011	+·003
Madras Deccan	— 006	+·015	—·011	+·002
South India	—·004	+·029	—·006	+·012

(3) The more important persistent local features or anomalies were :—

(*a*) Slight to moderate excess of pressure over the greater part of North-Western India, more pronounced in September than in August :—

Province or Division.	Pressure anomaly.	
	August.	September.
	"	"
Punjab	+·016	+·020
North-Western Provinces and Oudh	—·005	+·011
Bihar	+·002	+·012
Assam	—·001	+·032
Bengal	—·012	+·015

(*b*) A moderate to considerable deficiency of pressure over the broad belt of country between the areas of

increased pressure in Northern India and Southern India. The following gives comparative data:—

Province or Division.	Pressure anomaly.	
	August.	September.
	"	"
Central India	—·026	—·019
Berar	—·002	—·016
North Bombay	—·012	—·005
Central Provinces	—·018	—·034
Chota Nagpur	—·012	—·020
Orissa	—·027	—·010
Bombay Deccan	+·002	—·007
Rajputana	—·015	—·006

(*c*) Pressure was in slight to moderate local excess in Southern India in August and in slight defect in September due to the southward extension of the conditions (*a*) and (*b*).

(*d*) The vertical pressure anomalies were throughout the period positive in Northern India. They were large in amount in June, July and August and small in September. They were on the other hand, negative in Central and Southern India. The following gives data for ten pairs of stations:—

Pair of Stations.	Vertical pressure anomaly.				
	June.	July.	August.	September.	Period, June to September.
	"	"	"	"	"
Leh and Lahore	+·046	+·032	+·037	—·014	+·025
Murree and Peshawar	+·032	+·032	+·042	+·013	+·030
Quetta and Jacobabad	+·045	+·032	+·029	+·011	+·029
Simla and Ludhiana	+·054	+·050	+·053	+·018	+·044
Darjeeling and Dhubri	+·050	+·029	+·069	+·007	+·039
Ranikhet and Bareilly	+·025	+·021	+·033	+·001	+·020
Chakrata and Roorkee	+·057	+·048	+·034	0	+·035
Mount Abu and Deesa	—·014	—·022	+·001	—·019	—·014
Pachmarhi and Hoshangabad	+·021	—·006	—·020	—·022	—·007
Chikalda and Buldana	+·009	+·005	—·004	—·024	—·004

An important feature of this period is the succession of cyclonic storms which form usually in the Bay of Bengal and advance landwards, carrying heavy rain to these areas, and hence largely affecting and modifying the distribution of the rainfall of the period.

Two storms formed in the Bay in June. The first formed in front of the advancing monsoon in that area and passed into North-Eastern India, giving rain from the 12th to the 16th. The second storm formed in the north-west angle and passed into West and Central Bengal. It was of slight intensity.

One storm advanced from the Bay during the month of July. It marched from the head of the Bay on the 13th to the North-Western Provinces on the 15th. It was of moderate intensity. July was hence unusually free from storms in the Bay.

Four storms formed and advanced from the north of the Bay in August. They were all of slight to considerable intensity. The first marched north-westward across the Orissa Coast on the 31st July to the North-Western Provinces. The second crossed the Orissa Coast on the 10th and passed west-north-westward into Rajputana on the 14th. It gave a very heavy burst of rain over the whole area it passed over. The third storm crossed the Orissa Coast on the 18th and passed into East Rajputana on the 21st and filled up on the 22nd. It also gave very heavy rainfall to the districts it passed over, falls of 5 to 13 inches occurring in 24 hours at many stations in the storm area. The fourth storm crossed the Bengal Coast on the 26th and advanced north-westwards into the North-Western Provinces, where it filled up on the 31st.

The chief feature of the August storms (larger in number than usual) was the unusually heavy and general rain which they distributed over by far the greater part of Northern and Central India and the Central Provinces.

There was only one storm (a double storm of peculiar character) in September, remarkable for its prolonged existence from the 14th to the 28th and for the cyclonic downpour it gave over a portion of the area it traversed, more especially in South-West Bengal and the adjacent districts of Chota Nagpur and the Central Provinces.

The south-west monsoon proper of 1900 was characterised by a smaller number of disturbances than usual. August was the only month when the number was above the average.

IV.—***The retreating south-west monsoon.***—The south-west monsoon currents in the Bay withdrew much earlier than usual from the Bay area. In the first week of October weather was showery in Burma and Southern India and fine and dry elsewhere. There were two periods of stormy weather in the Bay. The first disturbance developed into a cyclonic storm of moderate intensity and advanced by a curved path into Orissa and Bengal, to which it gave a heavy downpour of rain from the 6th to the 12th. The Madras coast districts received frequent moderate rain from the 12th to the 19th. The second disturbance of the month in the Bay was diffused in character. It advanced from the centre of the Bay on the 22nd to the Coromandel Coast on the 24th, and broke up in the interior in North Mysore on the 25th and gave a moderate burst of rain to Southern India from the 24th to the 27th.

Weather was exceptionally fine and free from storms in the Bay in the months of November and December. Three feeble depressions advanced from Persia and Baluchistan into Upper India in the second half of December. They were of slight importance, except the second of the series. This formed over Persia on the 20th, passed through Baluchistan on the 21st and across Upper India on the 23rd and 24th. It gave some rain in the Punjab Plains and a moderately heavy fall of snow in the Punjab and Kashmir Himalayas. The chief feature of the period was the scanty rainfall over the greater part of the Peninsula. This accompanied the early withdrawal of the monsoon currents to the extreme south and south-east of the Bay in the last week of October.

The following table gives the pressure anomalies in the eleven meteorological provinces for each month of the period and for the whole period:—

Meteorological Province.	Pressure anomaly.			
	October.	November.	December.	Period, October to December.
	"	"	"	"
Burma Coast and Bay Islands	—·033	+·004	+·009	—·007
Burma Inland	—·013	—·004	—·001	—·006
Assam	—·005	—·003	+·001	—·002
Bengal and Orissa	—·002	+·003	+·006	+·002
Gangetic Plain and Chota Nagpur	+·007	—·010	+·004	0
Upper Sub-Himalayas	+·007	—·015	+·011	+·001
Indus Valley and North-West Rajputana.	+·015	—·024	+·004	—·002
East Rajputana, Central India and Gujarat.	+·012	—·009	—·018	—·005
Deccan	+·014	+·011	—·008	+·006
West Coast	—·011	0	—·009	—·007
South India	—·011	+·017	+·008	+·005

The pressure anomalies varied very considerably from month to month during the period. Pressure was generally in large excess in October, and was approximately normal in amount in November and December. The local pressure anomalies in October and November were inverse in character. Pressure was locally in moderate to considerable defect in Northern India and in moderate excess in the Peninsula in November. It was, on the other hand, relatively in excess in Northern India and in defect in the Peninsula in October. In December the anomalies were generally small in amount and of little significance. The only important feature was a moderate deficiency of pressure in Kathiawar, Gujarat and South-West Rajputana, which was the continuation and development of a feature that was very slightly shown in October, and was of considerable importance during the next four months.

The following gives the chief abnormal features of the period:—

(1) Pressure was in moderate excess over the whole Indian area in October and practically normal in amount in November and December. The following gives data:—

Area.	Mean variation of pressure from normal.			
	October.	November.	December.	Period, October to December.
	"	"	"	"
Extra-Tropical India	+·044	—·017	+·008	+·012
Tropical India	+·033	—·007	+·007	+·011
Whole India	+·038	—·012	+·007	+·011

(2) Pressure was in very slight excess on the mean of the whole period in the Andamans and Chota Nagpur and in slight defect in Burma. Over the remainder of Northern India the anomalies were slight and of no importance. The following gives data:—

Area.	Pressure anomaly.			
	October.	November.	December.	Period, October to December.
	"	"	"	"
Andamans (Port Blair)	—·020	+·019	+·021	+·007
Burma	—·026	+·003	+·004	—·006
Bengal	—·001	+·001	+·007	+·002
Assam	—·005	—·003	+·001	—·002
Orissa	—·013	+·011	+·005	+·001
Chota Nagpur	+·006	+·006	+·016	+·009
Bihar	+·006	—·005	—·007	—·002
North-Western Provinces and Oudh.	+·006	—·016	+·003	—·002
Punjab	+·011	—·017	+·009	+·001

(3) Pressure was in very slight excess on the mean of the period over the greater part of the Peninsula, as shown by the following data:—

Area.	Pressure anomaly.			
	October.	November.	December.	Period, October to December.
	"	"	"	"
Central Provinces	+·012	+·014	—·011	+·005
Berar	+·028	+·018	—·010	+·012
West Coast	—·012	0	—·009	—·007
Bombay Deccan	+·011	+·006	—·014	+·001
Madras Coast	—·007	+·022	+·012	+·009
Madras Deccan	+·002	+·019	+·006	+·009
South India	—·016	+·017	+·011	+·004

(4) Pressure was in increasing defect during the period in a small area, including Cutch, Kathiawar, Gujarat, Khandesh and South-West Rajputana.

The following table gives comparative data for stations in this area:—

Station.	Pressure anomaly.			
	October.	November.	December.	Period, October to December.
	"	"	"	"
Veraval	+·003	—·028	—·037	—·021
Rajkot	+·015	—·007	—·010	—·001
Surat	+·013	—·022	—·044	—·018
Deesa	+·019	—·013	—·025	—·006
Ajmer	+·001	—·020	—·029	—·016
Neemuch	+·008	—·014	—·028	—·011
Malegaon	+·013	—·003	—·026	—·005

This was in fact the only important persistent abnormal feature during the period. It was associated with a marked tendency to the formation of depressions in that region in the cold weather period of 1900-1901.

(5) A noteworthy feature of the period was the slight to considerable excess of pressure in the Persian area, which was apparently related to conditions in Southern Europe and Asia Minor and not to conditions in India :—

Station.	Variation of pressure from normal.			
	October.	November.	December.	Period, October to December.
	"	"	"	"
Baghdad	+·060	—·004	—·009	+·016
Bushire	+·045	—·010	+·008	+·014

(6) The vertical pressure anomalies were small and irregular in October and December and were large and positive in November. The following gives the vertical pressure anomalies as determined from the pressure variations of eight pairs of stations :—

Pairs of Stations.	Vertical pressure anomaly.			
	October.	November.	December.	Period, October to December.
	"	"	"	"
Quetta and Jacobabad	—·023	+·032	—·039	—·010
Murree and Peshawar	—·004	+·048	—·001	+·014
Simla and Ludhiana	+·013	+·035	—·019	+·010
Ranikhet and Bareilly	+·005	+·038	+·019	+·021
Darjeeling and Dhubri	+·042	+·052	+·050	+·048
Mount Abu and Deesa	—·024	—·005	—·019	—·016
Leh and Lahore	—·018	+·065	—·034	+·004
Chakrata and Roorkee	+·002	+·039	+·001	+·014

The Year.—The mean pressure of the year was on the average of the whole Indian area ·010″ above the normal and was in excess in all provinces. The excess was greatest in the submontane districts of the Punjab and North-Western Provinces, where it slightly exceeded ·020″. Data in illustration are given in the following table :—

Station.	Variation from normal of mean 8 A.M. pressure of year.	Pressure anomaly of year.
	"	"
Rawalpindi	+·024	+·013
Sialkot	+·026	+·015
Umballa	+·024	+·013
Gorakhpur	+·024	+·013
Jalpaiguri	+·022	+·011

Pressure was in excess by small and nearly equal amounts over the remainder of India. The following gives mean variation data of the year for twenty areas :—

Province or Area.	Variation from normal of mean 8 A.M. pressure of year.	Pressure anomaly of year.
	"	"
Baluchistan (Quetta)	+·022	+·011
Sind	+·014	+·003
Punjab	+·015	+·004
Rajputana	+·010	—·001
North-Western Provinces and Oudh	+·008	—·003
Bihar	+·007	—·004
Bengal	+·010	—·001
Assam	+·008	—·003
Lower Burma	+·008	—·003
Central India	+·006	—·005
Gujarat	+·004	—·007
Berar	+·013	+·002
Central Provinces	+·009	—·002
Chota Nagpur	+·014	+·003
Orissa	+·003	—·008
Bombay Deccan	+·013	+·002
Madras "	+·011	0
West Coast	+·013	+·002
Madras Coast	+·014	+·003
South India	+·011	0

Pressure was on the mean of the year more largely in excess at the hill stations than at the neighbouring plain stations. The following gives data for six pairs of stations :—

Pairs of stations.	Vertical pressure anomaly of year.
	"
Murree and Peshawar	+·021
Simla and Ludhiana	+·014
Chakrata and Roorkee	+·025
Ranikhet and Barielly	+·018
Darjeeling and Dhubri	+·043
Quetta and Jacobabad	+·014

As temperature was above the normal on the mean of the year over the whole of India, the excess of pressure in the Indian area was not a local temperature effect, but the resultant probably of more general conditions or actions. The slight relative increase of pressure at the hill stations was, on the other hand, such as invariably accompanies increased temperature in the neighbouring plains.

The following gives the variations oft he mean pressure of Extra-Tropical and Tropical India and also of the

whole of India fromthe normal, month by month, during the year 1900, for convenient reference : –

Month.	Variation from normal of mean pressure in			Variation of temperature, whole India, from Table II.
	Extra-Tropical India from Table II.	Tropical India from Table II.	Whole India from Table II.	
	"	"	"	°
January	—·005	—·007	—·006	+1·2
February	—·009	—·009	—·009	+2·1
March	+·013	+·021	+·017	+2·4
April	+·023	+·018	+·020	0
May	+·065	+·048	+·056	+0·8
June	+·008	+·003	+·006	+1·9
July	+·010	—·002	+·004	+1·3
August	—·024	—·020	—·022	+0·8
September	+·031	+·017	+·024	+0·1
October	+·044	+·033	+·038	0
November	—·017	—·007	—·012	+1·7
December	+·008	+·007	+·007	+1·8
Whole year	+·012	+·009	+·010	+1·2

The following gives the progressive variation of the mean annual pressure of the past 26 years for the Indian land area :—

Year.	Number of stations.	Mean anomaly.	Progressive variation.
		"	"
1875	33	—·007	
1876	35	—·007	0
1877	59	+·032	+·039
1878	65	+·002	—·030
1879	81	—·014	—·016
1880	93	—·003	+·011
1881	93	+·002	+·005
1882	93	—·010	—·012
1883	105	—·005	+·005
1884	107	+·010	+·015
1885	113	+·014	+·004
1886	118	—·003	—·017
1887	117	—·006	—·003
1888	109	+·011	+·017
1889	76	+·004	—·007
1890	77	—·009	—·013
1891	72	+·010	+·019
1892	72	—·022	—·032
1893	66	—·001	+·021
1894	66	—·012	—·011
1895	66	+·003	+·015
1896	68	—·001	—·004
1897	74	—·005	—·004
1898	74	—·018	—·013
1899	51	+·004	+·022
1900	49	+·010	+·006

The following gives a statement of the cyclones and more important cyclonic storms which affected the Indian area during the south-west monsoon of 1900, drawn up in the form adopted in the annual reports of the meteorology of India for the year 1886—1890. The tracks of these storms are given in Plate VI. at the end of the Summary :—

No.	Month.	Date.	Greatest observed barometric depression.	Character of storm.	Details of storm.
			"		
1	June	10th to 16th.	·49	Cyclonic storm of considerable intensity.	This storm was generated in the north of the Bay in front of the first permanent advance of humid south-west winds over the Bay. It drifted along a north-westerly track towards the Orissa Coast which it crossed near Puri on the morning of the 12th. It then began to recurve and marching through the eastern districts of the Central Provinces and Chota Nagpur passed into Central Bengal, where it filled up on the 16th. It was a storm of considerable intensity and gave a heavy burst of rain to the districts through which it passed. The strongest winds experienced in the storm area were of force 9 on board the *S.S. Itaura* and *Aratoon Apcar*.
2	June	21st to 25th.	·19"	Cyclonic storm of feeble intensity.	This storm formed in the north-west angle of the Bay of Bengal on the 21st and 22nd and advancing along a more northerly track than usual in June passed into South-West Bengal on the morning of the 23rd. It then recurved and marching north-eastwards passed into Central Bengal, where it broke up as a distinct cyclonic circulation on the 25th. The disturbance was throughout its existence feeble, the strongest winds in the Bay during its existence being only of force 7.
3	July	12th to 15th.	·26"	Cyclonic storm of moderate intensity.	This storm formed at the head of the Bay on the 12th and 13th. It drifted along a west-north-westerly track during the next two days, and was central near Agra on the morning of the 15th. It filled up rapidly during the day.

No.	Month.	Date.	Greatest observed barometric depression.	Character of storm.	DETAILS OF STORM.
					The strongest winds experienced in the Bay during its existence did not exceed force 7.
4	August .	28th July to 8th August.	·19″	Feeble cyclonic storm.	This storm was generated in the north west of the Bay, and drifting along a north-westerly track passed inland near Puri during the 31st July. It passed through Orissa and the Central Provinces on the 1st, into Baghelkhand on the 2nd where it filled up slowly during the next three or four days without changing its position to an appreciable extent. The strongest winds in the Bay during its existence were of force 9.
5	August .	8th to 16th	·27″	Cyclonic storm of moderate intensity.	This storm was generated in the north-west of the Bay on the 8th and 9th. It increased in intensity, and marching very slowly westwards crossed the Orissa Coast between Puri and False Point on the morning of the 11th. It continued to travel in the same westerly direction through the east of the Central Provinces on the 12th, the centre of the Central Provinces on the 13th, and South-East Rajputana and the western districts of Central India on the 14th, and was apparently absorbed into the area of quasi-permanent depression over the Western Desert on the 15th and 16th. The storm was noteworthy for the excessive burst of rain which accompanied it during its passage through the Central Provinces and Rajputana. The strongest winds experienced by ships in the Bay during its existence were of force 8.
6	August .	15th to 21st.	·45″	Cyclonic storm of considerable intensity.	This storm formed in the north of the Bay off the coast of Arakan on the 15th, and marching in a west by north direction passed inland across the Orissa Coast near Balasore on the morning of the 18th. It continued to drift in the same direction, and was central near Chaibassa on the 19th, Sutna on the 20th and to the west of Jhansi on the 21st. It broke up rapidly during the day. The storm was a concentrated disturbance and hurricane winds were experienced by the F. L. V. *Comet* on the afternoon of the 18th.
	August .	24th to 31st.	·18″	Feeble cyclonic storm.	This storm formed at the head of the Bay on the 24th and 25th. It travelled north-westwards and crossed the Bengal Coast to the east of Saugor Island during the 26th. The centre passed through Chota Nagpur on the 27th, the eastern districts of the North-Western Province on the 28th and the central districts of the North-Western Provinces on the 29th, and broke up during the next 36 hours. The strongest winds in the Bay were only of force 6.
8	September.	14th to 28th.	·22″	Cyclonic storm of moderate intensity.	This storm was the most remarkable of the year in several respects. It originated in the north-west angle of the Bay on the 14th and 15th, and drifting westward through Orissa passed into the east of the Central Provinces on the 18th. Whilst it was passing through the Central Provinces a second storm formed at the head of the Bay on the 18th and marching quickly westwards was absorbed by the first storm on the 19th. The combined disturbance developed and was practically stationary from the 19th to the 22nd. It began to move during the 22nd, and travelling slowly along a curved path through the Central Provinces during the next four days passed into the North-Western Provinces on the 27th and filled up in that area on the 28th. It had thus an existence of a fortnight, and is hence one of the longest lived storms in India on record. It occasioned an extraordinarily heavy downpour of rain in South and West Bengal. The strongest winds experienced in the Bay during the existence of the storm were of force 7.
9	October .	1st to 11th	·32″	Cyclonic storm of moderate intensity.	This storm was generated in the centre of the Bay on the 3rd and 4th and travelling northwards passed inland across the South Orissa Coast near Puri on the 6th. It thence passed into the south-east of the Central Provinces and was central near Raipur on the 8th. It now began to recurve and march in a north-easterly direction. The centre was near Daltonganj on the 9th and Hazaribagh on the 10th. It broke up during the next 24 hours. The strongest winds in the Bay experienced by vessels were of force 6.
10	October .	22nd to 25th.	·32″	Cyclonic storm of moderate intensity.	This storm was apparently generated to the east of the South Madras Coast on the 22nd. It drifted along a north-westerly track on the 23rd and crossed the Madras coast to the north of Madras on the morning of the 24th. The storm broke up rapidly as a distinct cyclonic circulation during the day. The strongest winds during the existence of the storm in the Bay were of force 7.

Winds.

The mean direction of the wind and the mean diurnal movement of the air, as measured by Robinson anemometers, are given for all second class stations in Table II in each monthly review. The normal values are also stated for the sake of ready comparison. The normal data of these elements, utilized in Table II of the Monthly Weather Reviews of the year 1900, will be found in a collected form in Tables XI and XII of the Annual Summary for 1896 (pages 638—644). The mean 8 A.M., wind directions for each month are laid down in the first chart in each monthly review. They are calculated in the usual manner by Lambert's formula from the 8 A.M., wind data given in Table I in each monthly review. As a general rule, the mean 8 A.M. wind directions vary little from the mean wind directions (calculated from the 10 and 16 hours wind data) in Table II of each monthly review, but in some cases and at certain seasons of the year they differ very considerably.

The chief features of the air movement over India in 1900 have been described in the monthly reviews of the year. The following gives a summary of the more important features for each period.—

I.—The cold weather period.—The first fortnight of January was remarkably free from cold weather storms. Two cold weather storms affected the weather in Northern India during the second half of the month, and occasioned a moderate to heavy burst of snow in the hills and of rain in the plains. There were six cold weather storms in February, but they were feeble, and the accompanying air movement was considerably less than usual in Upper India.

The winds at the hill stations in Northern India were generally considerably above their normal strength in January and moderately above in February. The following gives data in illustration :—

Station.	Mean daily air movement in miles.					
	Actual, January.	Normal, January.	Percentage variation from normal, January.	Actual, February.	Normal, February.	Percentage variation from normal, February.
Chakrata . .	212	123	+72	201	134	+50
Ranikhet . .	59	44	+34	54	57	— 5
Darjeeling . .	121	88	+38	168	137	+23
Mount Abu . .	168	119	+41	172	140	+23
Pachmarhi . .	97	78	+24	122	98	+24
Chikalda . .	162	123	+32	183	148	+24

Winds were on the mean of the month somewhat stronger and steadier than usual in January over the greater part of Northern India. They were below their normal strength in February in the Punjab and Sind and stronger than usual over the remainder of Northern India, and were on the mean of the period generally slightly above their normal strength, as is shown by the following data :—

Area.	Mean wind steadiness during cold weather period January and February.			Mean daily air movement in miles during cold weather period January and February.		
	Actual, percentage.	Normal, percentage.	Variation from normal.	Actual.	Normal.	Percentage variation from normal.
Bengal . . .	30	30	0	114	114	0
Bihar . . .	28	47	—19	82	77	+ 6
Chota Nagpur .	34	52	—18	171	154	+11
North-Western Provinces.	33	31	+ 2	86	62	+39
Punjab . .	30	23	+ 7	51	54	— 6
Rajputana . .	36	30	+ 6	164	149	+10

A noteworthy feature of the air movement at the head of the Bay in January was a strong easterly component in the northerly winds of the period instead of the normal feeble westerly component.

The chief feature of the air movement in February was the occasional occurrence of southerly winds on the Bengal Coast due to the passage eastwards of cold weather depressions across Bengal, rather than to the early establishment of hot weather conditions.

Winds were very irregular in direction on the mean of the period in Berar, Central India and the Central Provinces, although they were practically of normal steadiness. The following gives data of steadiness in illustration :—

Area.	Percentage of mean wind steadiness.			
	January.	February.	Mean of period January and February.	Variation from normal of period January and February.
Berar	24	42	33	+10
Central Provinces. . .	16	22	19	— 8

In Central India and the North Deccan the air movement was from north-west instead of from the normal north-easterly direction.

The air movement in Bombay, South India and Mysore was practically normal both in January and February. It was, on the other hand, somewhat stronger in both months in the Deccan, the Central Provinces and Berar and feebler in the Madras Coast districts.

The following gives comparative data showing the

variations of the intensity of the diurnal air movement from the normal in the Peninsula during this period:—

Area.	Mean daily air movement in miles.				
	Actual, January.	Actual, February.	Mean actual of period January and February.	Mean normal of period January and February.	Percentage variation from normal of period January and February.
Central Provinces	137	126	132	96	+38
Berar	152	155	154	117	+32
Deccan	152	155	154	149	+ 3
Madras Coast	99	106	103	133	—23
Mysore	149	134	142	142	0
Konkan	164	169	167	163	+ 2

The following gives a statement of the mean wind force and its variation from the normal in the Bay of Bengal and Arabian Sea:—

Area.	Mean daily force of wind (Beaufort's notation).					
	Actual, January.	Variation from normal, January.	Actual, February.	Variation from normal, February.	Mean actual of period January and February.	Variation from normal of period January and February.
Bay of Bengal	2·9	—0·1	2·5	0	2·7	—0·1
Arabian Sea	3·7	+0·4	3·1	+0·1	3·4	+0·3

The statement indicates that the drift from north-east across the Arabian Sea was slightly stronger than usual in both months by amounts averaging about twenty miles per diem.

II.—The hot weather period.—Weather was on the whole less disturbed than usual in March and May in the Indian area, but was unusually disturbed in Northern India and the Peninsula in April.

The hot weather conditions were generally very strongly marked in March, more especially in the Punjab, Sind and Rajputana. The temperature variations were slight to moderate in amount in April and May, the chief features in these two months being a moderate deficiency in Upper India and a moderate excess in the Deccan area. There was a largish excess in Burma in April.

The chief features of the air movement of the period in Northern and Central India were:—

1st.—Winds were slightly steadier and more westerly than usual (more especially in April and May) at the coast stations of Chittagong and Calcutta and less westerly at Saugor Island and False Point. They were somewhat stronger than usual in March and April and of normal strength in May. The following gives data showing the actual westerly deflection at four stations:—

Station.	Westerly deflection.			
	March.	April.	May.	Mean of period March to May.
	°	°	°	°
Chittagong	—21	+25	+18	+11
Calcutta	— 6	+33	+25	+17
Saugor Island	—16	+ 1	— 2	— 6
False Point	—29	— 9	—18	—19

2nd.—Winds were stronger than usual in the North-Western Provinces during the period, more especially in April and May. They were on the mean of the period somewhat less steady than usual.

3rd.—Winds were on the mean of the period feebler but less variable than usual in Bihar and Chota Nagpur.

4th.—Winds were also on the whole much feebler, relatively to the normal, in the Punjab and to a less extent in Rajputana and Central India and were more westerly than usual, more especially in Rajputana and Central India.

5th.—Winds from northerly directions were much more frequent than usual in May at the hill stations in Northern India.

The following gives data showing the percentage variation of the air movement, month by month, from the normal during this period in Northern and Central India:—

Area.	Percentage variation from normal of mean daily air movement in			
	March.	April.	May.	Period March to May.
Bengal	+19	+12	— 1	+10
Bihar	—15	— 8	— 9	—11
Chota Nagpur	—10	0	—11	— 7
North-Western Provinces	0	+27	+ 7	+11
Punjab	—26	—14	—26	—22
Rajputana	— 2	— 1	—12	—5

The preceding data indicate that the air movement over the greater part of Northern India during the hot weather period was less vigorous than usual. The deficiency on the whole was most marked in the month of May. The most important variation of the direction of the air movement was the increased westing of the winds in Burma, Bengal and Rajputana.

The following gives the chief features of the air movement in the Peninsula:—

1st.—Winds were considerably stronger than usual thoughout the period in Berar, the Central Provinces and the Bombay Deccan. They were steadier than usual in March and May and of normal steadiness in April.

2nd.—Winds were practically normal in strength in the Madras Deccan and Mysore.

3rd.—Winds were throughout the period normal in strength and direction in the Madras and Bombay Coast districts.

The following gives data showing the percentage variation of the air movement from the normal, month by month, in the Peninsula:—

Area.	Percentage variation from normal of mean daily air movement in		
	March.	April.	May.
Berar	+36	+25	+17
Central Provinces	+24	+24	+ 6
Bombay Deccan	+14	+ 8	+ 9
Madras Deccan	+15	— 8	— 7
Mysore	+ 9	+ 4	— 8
West Coast	— 2	— 5	+ 4
Madras Coast	+ 3	— 5	+ 1

The following gives mean data for the winds in the Bay of Bengal and Arabian Sea for the period:—

Area.	Variation of mean daily force of wind (Beaufort's notation) in				Normal mean strength of winds during period.
	March.	April.	May.	Period March to May.	
Bay of Bengal	0	—0·1	+0·3	+0·1	2·7
Arabian Sea	—0·5	—0·2	—0·5	—0·4	2·9

The mean intensity of the air movement in the Bay of Bengal was, as in the preceding period, practically normal. It was, on the other hand, in moderate defect throughout in the Arabian Sea.

III. ***The south-west monsoon period.***—The Arabian Sea current was greatly delayed, and was not established on the Malabar Coast until the 12th and the Konkan Coast until the 25th of June. It extended very slowly and by a series of advances of increasing intensity into the interior and gave the first heavy general rain to the Central Provinces on the 25th June, to Gujarat and South-West Rajputana on the 11th and 12th July and to East Rajputana and the Punjab on the 10th July. The advance of the current over the Arabian Sea area was made somewhat more quickly than usual. The weather was very squally in front of the advancing current, but this irregular disturbance did not develop, as is usually the case, into a cyclonic storm. The south-west monsoon current was established in the Bay during the second week of June.

The first burst of the Bombay monsoon current was much less vigorous than usual, and the current, as judged by its extension into the interior and by the rainfall over the area of its prevalence, was much below its normal strength in June and July. It increased considerably in intensity, judged from the same standpoint, about the middle of July and was strong in August and September, giving unusually heavy rain in North-Western India. The Bay current was of about its normal strength throughout, but was determined more largely than usual towards Burma and North-Eastern India during the months of June and July and to the Gangetic Plain and Central India in August and September.

The comparative data in the table below, based upon the anemometric observations of four coast and four inland stations under the influence of the two currents, give an approximate estimate of the strength of the air movement of the two branches of the monsoon currents:—

Month.	Percentage variation from normal of mean daily air movement.			
	Bay of Bengal current.		Bombay current.	
	Four coast stations.	Four inland stations.	Four coast stations.	Four inland stations.
June	—2	—10	—19	+10
July	—5	—6	—11	+3
August	+18	+15	—4	+18
September	+17	+31	—7	+10
Mean of period	+7	+8	—10	+10

The data of the preceding table indicate that the Bay current as measured by the air movement at selected coast and inland stations was very slightly weaker than usual in June and July, but was unusually vigorous in August and September. The Arabian Sea current as gauged by the wind data of the Sind, Konkan and Malabar Coast stations was considerably below its normal strength in June and July and slightly below it in August and September.

The following table gives corresponding data for the steadiness of the two currents:—

Month.	Variation from normal of percentage of mean wind steadiness.			
	Bay of Bengal current.		Bombay current.	
	Four coast stations.	One inland station.	Three coast stations.	Four inland stations.
June	—1	—18	+ 4	+ 5
July	—1	+ 5	+ 3	— 5
August	—2	—25	— 2	+ 3
September	+1	+ 6	+13	+12
Mean of period	—1	— 8	+ 5	+ 4

The winds on the Sind and Konkan Coasts were, as shown by the data, slightly steadier than usual.

The comparative data given in the following table of the mean actual and normal force of the winds derived from the meteorological information contained in the logs of vessels navigating the Indian seas indicate that the air movement was below the normal to a moderate extent throughout the period in the Arabian Sea, and was in moderate excess in the Bay of Bengal on the mean of the whole period. The actual variations are chiefly derived from the vessels following four or five tracks in these seas, and hence do not necessarily indicate a variation common to the whole area. They, however, almost certainly establish that the current in the Arabian Sea was slightly below its normal strength throughout the period :—

Month	Mean daily force of wind (Beaufort's notation) in the Bay of Bengal.			Mean daily force of wind (Beaufort's notation) in the Arabian Sea.		
	Actual.	Normal.	Variation from normal.	Actual.	Normal.	Variation from normal.
June	4·6	4·0	+0·6	4·1	4·5	—0·4
July	4·2	4·0	+0·2	4·2	4·6	—0·4
August	4·4	4·0	+0·4	4·1	4·3	—0·2
September	3·8	3·7	+0·1	3·3	3·5	—0·2
Mean of period	4·3	3·9	+0·3	3·9	4·2	—0·3

The following gives a summary of the more important features of the mean air movement during the months of June and July, during which period the Bombay current was below its normal strength and the Bay current determined more largely than usual to Burma and North-East India :—

(*a*) Winds were more westerly than usual at Port Blair and were normal in direction in Lower Burma.

(*b*) Winds were above their normal strength in Bengal and lighter than usual in Orissa. They were, however, approximately normal in direction in Bengal, but much less westerly than usual in Orissa and at Saugor Island.

(*c*) Winds contained a strong easterly component in the Gangetic Plain, and were slightly stronger and steadier than usual.

(*d*) Winds were more directly from the west than usual on the West Coast.

(*e*) Winds were normal in direction in the Deccan and South India and slightly stronger than usual.

The most noteworthy features of the air movement of the period, August and September, when both currents, judging by the distribution of the rainfall were above their normal strength, were:—

(1) Winds were more westerly than usual at Port Blair and at the Bengal and Burma Coast stations, and less westerly or more easterly in Orissa and the interior of Bengal. Data in illustration are given for eight stations in the following table :—

Station.		Deflection from normal. August.	September.	Period August and September.
		°	°	°
Port Blair	Increased westerling.	+19	+21	+20
Diamond Island	Increased westerling.	+ 7	+26	+17
Chittagong	Increased westerling.	+26	+27	+27
Saugor Island	Increased westerling.	+11	— 9	+ 1
False Point	Increased easting.	+16	—26	— 5
Calcutta	Increased easting.	+21	+33	+28
Dacca	Increased easting.	+29	— 51	+45
Burdwan	Increased easting.	+63	+69	—66

(2) Winds were stronger than usual in the Bay Islands, Burma, Bengal, Orissa, Chota Nagpur and the North-Western Provinces and below their normal strength in Bihar throughout the period, as shown below :—

Area.	Percentage variation from normal of mean daily air movement in August.	September.	Period August and September.
Port Blair	+57	+11	+34
Burma	+29	— 6	+12
Bengal	+17	+22	+20
Orissa	+ 6	+27	+17
Bihar	—28	—20	—24
Chota Nagpur	+14	+30	+22
North-Western Provinces and Oudh	+30	+35	+33

(3) The air movement was below the normal during this period in the Punjab, Sind and Rajputana, as shown below :—

Area.	Percentage variation from normal of mean daily air movement in August	September.	Period August and September.
Punjab	—12	+ 4	— 4
Sind	—13	—11	—12
Rajputana	—11	—21	—16

It may be noted that the variations of the steadiness and mean direction of the air movement in these areas were on the whole small in amount and somewhat irregular.

(4) Winds were considerably above their normal intensity over the whole land area dominated by the Bombay current to the south of Rajputana :—

Area.	Percentage variation from normal of mean daily air movement in		
	August.	September.	Period August and September.
Central Provinces	+40	+25	+33
Berar	+30	+38	+34
Madras Deccan	+20	+18	+19
Bombay Deccan	+23	+10	+17
Bombay Coast	+29	+10	+20

(5) Winds were remarkably steady over the greater part of the area dominated by the Bombay current in August and September, as shown below :—

Area.	Percentage variation from normal of mean wind steadiness in		
	August.	September.	Period August and September.
Central Provinces	+9	+15	+12
Berar	+7	+20	+14
Madras Deccan	+9	+18	+14
Bombay Deccan	—1	+11	+5
Bombay Coast	—2	+19	+9

(6) Winds were practically normal in direction over the same areas.

(7) The winds at the hill stations in Rajputana and the Central Provinces were as largely above their normal strength as at the neighbouring plains stations :—

Station.	Percentage variation from normal of mean daily air movement in		
	July.	August.	September
Mount Abu	+15	—4	+5
Pachmarhi	+3	+78	+90
Chikalda	—10	+4	+45

The following table gives the percentage variation of the strength of the winds from the normal, month by month, in different provinces throughtout the whole season :—

Area.	Percentage variation from normal of mean daily air movement in				
	June.	July.	August.	September.	Period June to September
Burma	+7	—8	+29	—6	+6
Bengal	—3	+7	+17	+22	+11
Bihar	—4	—34	—28	—20	—22
Chota Nagpur	—9	—15	+14	+30	+5
North-Western Provinces.	+10	+20	+30	+35	+24
Punjab	—23	+9	—12	+4	—6
Rajputana	+9	+10	—11	—21	—3
Central Provinces	+20	+2	+40	+25	+22
Berar	+25	+44	+30	+38	+34
Bombay Deccan	+8	—10	+23	+10	+8
Madras Deccan	+15	—5	+20	+18	+12

IV.—The retreating south-west monsoon period.—The air movement in the Bay was on the mean of the month of October slightly weaker and more unsteady than usual. Winds were stronger than usual in Burma Bengal and Orissa and more northerly than usual in the interior of Bengal. Winds were, very light and variable in direction over the interior of Northern India and in Central India. The Arabian Sea current withdrew rapidly from the north and centre of that area in the first fortnight of October. Winds were normal in strength over that area in November, and were slightly stronger than usual in the Madras Deccan and Madras coast districts. Winds were less steady and feeble in the south and centre of the Bay than usual in November.

Winds were less easterly and more northerly than the normal in November at Port Blair. Over the whole of Northern and Central India the westerly element was more strongly marked than usual. This was especially the case in Bengal. In the Deccan and Southern India winds were somewhat more easterly than usual. North-east winds extended over the whole of the Arabian Sea, and over nearly the whole of the Bay during the month, and the air movement in these areas in November on the whole resembled that of December and January.

The air movement in December was feebler than usual in the Bay and also in Burma Winds were more variable than usual and abnormally feeble in the Gangetic Rajputana, and Plain and the Punjab. Winds were very variable in at some stations the mean direction of the air movement was from north-east instead of the normal north-west. Winds were also light and more variable than usual in the northern half of the Peninsula, and were slightly stronger and steadier in South India.

The following is a summary of the chief features of the air movement of the period.

(1) The air movement varied irregularly from the normal during the period over Northern and Central India, but was, on the mean of the period, below it in all divisions

except Bengal. The deficiency was very marked throughout the period in Sind and the Punjab and to a slightly less extent in Bihar. The following gives data in illustration :—

Division.	Percentage variation from normal of mean daily air movement in			
	October.	November.	December	Period October to December.
Bengal	+16	+ 4	+ 8	+ 9
Bihar	—62	— 7	+ 8	—20
Chota Nagpur	— 8	— 1	+ 4	— 2
North-Western Provinces	—10	— 9	0	— 6
Punjab	—31	—29	—28	—29
Sind	—21	—33	—28	—27
Rajputana	—13	—11	+11	— 4

(2) The air movement was, on the whole, slightly stronger than usual in the area of greatest excess of temperature, including Berar and the Central Provinces, but was remarkably unsteady in the month of December when the temperature excess was most marked. The following gives comparative data of the velocity and steadiness of the winds during the period for stations in that area :—

Station.	Mean daily air movement in					
	October.		November.		December.	
	Actual.	Variation from normal.	Actual.	Variation from normal.	Actual.	Variation from normal.
Akola	92	+ 9	57	— 28	66	—14
Buldana	...	...	122	0	162	+30
Khandwa	76	+ 5	58	— 6	88	+26
Nagpur	103	+ 1	88	— 7	70	—13
Amraoti	149	+79	199	+127	170	+96
Chikalda	165	+26	125	+ 11	135	+18

Station.	Mean wind steadiness in					
	October.		November.		December.	
	Actual percentage.	Variation from normal.	Actual percentage.	Variation from normal.	Actual percentage.	Variation from normal.
Akola	52	+20	54	+ 5	36	—21
Buldana	67	+18	58	+ 6	21	—22
Khandwa	39	+ 4	59	+ 7	32	—10
Nagpur	35	—14	25	—35	18	—36

(3) The air movement was stronger than usual over the southern half of the Peninsula, including the Madras Deccan, Mysore and South India, and was normal or below it in the Madras and Bombay coast districts, the Bombay Deccan, Central Provinces and Berar, as is shown below :—

Division.	Mean daily air movement in					
	October.		November.		December.	
	Actual.	Variation from normal.	Actual.	Variation from normal.	Actual.	Variation from normal
Central Provinces	90	+ 3	72	— 8	79	+ 6
Berar	92	—12	90	—14	114	+ 8
Bombay Deccan	178	—13	186	—15	195	—10
Madras Deccan	108	+ 8	91	+ 8	99	+20
Mysore	127	+ 3	150	+ 7	181	+13
Bombay Coast	134	— 6	134	—14	134	—17
Madras Coast	128	+10	146	—10	165	—13
Southern India	64	+ 4	95	+21	104	+12

The air movement was also steadier over the whole of that area, except in the Bombay coast districts, Central Provinces and Berar, as shown below :—

Division.	Mean wind steadiness in					
	October.		November.		December.	
	Actual.	Variation from normal.	Actual.	Variation from normal.	Actual.	Variation from normal.
Central Provinces	37	— 5	42	—14	25	—23
Berar	52	+20	54	— 5	36	—21
Bombay Deccan	43	+25	69	+6	60	— 2
Madras Deccan	35	+11	71	+10	71	+ 4
Mysore	43	+28	82	+11	86	+ 3
Bombay Coast	66	+18	43	— 6	34	—22
Madras Coast	39	+22	84	+20	84	+ 5
Southern India	16	—13	48	+24	77	+27

Humidity.

The variations of the mean monthly and annual aqueous vapour pressure and humidity values from the calculated normals for the year 1900 are given in Tables XVI and XVII. The normal values employed in the determination of the variations are given in Tables XIII and XIV of the Annual Summary for the year 1896. The four tables (Tables XVIII to XXI) give variation data of aqueous vapour pressure and relative humidity for each month of the year and for the year :—

1st.—For sixteen meteorological areas adopted in the geographical summaries of meteorological data in the annual reports issued by the department previous to 1891.

2nd.—For nine meteorological provinces of the Empire.

TABLE XVI.—*Comparison of the monthly mean vapour pressure data of 1900 with the averages of past years.*

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
Burma Coast and Bay Islands.	Port Blair	+·054	+·056	+·027	+·031	+·018	+·029	+·033	+·034	+·016	+·015	−·026	−·013	+·023
	Rangoon	−·002	−·014	+·003	+·034	+·032	+·026	+·016	+·022	+·006	+·021	−·042	−·025	+·006
	Diamond Island	+·082	+·063	+·008	+·027	−·002	+·029	+·009	+·029	+·026	+·038	+·015	+·011	+·028
	Cocos Island	+·069	−·093	+·016	+·020	−·032	?	?	?	+·004	0	−·035	+·003	?
Bengal and Orissa.	Chittagong	+·059	+·059	+·032	+·051	−·046	+·045	0	+·035	−·009	−·026	−·042	−·002	+·013
	Calcutta (Alipore)	+·082	+·078	+·044	+·013	−·015	+·019	+·022	+·030	−·013	−·035	−·023	+·032	+·020
	Saugor Island	+·043	+·085	+·006	−·008	−·044	+·007	+·002	+·011	−·016	−·027	−·025	+·027	+·005
	False Point	+·138	+·145	+·083	+·030	+·003	+·042	+·050	+·041	+·013	+·028	−·007	+·080	+·054
Gangetic Plain and Chota Nagpur.	Hazaribagh	+·057	+·053	−·036	+·070	+·049	+·020	−·020	−·007	−·006	−·036	?	+·085	?
	Darbhanga	+·046	+·038	+·032	−·052	−·035	−·008	+·014	+·039	−·029	−·015	+·006	+·013	+·004
	Allahabad	+·035	+·018	−·016	−·039	+·025	−·035	−·043	−·002	+·008	+·006	+·033	+·049	+·003
Upper Sub-Himalayas	Dehra Dun	−·036	−·008	−·026	−·023	−·029	−·067	−·002	+·017	+·023	−·031	+·016	+·019	−·012
	Roorkee	−·030	−·010	−·054	−·031	−·046	−·042	−·019	+·012	+·026	−·025	+·017	+·033	−·014
	Meerut	−·015	−·003	+·011	+·005	−·011	−·026	+·005	+·067	+·091	−·018	+·049	+·066	+·018
	Lahore	−·040	−·001	−·004	−·028	+·031	−·067	−·022	+·070	+·134	+·045	+·099	+·045	+·022
	Ludhiana	−·050	−·032	−·055	−·065	−·073	−·080	−·042	+·065	+·090	−·019	+·065	+·055	−·012
Indus Valley and North-West Rajputana.	Peshawar	−·029	+·034	+·043	−·021	+·075	−·053	+·001	+·034	+·165	+·007	+·048	+·022	+·027
	Jacobabad	−·051	0	+·078	+·044	+·096	+·077	+·006	+·048	+·130	−·015	+·102	+·068	+·054
	Kurrachee	−·153	−·027	+·023	−·030	−·012	+·022	+·016	+·045	+·032	−·042	+·067	−·063	−·010
Eastern Rajputana, Central India and Gujarat.	Jaipur	−·063	−·022	−·028	0	+·025	−·073	−·050	+·075	+·126	−·021	+·048	+·052	+·006
	Deesa	−·120	−·056	−·019	0	−·090	−·050	−·066	+·065	+·087	−·051	+·022	+·018	−·021
Deccan	Belgaum	−·005	−·042	−·067	−·031	−·054	−·010	+·021	+·024	+·016	−·075	−·068	+·011	−·023
	Sholapur	−·090	−·095	−·059	−·020	−·087	−·009	+·020	−·015	−·014	−·170	−·107	+·034	−·051

TABLE XVI.—*Comparison of the monthly mean vapour pressure data of 1900 with the averages of past years*—concld.

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
Deccan—*concld.*	Poona	−·041	−·050	−·047	−·031	−·085	−·038	+·032	+·023	+·014	−·096	−·072	+·027	−·030
	Akola	−·005	+·041	−·046	+·123	+·024	−·023	+·015	+·031	+·029	−·148	−·056	+·067	+·004
	Buldana	−·113	−·129	−·099	−·033	−·088	−·077	−·018	+·001	0	−·156	−·095	+·015	−·066
	Khandwa	−·076	−·109	−·082	−·027	−·085	−·046	+·008	+·038	+·055	−·084	+·009	+·083	−·026
	Nagpur	+·022	−·050	−·100	+·007	−·120	−·066	+·016	+·020	+·057	−·104	−·031	+·120	−·019
	Hyderabad (Deccan).	−·011	−·018	−·021	+·013	−·087	−·032	+·028	−·019	+·010	−·080	−·057	+·015	−·022
West Coast	Bombay	−·078	−·057	−·033	−·017	−·036	−·001	+·020	+·011	+·011	−·070	−·012	+·018	−·020
	Karwar	+·009	+·018	−·041	−·043	−·020	−·017	+·006	+·022	+·010	−·006	−·024	+·034	−·004
South India	Salem	+·005	+·032	+·004	+·010	+·050	−·004	+·005	−·004	+·033	−·020	+·030	+·031	+·014
	Chitaldroog	+·010	+·019	−·016	+·061	−·026	+·005	+·033	+·032	+·046	+·043	+·008	+·069	+·024
	Bangalore	−·006	+·006	−·055	+·005	−·064	0	+·023	−·001	+·036	+·001	−·021	+·024	−·004
	Hassan	−·035	−·025	−·072	−·018	−·087	+·012	+·048	+·044	+·044	+·001	−·032	+·005	−·010
	Mysore	−·056	−·017	−·041	+·065	−·014	+·015	+·036	+·046	+·051	+·021	−·014	+·046	+·012
	Madras	+·097	+·078	+·056	+·057	+·043	+·021	+·021	−·003	+·038	+·028	+·028	+·070	+·045
	Bellary	−·057	−·048	−·051	+·009	−·078	−·107	−·087	−·081	−·058	−·071	−·067	+·029	−·056
Baluchistan	Quetta	−·020	+·018	−·009	−·015	+·038	−·109	−·057	−·005	?	−·006	+·088	+·028	?
Hill Stations, Northern India.	Leh	−·036	−·040	−·011	+·015	+·014	−·008	+·019	+·026	+·036	+·069	+·023	−·028	+·007
	Srinagar	−·001	+·042	+·093	+·027	+·081	+·025	+·092	+·107	+·139	+·043	+·100	+·028	+·065
	Kailang	−·006	−·007	+·006	−·006	+·005	−·011	−·002	+·033	+·057	+·049	+·022	+·010	+·013
	Simla (Ridge)	−·010	−·006	−·023	−·034	−·005	−·068	−·024	0	+·017	−·028	−·006	+·018	−·014
	Chakrata	−·007	+·011	−·013	−·025	+·002	−·047	−·034	+·004	+·012	−·028	+·014	+·007	−·009
	Ranikhet	−·023	+·004	−·038	−·041	−·022	−·024	+·004	+·023	+·011	−·034	+·020	0	−·010
	Katmandu	−·016	+·023	−·001	−·056	−·027	+·004	+·009	+·024	+·006	+·011	+·020	−·016	−·002
	Darjeeling	+·001	+·006	+·031	−·013	−·011	?	+·011	+·017	−·024	−·014	+·005	?	?
Hill Stations, Central India.	Mount Abu	−·062	−·020	+·018	+·028	−·028	−·057	−·017	+·047	+·052	−·054	+·033	+·027	−·003
	Pachmarhi	−·014	−·044	+·079	+·202	+·170	+·107	+·048	+·028	+·044	−·097	−·016	+·106	+·051
	Chikalda	−·051	−·058	+·004	+·138	+·030	−·036	−·001	+·013	+·035	−·101	−·052	+·069	−·002
Hill Station, Southern India.	Wellington	−·018	+·021	−·031	+·014	−·035	−·025	+·019	+·012	+·036	−·002	+·006	+·026	+·003
Extra Indian Stations.	Aden	−·055	+·052	−·001	−·087	−·011	−·007	−·003	+·006	−·008	+·003	+·046	+·048	+·001
	Perim	−·039	+·043	+·041	+·037	+·064	+·072	+·097	+·189	+·146	+·216	+·285	+·157	+·109
	Zanzibar	+·020	+·026	+·008	+·017	+·022	+·007	+·023	−·022	−·023	−·005	0	−·008	+·005
	Port Victoria (Seychelles).	+·013	+·043	+·043	+·055	+·047	+·054	+·038	−·001	+·014	+·009	−·001	+·023	+·028

TABLE XVII.—*Comparison of the monthly mean relative humidity data of 1900 with the averages of past years.*

Meteorological Provinces.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Burma Coast and Bay Islands	Port Blair	+ 2	+ 1	− 1	− 1	− 1	− 3	− 1	− 2	− 1	− 2	− 3	− 5	− 1
	Rangoon	− 1	− 3	− 2	− 2	+ 3	+ 1	0	0	− 2	0	− 2	− 4	− 1
	Diamond Island	+ 3	+ 1	− 1	− 2	+ 2	− 1	− 2	− 1	− 3	− 3	− 4	− 5	− 1
	Cocos Island	+ 2	+ 5	− 1	− 5	−12	?	?	?	− 2	− 2	− 7	− 4	?
Bengal and Orissa.	Chittagong	+ 1	+ 1	0	+ 4	− 5	0	− 1	− 1	− 2	− 4	− 5	− 4	− 1
	Calcutta (Alipore)	− 1	0	− 4	− 2	− 3	− 2	− 2	− 1	0	− 7	− 5	− 4	− 3
	Saugor Island	0	+ 1	− 3	− 2	− 3	0	− 1	0	+ 1	− 3	− 4	− 1	− 1
	False Point	+ 6	+ 3	0	− 3	− 2	0	+ 1	+ 3	+ 1	+ 1	− 1	+ 1	+ 1
Gangetic Plain and Chota Nagpur.	Hazaribagh	+ 8	+ 5	− 8	+ 6	+ 5	− 1	− 6	− 2	+ 1	− 3	?	+13	?
	Darbhanga	+ 7	+ 5	0	− 6	− 1	− 1	+ 3	− 1	+ 1	− 2	− 2	0	0
	Allahabad	+ 3	− 1	− 5	− 2	+ 2	− 9	− 8	− 2	+ 3	0	− 2	+ 1	− 2
Upper Sub-Himalayas.	Dehra Dun	− 9	− 1	− 9	+ 4	− 2	−12	− 3	− 1	+ 6	− 3	− 1	+ 5	− 2
	Roorkee	− 7	− 4	−12	0	− 4	− 6	− 3	0	+ 7	+ 1	0	+ 5	− 2
	Meerut	− 5	− 6	− 7	+ 3	− 4	− 6	0	+ 3	+13	+ 1	+ 4	+11	+ 1
	Lahore	− 4	0	− 6	+ 3	+ 4	− 6	− 3	+ 7	+20	+ 9	+ 9	+16	+ 4
	Ludhiana	−10	− 8	−14	− 3	− 8	−12	− 5	+ 7	+15	+ 2	+ 6	+12	− 2
Indus Valley and North-West Rajputana.	Peshawar	− 4	+ 5	− 1	+ 6	+ 8	− 5	− 3	0	+12	+ 1	+ 1	+ 3	+ 2
	Jacobabad	− 7	− 5	− 2	+ 1	+ 2	− 2	− 1	− 1	+ 4	− 2	+ 6	+16	+ 1
	Kurrachee	−24	− 6	− 1	−10	− 2	− 4	− 5	− 5	− 3	− 8	+ 2	− 8	− 6
East Rajputana, Central India and Gujarat.	Jaipur	−12	− 8	−10	+ 1	+ 3	−13	−12	+ 2	+13	− 2	0	+ 8	− 3
	Deesa	−16	− 7	+ 1	+ 2	− 3	− 7	−16	+ 5	+ 8	− 3	0	+ 3	− 3
Deccan	Belgaum	0	− 3	− 5	− 1	− 6	− 4	− 1	+ 1	− 1	−12	−10	0	− 4
	Sholapur	−15	−13	− 8	− 2	− 9	− 4	− 1	− 4	− 5	−21	−13	− 9	− 9
	Poona	− 3	− 2	0	+ 1	− 5	−10	− 1	+ 2	+ 1	− 8	− 5	+ 3	− 2
	Akola	−12	− 4	− 6	+ 7	0	− 6	− 3	+ 2	+ 2	−11	− 8	− 2	− 3
	Buldana	−20	−17	−11	− 3	− 8	−14	− 6	− 1	0	−16	−13	− 4	− 9
	Khandwa	−15	−17	−12	− 4	− 8	−11	− 5	+ 1	+ 6	− 5	− 2	0	− 6
	Nagpur	− 8	−10	−13	− 1	− 9	−11	− 0	+ 2	+ 7	− 9	− 5	+ 7	− 4
	Hyderabad (Deccan).	− 9	− 7	− 7	− 2	− 8	− 6	+ 2	− 7	+ 1	− 9	−10	− 4	− 6
West Coast	Bombay	− 9	− 4	− 3	− 2	− 4	− 6	− 3	− 1	− 2	− 8	− 4	− 3	− 4
	Karwar	+ 2	+ 1	− 3	− 3	− 3	− 1	− 2	− 2	− 3	− 6	− 6	− 2	− 2
South India	Salem	− 3	0	− 2	+ 1	0	− 6	− 1	− 7	+ 2	− 4	− 2	− 4	− 2
	Chitaldroog	− 4	− 2	− 5	+ 2	− 7	− 2	0	+ 1	+ 4	+ 1	− 6	+ 1	− 1
	Bangalore	− 5	− 3	− 8	0	−12	− 2	+ 1	− 4	+ 3	− 2	− 5	0	− 3
	Hassan	− 6	− 5	−11	− 4	−14	− 2	+ 3	+ 4	+ 4	− 2	− 4	− 1	− 3
	Mysore	−10	− 5	− 6	+ 2	− 7	− 2	+ 2	+ 4	+ 6	+ 2	− 1	+ 2	− 1

TABLE XVII.—*Comparison of the monthly mean relative humidity data of 1900 with the averages of past years*—concld.

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
South India —*concld.*	Madras	+ 9	+ 5	+ 3	+ 6	+ 4	− 4	0	− 9	+ 2	0	+ 3	+ 4	+ 2
	Bellary	−11	− 8	− 6	+ 1	− 7	−12	−10	− 9	− 7	− 9	−11	− 7	− 8
Baluchistan	Quetta	+ 5	+ 3	− 9	− 1	+ 6	−10	− 9	− 3	?	0	+19	+15	?
Hill Stations, Northern India.	Leh	−24	−30	−11	+10	+ 2	+ 1	+ 5	+ 3	+ 3	+23	− 1	−20	− 3
	Srinagar	+ 4	+ 7	+ 9	+17	+17	+11	+ 8	+ 9	+ 6	+ 6	+ 8	+ 7	+ 9
	Kailang	− 1	− 3	− 4	+11	+ 2	+ 2	+ 2	+ 6	+ 4	+17	+ 2	+ 8	+ 4
	Simla (Ridge)	+ 6	+ 1	−10	+ 4	+ 4	−15	− 4	0	+10	− 2	− 4	+16	+ 1
	Chakrata	+ 6	+ 5	− 8	+ 6	+ 3	− 9	− 4	+ 1	+ 7	− 5	− 2	+10	+ 1
	Ranikhet	− 2	− 1	−15	+ 1	− 2	− 6	− 1	0	+ 4	− 6	+ 2	+ 7	− 2
	Katmandu	+ 1	+ 3	− 4	− 9	− 2	− 1	+ 3	− 1	− 1	+ 2	+ 2	− 3	− 1
	Darjeeling	+ 3	+ 3	+ 6	− 5	− 2	?	0	− 2	− 4	− 4	− 3	?	?
Hill Stations, Central India.	Mount Abu	−12	−15	− 2	+ 4	− 2	−14	−12	+ 3	+10	− 8	+ 1	+ 4	− 3
	Pachmarhi	− 8	−12	+ 1	+15	+ 9	− 4	0	+ 4	+10	− 8	− 4	+11	+ 1
	Chikalda	−15	−11	− 3	+10	0	−15	− 8	+ 1	+ 6	−13	−10	+ 5	− 4
Hill Station, Southern India.	Wellington	−23	− 2	− 9	0	− 7	− 7	0	− 2	+ 1	− 4	− 3	− 1	− 5
Extra Indian Stations.	Aden	− 6	+ 2	− 3	− 9	− 1	+ 1	− 3	0	− 2	+ 1	+ 2	+ 1	− 1
	Perim	− 4	+ 4	+ 3	+ 3	+ 6	+ 5	+ 8	+14	+10	+19	+25	+12	+ 9
	Zanzibar	+ 1	0	+ 1	0	− 1	0	+ 1	− 4	− 3	− 2	− 4	+ 2	− 1
	Port Victoria (Seychelles).	+ 3	+ 4	0	+ 2	+ 4	+ 2	+ 3	− 1	+ 2	0	0	+ 2	+ 2

TABLE XVIII.—*Geographical summary of the aqueous vapour pressure data of Table II in the monthly weather reviews of 1900.*

Meteorological Area.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
North-West Himalaya	6	−·014	+·001	+·002	−·0 1	+·013	−·022	+·009	+·032	+·045	+·012	+·029	+·006	+·008
Sikkim Himalaya and Nepal.	1−2	−·008	+·015	+·015	−·035	−·019	+·004	+·010	+·021	−·009	−·002	+·013	−·016	−·001
Punjab Plains	3	−·040	0	−·005	−·038	+·011	−·067	−·021	+·056	+·130	+·011	+·071	+·041	+·012
Gangetic Plain	5	0	+·007	−·011	−·028	−·019	−·036	−·009	+·027	+·024	−·017	+·024	+·036	0
Western Rajputana	4	−·097	−·026	+·025	+·011	−·009	−·002	0	+·051	+·075	−·041	+·056	+·013	−·005
Eastern Rajputana and Central India.	1	−·063	−·022	−·028	0	+·025	−·073	−·050	+·075	+·126	−·021	+·048	+·052	+·006
Nerbudda Valley	1	−·076	−·109	−·082	−·027	−·085	−·046	+·008	+·038	+·055	−·084	+·009	+·083	−·026
Chota Nagpur	1	+·057	+·053	−·036	+·070	+·049	+·020	−·020	−·007	−·006	−·036	?	+·085	?
Lower Bengal	2	+·063	+·082	+·025	+·003	−·030	+·013	+·012	+·021	−·015	−·031	−·024	+·030	+·012
Orissa	1	+·138	+·145	+·083	+·030	+·003	+·042	+·050	+·041	+·013	+·028	−·007	+·080	+·054

TABLE XVIII.—*Geographical summary of the aqueous vapour pressure data of Table II in the monthly weather reviews of 1900*—concld.

METEOROLOGICAL AREA.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Central Provinces (South) and Berar.	5	−·034	−·048	−·032	+·087	+·003	−·019	+·012	+·019	+·033	−·121	−·050	+·075	−·006
Konkan . . .	2	−·035	−·020	−·037	−·030	−·028	−·009	+·013	+·017	+·011	−·038	−·018	+·026	−·012
Deccan, Hyderabad and Mysore.	9	−·032	−·030	−·048	+·006	−·065	−·018	+·017	+·006	+·016	−·047	−·048	+·029	−·018
East Coast and Carnatic.	2	+·051	+·055	+·030	+·034	+·047	+·009	+·013	−·004	+·036	+·004	+·029	+·051	+·030
Arakan and Pegu .	3	+·046	+·036	+·014	+·037	−·005	+·033	+·008	+·029	+·008	+·011	−·023	−·005	+·016
Bay Islands . . .	1−2	+·062	−·019	+·022	+·026	−·007	+·029	+·033	+·034	+·010	+·008	−·031	−·005	+·014
Extra-Tropical India .	25—26	−·016	+·008	+·002	−·014	−·005	−·022	−·001	+·036	+·047	−·012	+·029	+·029	+·007
Tropical India . .	23—24	−·008	−·014	−·023	+·028	−·024	−·007	+·015	+·013	+·020	−·044	−·033	+·033	−·004
Whole India . .	48−50	−·012	−·003	−·010	+·008	−·014	−·015	+·007	+·025	+·034	−·027	−·001	+·031	+·002

TABLE XIIX.—*Geographical summary of the humidity data of Table II in the monthly weather reviews of 1900.*

METEOROLOGICAL AREA.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
North-West Himalaya	6	− 2	− 4	− 7	+8	+4	− 3	+ 1	+3	+ 6	+ 4	+1	+ 5	+2
Sikkim Himalaya and Nepal.	1— 2	+ 2	+ 3	+ 1	−7	−2	− 1	+ 2	−2	− 3	− 1	−1	− 3	−1
Punjab Plains . .	3	− 6	− 1	− 7	+2	+1	− 8	− 4	+5	+16	+ 4	+5	+10	+1
Gangetic Plain .	5	− 2	− 1	− 7	0	−2	− 7	− 2	0	+ 6	− 1	0	+ 4	−1
Western Rajputana .	4	−15	− 6	− 1	−1	−1	− 7	− 9	+1	+ 5	− 5	+2	+ 4	−3
Eastern Rajputana and Central India.	1	−12	− 8	−10	+1	+3	−13	−12	+2	+13	− 2	0	+ 8	−3
Nerbudda Valley .	1	−15	−17	−12	−4	−8	−11	− 5	+1	+ 6	− 5	−2	0	−6
Chota Nagpur . .	1	+ 8	+ 5	− 8	+6	+5	− 1	− 6	−2	+ 1	− 3	?	+13	+2?
Lower Bengal . .	2	− 1	+ 1	− 4	−2	−3	− 1	− 2	−1	+ 1	− 5	−5	− 3	−2
Orissa . . .	1	+ 6	+ 3	0	−3	−2	0	+ 1	+3	+ 1	+ 1	−1	+ 1	+1
Central Provinces South and Berar.	5	−13	−11	− 6	+6	−2	−10	− 3	+2	+ 5	−11	−8	+ 3	−4
Konkan . . .	2	− 4	− 2	− 3	−3	−4	− 4	− 3	−2	− 3	− 7	−5	− 3	−4
Deccan, Hyderabad and Mysore.	9	− 7	− 5	− 6	0	−8	− 5	− 1	−1	+ 1	− 7	−7	− 2	−4
East Coast and Carnatic.	2	+ 3	+ 3	0	+4	+2	− 5	− 1	−8	+ 2	− 2	+1	0	0
Arakan and Pegu	3	+ 1	0	− 1	0	0	0	− 1	−1	− 2	− 2	−4	− 4	−1
Bay Islands . .	1—2	+ 2	+ 3	− 1	−3	−7	− 3	− 1	−2	− 2	− 2	−5	− 5	−2
Extra-Tropical India.	25—26	− 4	− 2	− 5	+1	0	− 5	− 3	+1	+ 6	0	+1	+ 4	−1
Tropical India . .	23—24	− 6	− 4	− 4	+1	−4	− 5	− 1	−1	+ 1	− 6	−6	− 1	−3
Whole India . .	48—50	− 5	− 1	− 5	+1	−2	− 5	− 2	0	+ 3	− 3	−2	+ 2	−2

TABLE XX.—*Variations of the mean monthly aqueous vapour pressure from the normal in nine meteorological provinces of India in 1900.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	YEAR.
	"	"	"	"	"	"	"	"	"	"	"	"	"
Burma Coast and Bay Islands	+·045	+·035	+·013	+·028	+·016	+·028	+·019	+·028	+·013	+·019	−·018	−·006	+·018
Bengal and Orissa . .	+·081	+·092	+·041	+·022	−·026	+·024	+·019	+·029	−·006	−·015	−·024	+·034	+·023
Gangetic Plain and Chota Nagpur.	+·046	+·036	−·007	−·007	+·014	−·008	−·016	+·010	−·009	−·015	+·020	+·049	+·009
Upper Sub-Himalayas . .	−·034	−·011	−·026	−·028	−·026	−·056	−·016	+·046	+·073	−·010	+·049	+·044	0
Indus Valley and North-West Rajputana.	−·078	+·002	+·048	−·002	−·053	+·015	+·028	+·002	+·109	−·017	+·072	+·009	+·011
East Rajputana, Central India and Gujarat.	−·092	−·039	−·024	0	−·033	−·062	−·058	+·070	+·107	−·036	+·035	+·035	−·008
Deccan	−·040	−·057	−·066	0	−·073	−·038	+·015	+·013	+·021	−·114	−·060	+·038	−·030
West Coast	−·035	−·020	−·037	−·030	−·028	−·009	+·013	+·017	+·011	−·038	−·018	+·026	−·012
South India	−·006	+·006	−·025	+·027	−·025	−·008	+·011	+·005	+·027	0	−·010	+·039	+·003

TABLE XXI.—*Variations of the mean monthly relative humidity from the normal in nine meteorological provinces of India in 1900.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
Burma Coast and Bay Islands	+ 1	0	− 1	−3	+1	− 1	− 1	−1	− 2	− 2	−3	− 5	−1
Bengal and Orissa . .	+ 2	+1	− 2	−1	−3	− 1	− 1	0	0	− 3	−4	− 2	−1
Gangetic Plain and Chota Nagpur.	+ 6	+3	− 4	−1	+2	− 4	− 4	−2	+ 2	− 2	−2	+ 5	0
Upper Sub-Himalayas . .	− 7	−4	−10	+1	−3	− 8	− 3	+3	+12	+ 2	+4	+10	0
Indus Valley and North-West Rajputana.	−12	−2	− 1	−1	+3	− 4	− 3	−2	+ 4	− 3	+3	+ 4	−1
East Rajputana, Central India and Gujarat.	−14	−8	− 5	+2	0	−10	−14	+4	+11	− 3	0	+ 6	−3
Deccan	−10	−9	− 8	−1	−7	− 8	− 2	−1	+ 1	−11	−8	− 1	−5
West Coast	− 4	−2	− 3	−3	−4	− 4	− 3	−2	− 3	− 7	−5	− 3	−4
South India	− 4	−3	− 5	+1	−6	− 4	− 1	−3	+ 2	− 2	−4	− 1	−3

I.—The cold weather period.—Weather was unusually fine and dry in the first-half of January. Two storms of moderate intensity passed across Northern India in the second-half of the month and gave light to moderate rain. A large number of cold weather depressions affected Upper India in February, but they were feeble and gave little rain. The amount of aqueous vapour present in the air was hence much less than usual over the greater part of India. As this condition was accompanied by higher temperature than usual, the relative humidity was also largely below the normal. It was in general moderate to large defect over the whole area to the west of the 80th meridian.

The following gives comparative data for that area :—

Area.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January.	February.	Period January and February.	January.	February.	Period January and February.
	"	"	"			
Punjab	—·040	0	—·020	—6	—1	—4
Sind	—·102	—·014	—·058	—16	—6	—11
Rajputana	—·092	—·039	—·066	—14	—8	—11
North-Western Provinces.	—·012	—·001	—·007	—5	—3	—4
Central Provinces	—·027	—·080	—·054	—12	—14	—13
Berar	—·059	—·044	—·052	—16	—11	—14
Bombay Coast	—·035	—·020	—·028	—4	—2	—3
Bombay Deccan	—·045	—·062	—·054	—6	—6	—6
Madras Deccan	—·034	—·033	—·034	—10	—8	—9
Mysore	—·022	—·004	—·013	—6	—4	—5

The relative humidity was most largely below the normal, on the mean of the period, in the areas represented by the stations for which comparative data are given below :—

Station.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January.	February.	Period January and February.	January.	February.	Period January and February.
	"	"	"			
Buldana	—·113	—·129	—·121	—20	—17	—19
Khandwa	—·076	—·109	—·093	—15	—17	—16
Chikalda	—·061	—·058	—·060	—15	—11	—13
Pachmarhi	—·014	—·044	—·029	—8	—12	—10
Sholapur	—·090	—·095	—·093	—15	—13	—14
Kurrachee	—·153	—·027	—·090	—24	—6	—15
Jaipur	—·063	—·022	—·043	—12	—8	—10
Deesa	—·120	—·056	—·088	—16	—7	—12
Wellington	—·018	+·021	+·002	—23	—2	—13

As the mean aqueous vapour pressure in the dry area including the Central Provinces, Berar, Khandesh, Central India, averages about ·300", the data indicate that in that area the amount of aqueous vapour present in the lowest air stratum was about 30 per cent. less than usual at several of these stations.

A reference to the annual summary for the previous year, page 733, will show that similar conditions of high temperature and great dryness of the air prevailed in that area in the cold weather of 1899.

The air was somewhat damper in North-Eastern India, Burma and the Madras coast districts.

The following gives data :—

Area.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January.	February.	Period January and February.	January.	February.	Period January and February.
	"	"	"			
Burma Coast	+·040	+·025	+·033	+1	—1	0
Bengal	+·061	+·074	+·068	0	+1	+1
Orissa	+·138	+·145	+·142	+6	+3	+5
Bihar	+·045	+·038	+·042	+7	+5	+6
Chota Nagpur	+·057	+·053	+·055	+8	+5	+7
Madras Coast	+·097	+·078	+·088	+9	+5	+7

The variations of the humidity at the hill stations in Northern India and in the Persian area were generally small. There was on the whole a slight excess.

There were several periods of abnormal dryness of the air during the period, *viz.*, the 2nd to the 10th of January, the 16th to the 20th of January and the 4th to the 18th of February.

The lowest reported humidities (of 9 and less) excluding those at Leh where zero humidities were recorded on 16 days during January and on 14 days during February are given below :—

Station.	Date.	Hour.	Lowest humidity recorded during January and February.
			%
Kodaikanal	2nd January.	8 A.M.	5
Udaipur	17th ,,	4 P.M.	5
Belgaum	3rd and 4th ,,	4 P.M.	5
Kodaikanal	5th and 6th ,,	8 A.M.	6
Deesa	16th ,,	4 P.M.	6
Poona	2nd ,,	4 P.M.	7
Akola	4th ,,	4 P.M.	7
Jamnagar	18th ,,	10 A.M.	7
Kodaikanal	5th ,,	10 A.M.	7
Mount Abu	2nd ,,	10 A.M.	8
Kodaikanal	2nd ,,	10 A.M.	8
Mysore	5th ,,	4 P.M.	9
Kodaikanal	3rd ,,	10 A.M.	9
	16th ,,	10 A.M.	9
Kodaikanal	3rd ,,	8 A.M.	9
Akola	6th ,,	4 P.M.	9
	8th ,,	4 P.M.	9

Station.	Date.	Hour.	Lowest humidity recorded during January and February.
			%
Sholapur	1st and 8th January	4 P.M.	9
Muktesar	4th ,,	10 A.M.	9
Buldana	4th February	4 P.M.	8
	5th ,,	10 A.M.	9
	5th ,,	4 P.M.	6
	6th ,,	4 P.M.	8
Khandwa	6th ,,	10 A.M.	8
Buldana	7th ,,	4 P.M.	9
	8th ,,	4 P.M.	8
Khandwa	8th ,,	4 P.M.	9
Buldana	9th ,,	4 P.M.	8
	10th ,,	4 P.M.	9
Poona	10th ,,	4 P.M.	7
Sholapur	10th ,,	4 P.M.	8
Buldana	12th ,,	4 P.M.	5
Poona	12th ,,	4 P.M.	9
	13th ,,	4 P.M.	8
Buldana	13th ,,	4 P.M.	5
	14th ,,	10 A.M.	7
	14th ,,	4 P.M.	4
Poona	14th ,,	4 P.M.	9
Buldana	15th ,,	4 P.M.	8
	16th ,,	4 P.M.	6
Khandwa	16th ,,	From minima.	8
Sholapur	16th ,,	4 P.M.	9
Belgaum	17th ,,	10 A.M.	9
Nagpur	18th ,,	4 P.M.	9
Deesa	6th ,,	10 A.M.	6
	6th ,,	4 P.M.	8
Jamnagar	6th ,,	4 P.M.	5
	7th ,,	10 A.M.	4
	7th ,,	4 P.M.	7
Deesa	7th ,,	4 P.M.	7
	15th ,,	4 P.M.	9
	16th ,,	4 P.M.	8
	18th ,,	4 P.M.	7

II.—The hot weather period.—March was drier than usual over practically the whole of India. A large change occurred in the beginning of April which reversed the humidity conditions over the greater part of India. Weather was more disturbed than usual with much rain, and the precipitation was largely in excess over the Indian area except Burma. The air was hence on the mean of the month slightly damper than usual over the greater part of the country.

Weather was also slightly more disturbed than usual in the first fortnight of May, but was very hot and dry in the latter half, more especially in North-Western India.

The driest periods in the hot weather of 1900 were the 7th to the 17th March, the 14th to the 20th April, and the 25th April to the 3rd of May. Humidities of 3 and less were recorded at several stations during these periods. The following gives the most noteworthy :—

Station.	Date.	Hour.	Lowest humidity recorded during March April and May.
			%
Chakrata	8th March	10 A.M.	0
Leh	11th ,,	4 P.M.	0
Jamnagar	12th ,,	,,	3
Buldana	14th ,,	,,	0
Deesa	,, ,,	,,	2
Roorkee	17th April	,,	3
Deesa	27th ,,	,,	2
Jamnagar	,, ,,	10 A.M.	3
Akola	29th ,,	,,	2
Deesa	1st May	4 P.M.	2
Akola	,, ,,	,,	3
Jhansi	,, ,,	8 A.M.	3
Buldana	,, ,,	10 A.M.	3
Buldana	2nd ,,	4 P.M.	3

The mean humidity conditions of this period differed less from the normal than during the other periods of the year. The following gives a summary of the chief features :—

(1) Weather was very slightly drier than usual in Upper India on the mean of the period, as shown below :—

Area.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March.	April.	May.	Period, March to May.	March.	April.	May.	Period, March to May.
	"	"	"	"				
Baluchistan (Quetta)	—·009	—·015	+·038	+·005	—9	—1	+6	—1
Punjab	—·005	—·038	+·011	—·011	—7	+2	+1	—1
Sind	+·051	+·007	+·042	+·033	—2	—5	0	—2

(2) The variations were generally small at the hill stations in Upper India on the mean of the period. This is shown below :—

Station.	Variation of absolute humidity from normal in				Variation of relative humidity from normal in			
	March.	April.	May.	Period March to May.	March.	April.	May.	Period March to May.
	"	"	"	"				
Leh . . .	—·011	+·015	+·014	+·006	—11	+10	+ 2	0
Srinagar . .	+·093	+·027	+·081	+·067	+ 9	+17	+17	+14
Simla . . .	—·023	—·034	—·005	—·021	—10	+ 4	+ 4	— 1
Chakrata . .	—·013	—·025	+·002	—·012	— 8	+ 6	+ 3	0
Ranikhet . .	—·038	—·041	—·022	—·034	—15	+ 1	— 2	— 5

(3) The variations of the humidity conditions from the normal were small in Northern India, Burma and the Bay Islands. The following gives data :—

Area.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March.	April.	May.	Period March to May.	March.	April.	May.	Period March to May.
	"	"	"	"				
Bihar . . .	+·032	—·052	—·035	—·018	0	—6	—1	—2
Chota Nagpur .	—·036	+·070	+·049	+·028	—8	+6	+5	+1
Bengal . .	+·027	+·019	—·035	+·004	—2	0	—4	—2
Orissa . . .	+·083	+·030	+·003	+·039	0	—3	—2	—2
Burma . .	+·006	+·031	+·015	+·017	—2	—2	+3	0
Port Blair . .	+·027	+·031	+·018	+·025	—1	—1	—1	—1

(4) The air was much drier in Central India and the interior of the Peninsula in March and May and very slightly damper in April. The variations were small in Rajputana and the North-Western Provinces, as is shown below :—

Area.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March.	April.	May.	Period March to May.	March.	April.	May.	Period March to May.
	"	"	"	"				
Rajputana . .	—·024	0	—·033	—·019	— 5	+2	0	—1
North-Western Provinces.	—·021	—·022	—·015	—·020	— 8	+1	— 2	—3
Berar . . .	—·073	+·045	—·032	—·020	— 9	+2	— 4	—4
Central Provinces	—·091	—·010	—·103	—·068	—13	—3	— 9	—8
Bombay Deccan .	—·058	—·027	—·075	—·048	— 4	—1	— 7	—4
Madras Deccan .	—·036	+·011	—·083	—·036	— 7	—1	— 8	—5
Bombay Coast .	—·037	—·030	—·028	—·032	— 3	—3	— 4	—3
Madras Coast .	+·056	+·057	+·043	+·052	+ 3	+6	+ 4	+4
Mysore . .	—·044	+·028	—·048	—·021	— 8	0	—10	—6

III.—The south-west monsoon period.—The Bombay monsoon current was weak in June and July. It was unusually late in being established on the Bombay Coast, and extended very slowly into the interior of North-Western India where it was not fully established until the end of July. The Bombay monsoon current was strong during the remainder of the period and the rainfall was largely above the normal over the greater part of the region which usually obtains rain from it, more especially the Punjab and Rajputana. The Bay current was of normal strength in June and July, and above its normal strength in August and September. In June and July it was determined to a greater extent than usual to North-Eastern India and Burma and in August and September to the Gangetic Plain.

The humidity conditions of the period were determined by the variations in the strength and rain-giving capacity of the monsoon currents.

The following is a brief statement of the chief features of the mean humidity conditions of the first-half of the period :—

(1) The variations of the humidity conditions were irregular but generally small in amount throughout the period in Burma and North-Eastern India, as shown below :—

Area.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	June.	July.	Period June and July.	June.	July.	Period June and July.
Burma	+·028	+·013	+·021	0	— 1	— 1
Bengal . . .	+·024	+·008	+·016	— 1	— 1	— 1
Orissa	+·042	+·050	+·046	0	+ 1	+ 1
Chota Nagpur . .	+·020	—·020	0	— 1	— 6	— 4
Bihar	—·008	+·014	+·003	— 1	+ 3	+ 1

(2) Over nearly the whole of the remainder of India including the Punjab, the North-Western Provinces, Rajputana, Central India, Berar, the Central Provinces, North Bombay, Konkan and the Deccan, the air was in both months abnormally dry. The variations were somewhat larger in June than in July. The amount of aqueous vapour present in the air was much less than usual. This in combination with the increased temperature due to decreased cloud and rainfall reduced the relative humidity very largely below the normal over the interior districts. The following gives comparative aqueous vapour pressure and relative humidity data for the period in this area of abnormal dryness —

Area.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	June.	July.	Period June and July.	June.	July.	Period June and July.
Baluchistan (Quetta) .	—·109	—·057	—·083	—10	— 9	—10
Punjab . . .	—·067	—·021	—·044	— 8	— 4	— 6
Rajputana . . .	—·062	—·058	—·060	—10	—14	—12

Area.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	June.	July.	Period June and July.	June.	July.	Period June and July.
	"	"	"			
Sind	+·050	+·041	+·046	−3	−3	−3
North-Western Provinces.	−·043	−·015	−·029	−8	−4	=6
Berar	−·050	−·002	−·026	−10	−5	−8
Central Provinces	−·056	+·012	−·022	−11	−3	−7
Konkan	−·009	+·012	+·002	−4	−3	−4
Bombay Deccan	−·019	+·024	+·003	−6	−1	−4
Madras Deccan	−·070	−·030	−·050	−9	−4	−7

The variations of the humidity conditions were small in the coast districts but large over the interior, more especially in Berar, the Central Provinces, Central India, Baluchistan, the Panjab, Rajputana and the Madras Deccan.

The following gives comparative data for representative stations in these areas :—

Station.	Variation of absolute humidity from normal in			Variation of relative humidity from normal in		
	June.	July.	Period June and July.	June.	July.	Period June and July.
	"	"	"			
Khandwa	−·046	+·008	−·019	−11	−5	−8
Nagpur	−·066	+·016	−·025	−11	0	−6
Deesa	−·050	−·066	−·058	−7	−16	−12
Jaipur	−·073	−·050	−·062	−13	−12	−13
Ludhiana	−·080	−·042	−·061	−12	−5	−9
Lahore	−·067	−·022	−·045	−6	−3	−5
Allahabad	−·035	−·043	−·039	−9	−8	−9
Buldana	−·077	−·018	−·048	−14	−6	−10
Bellary	−·107	−·087	−·097	−12	−10	−11
Quetta	−·109	−·057	−·083	−10	−9	−10
Mount Abu	−·057	−·017	−·037	−14	−12	−13
Chikalda	−·036	−·001	−·019	−15	−8	−12

The more important abnormal features of the humidity conditions of the months of August and September were :—

(1) Humidity was in slight excess in August and in large excess in September in the interior areas dependent for their rainfall on the Bombay monsoon, as is shown by the following data :—

Area.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	August.	September.	Period August and September.	August.	September.	Period August and September.
	"	"	"			
Punjab	+·056	+·130	+·093	+5	+16	+11
Rajputana	+·070	+.107	+·089	+4	+11	+8
North-Western Provinces and Oudh.	+·024	+·037	+·031	0	+7	+4
Central Provinces	+·029	+·056	+·043	+2	+7	+5
Berar	+·016	+·015	+·016	+1	+1	+1

The excess was most pronounced in the South Punjab as represented by the stations of Lahore and Ludhiana :—

Station.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	August.	September.	Period August and September.	August.	September.	Period August and September.
	"	"	"			
Lahore	+·070	+·134	+·102	+7	+20	+14
Ludhiana	+·065	+·090	+·078	+7	+15	+11

(2) The relative humidity was above the normal or the air was more humid than usual at the hill stations in Upper India but to a less extent than at the neighbouring plain stations.

The following gives data for four stations.

Station.	Variation of mean relative humity from normal in		
	August.	September.	Period August and September.
Leh	+3	+3	+3
Simla	0	+10	+5
Ranikhet	0	+4	+2
Mount Abu	+3	+10	+7

(3) The air was very slightly less humid than usual in North-Eastern India, Burma and the West Coast districts. The variations were very small, and the conditions were hence practically normal in these areas.

IV.—The retreating south-west monsoon period. The humidity conditions of this period were almost solely determined by the unusually rapid retreat of the monsoon currents from the north and centre of the Peninsula and the Bay of Bengal and by the scanty rainfall in the months of October and November. The regular monsoon rains ceased in North-Eastern India in the second week of October and in Burma in the fourth week of that month. Moderate to heavy rain fell in North-Eastern India in October due to a cyclonic storm in the second week of the

month and moderate rain fell in Southern India in the last week of the month due to the only cyclonic storm which crossed the Coromandal Coast during the period The months of November and December were unusually fine and dry in the Peninsula and only occasional showers fell in the South Coromandal Coast districts.

The interior of the Peninsula, more especially the Deccan, received very scanty rain during the period. Weather was more disturbed in Upper India and the Persian area, and a succession of feeble depressions passed eastwards and gave light rain and much cloud.

The chief feature of the humidity conditions of the period was the dryness of the air over the central area including the Central Provinces, Berar, the Bombay Deccan and Hyderabad throughout the whole period. This feature was most pronounced at the end of the rains in the month of October. The following gives data :—

Area.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	October.	November.	December.	Period October to December.	October.	November.	December.	Period October to December.
	"	"	"	"				
Berar	—·152	—·076	+·041	—·062	—14	—11	—3	—9
Central Provinces	—·094	—·011	+·102	—·001	—7	—4	+4	—2
Bombay Deccan	—·114	—·082	+·024	—·057	—14	—9	—2	—8
Hyderabad Deccan	—·080	—·057	+·015	—·041	—9	—10	—4	—8

The deficiency was most marked in the centre and south of the area as defined by the stations of Belgaum, Sholapur, Buldana, Akola and Hyderabad. Comparative data are given below for the stations at which the deficiency was greatest :—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	October.	November.	December.	Period October to December.	October.	November.	December.	Period October to December.
	"	"	"	"				
Sholapur	—·170	—·107	+·034	—·081	—21	—13	—9	—14
Buldana	—·156	—·095	+·015	—·079	—16	—13	—4	—11
Hyderabad (Deccan)	—·080	—·057	+·015	—·041	—9	—10	—4	—8
Akola	—·148	—·056	+·067	—·046	—11	—8	—2	—7
Belgaum	—·075	—·068	+·011	—·044	—12	—10	0	—7

As already stated, the excessive dryness in this central area was similar to the conditions which obtained during the corresponding periods of 1896 and 1899. The following gives comparative data for these stations :—

Station.	Mean data of retreating south-west monsoon period, October to December					
	1900.		1899.		1896.	
	Variation from normal.		Variation from normal.		Variation from normal.	
	Absolute humidity.	Relative humidity.	Absolute humidity.	Relative humidity.	Absolute humidity.	Relative humidity.
	"		"		"	
Sholapur	—·081	—14	—·185	—25	?	?
Buldana	—·079	—11	—·213	—31	—·076	—14
Akola	—·046	—7	—·163	—27	—·040	—13
Hyderabad (Deccan)	—·041	—8	—·131	—20	—·016	—7
Belgaum	—·044	—7	—·088	—11	—·013	—3

The air was damper than usual throughout the period in Upper India, the variations in the absolute and relative humidities increasing on the whole with the advance of the season. The following gives comparative data for stations in that area :—

Station.	Variation of absolute humidity from normal in				Variation of relative humidity from normal in			
	October.	November.	December.	Period October to December.	October.	November.	December.	Period October to December.
	"	"	"	"				
Peshawar	+·007	+·048	+·022	+·026	+1	+1	+3	+2
Lahore	+·045	+·099	+·045	+·063	+9	+9	+16	+11
Ludhiana	—·019	+·065	+·055	+·034	+2	+6	+12	+7
Jacobabad	—·015	+·102	+·068	+·052	—2	+6	+16	+7

The variations were small and somewhat irregular at the hill stations in Upper India. The air was much damper in Baluchistan and probably the Persian area. The following gives data for five stations :—

Station.	Variation of absolute humidity from normal in				Variation of relative humidity from normal in			
	October.	November.	December.	Period October to December.	October.	November.	December.	Period October to December.
	"	"	"	"				
Leh	+·069	+·023	—·028	+·021	+23	—1	—20	+1
Simla	—·028	—·006	+·018	—·005	—2	—4	+16	+3
Quetta	—·006	+·088	+·028	+·037	0	+19	+15	+11
Bushire	—·018	—·058	+·002	—·025	—1	—3	+4	0
Baghdad	+·031	0	+·014	+·015	+3	+9	+5	+6

The air was very slightly drier than usual on the mean of the period in North-Eastern India, as shown by comparative data for the following stations :—

Station.	Variation of absolute humidity from normal in				Variation of relative humidity from normal in			
	October.	November.	December.	Period October to December.	October.	November.	December.	Period October to December.
	"	"	"	"				
Rangoon	+·021	—·042	—·025	—·015	0	—2	—4	—2
Saugor Island	—·027	—·025	+·027	—·008	—3	—4	—1	—3
Calcutta	—·035	—·023	+·032	—·009	—7	—5	—4	—5

The year.—The mean variations for the whole year are given in the final columns of Tables XXIV and XXV.

The following are the more important features of the mean humidity conditions of the year 1900 in India :—

1st.—The year was very slightly drier than usual. The mean humidity of the whole of India for the year was 2 below the normal. The deficiency in 1900 was a result of the high temperature of the year, as the amount of aqueous vapour on the mean of the year was only ·002″ above the normal or practically normal.

2nd.—The variations of the mean humidity conditions were small to moderate in amount in Burma, North-Eastern India, the North-Western Provinces, the Punjab, Baluchistan and the Himalayas. The following gives data in illustration :—

Area.	Mean variation from normal in 1900 of	
	Mean absolute humidity.	Mean relative humidity.
	"	
Burma	+·017	—1
Bengal	+·013	—2
Orissa	+·054	+1
Bihar	+·004	0
Chota Nagpur	+·021?	+2?
North-Western Provinces and Oudh	—·001	—1
Punjab	+·012	+1
Baluchistan	—·004	+1
North-West Himalayas	+·009	—1
Sikkim and Nepal Himalayas	—·001	—1

3rd.—On the mean of the year the aqueous vapour pressure and humidity were in moderate defect over the remainder of India, including the greater part of the area wholly dependent on the Bombay current for its south-west monsoon rainfall, *viz*, Rajputana, Central India, Berar, the Konkan, the Central Provinces and the Deccan. The following gives variation data for these areas :—

Area.	Mean variation from normal in 1900 of	
	Mean absolute humidity.	Mean relative humidity.
	"	
Western Rajputana	—·005	—3
Eastern Rajputana and Central India	+·006	—3
Nerbudda Valley	—·026	—6
Central Provinces South and Berar	—·006	—4
Konkan	—·012	—4
Deccan, Hyderabad and Mysore	—·018	—4

The deficiency was most marked in the area represented by the stations for which data are given below :—

Station.	Mean variation from normal in 1900 of	
	Absolute humidity.	Relative humidity.
	"	
Buldana	—·066	—9
Khandwa	—·026	—6
Sholapur	—·051	—9
Hyderabad	—·022	—6
Bellary	—·056	—6
Kurrachee	—·010	—6

The following gives the mean annual variations of the mean aqueous vapour pressure and humidity of the whole of India from the normal for each year from 1875 to 1900 :—

Year.	Annual variation of pressure of vapour.	Annual variation of relative humidity
	"	
1875	—·004	+1
1876	—·017	—1
1877	+·011	+1
1878	+·020	0
1879	—·014	—1
1880	—·004	0
1881	+·001	0
1882	—·008	0
1883	—·013	—1
1884	—·012	0
1885	+·001	0
1886	+·008	+1
1887	—·012	—1
1888	—·005	—1
1889	+·003	—1
1890	—·003	=1
1891	—·007	0
1892	—·002	—1
1893	+·007	+3
1894	+·013	+2
1895	+·003	0
1896	—·010	—3
1897	+·005	—1
1898	—·008	—2
1899	—·026	—5
1900	+·002	—2

Cloud.

Normal values of the mean monthly and annual amount of cloud at second class stations, obtained from the whole of the available data up to the end of the year 1896, were given in Table XXI of the Annual Summary of 1896. These means are the arithmetical averages of the cloud amounts as registered at 10 A.M. and 4 P.M., and hence represent the mean amount during the day period rather than of the whole 24 hours. Corrections to reduce these means to true daily means have only been obtained in the case of a few stations.

Variation data of this element of meteorological observation for the year 1900, are given in Tables XXII, XXIII and XXIV. Table XXV gives the mean variation data for the sixteen meteorological areas adopted in the geographical summaries of meteorological data in the Annual Reports previous to 1891, and Table XXVI gives similar data for nine meteorological provinces of India.

TABLE XXII.—*Comparison of the mean cloud proportion in each month of 1900 with the averages of past years.*

Meteorological Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Burma Coast and Bay Islands.	Port Blair	−0·1	+0·2	+1·3	+0·3	+0·3	+0·5	+0·4	+0·4	+0·7	+0·9	−0·4	+0·4	+0·4
	Rangoon	−1·2	−0·9	0	−1·5	+1·0	+0·5	−0·7	0	−0·8	+0·2	−1·4	+0·5	−0·4
	Diamond Island	−0·9	−0·7	−0·2	−0·8	−0·2	+0·8	+0·7	+0·5	+0·2	+0·1	−1·5	−1·2	−0·3
	Cocos Island	−0·1	−0·6	+0·8	−0·8	−0·9	+1·1	−0·5	−0·1	+0·8	+1·2	−1·8	+0·4	0
	Akyab	+1·6	+0·4	+1·8	+1·1	−0·6	+0·7	0	+0·3	−0·8	−0·7	−1·0	+0·8	+0·3
Bengal and Orissa.	Chittagong	+1·4	+1·2	+0·5	+0·7	−1·0	+1·3	+0·9	+0·7	+0·3	−0·2	−1·0	−0·1	+0·4
	Calcutta (Alipore).	+1·8	+1·7	−0·7	+1·2	−0·3	0	0	+0·5	+0·9	+0·3	−0·9	−0·2	+0·4
	Saugor Island	+1·9	+2·5	0	+0·8	−1·4	−0·8	0	+0·6	+0·4	+0·2	−1·2	−0·6	+0·2
	False Point	+2·8	+2·8	+0·9	+1·6	−0·3	+0·1	+0·7	+0·8	+1·1	+0·8	−1·0	−0·8	+0·8
Gangetic Plain and Chota Nagpur.	Hazaribagh	+5·2	+0·9	−1·3	+2·6	+0·9	+1·3	+0·7	+1·0	+1·7	0	−1·0	+1·2	+1·1
	Darbhanga	+2·3	−0·7	−1·1	0	−0·2	−0·2	+0·5	−0·5	+0·8	−0·7	−0·4	+0·1	0
	Allahabad	+4·4	+0·4	−0·7	+0·8	+0·5	−1·4	+0·1	+0·4	+1·9	+0·2	+0·2	+1·9	+0·7
Upper Sub-Himalayas.	Dehra Dun	+1·8	+0·7	+0·2	+1·2	+0·6	−1·6	−1·0	+0·5	+2·6	−0·1	+0·2	+2·2	+0·6
	Roorkee	+1·8	−0·2	−0·2	+0·5	+0·2	−1·3	+0·4	+0·5	+2·1	−0·4	−0·2	+2·2	+0·5
	Meerut	+1·4	+0·5	−0·7	+1·8	+2·9	+4·2	+1·4	+0·5	+2·3	−0·2	−0·1	+2·9	+1·4
	Lahore	+0·4	−0·3	+0·5	+1·5	−0·1	−2·7	−2·0	+0·2	+2·5	+0·1	+0·8	+2·5	+0·3
	Ludhiana	+0·1	−0·5	+0·3	+1·0	+1·0	−2·3	−1·3	+0·1	+2·6	0	+0·4	+1·5	+0·2
Indus Valley and North-West Rajputana.	Peshawar	−0·3	+0·7	+0·7	+0·8	+1·9	−0·1	−0·4	−0·8	+1·1	+1·0	+2·1	+2·1	+0·7
	Jacobabad	+1·2	−0·4	−1·0	−0·8	+0·1	−0·7	−1·7	−0·2	+0·2	+0·6	+0·8	+2·5	+0·1
	Kurrachee	0	−0·5	−1·3	−0·4	−1·0	−2·4	−3·1	−1·1	−0·4	−0·6	−0·3	+1·0	−0·8
East Rajputana, Central India and Gujarat.	Jaipur	+1·3	+0·8	−0·4	−0·3	0	−2·8	−2·4	+0·5	+3·0	−0·7	+0·6	+2·2	+0·2
	Deesa	+0·5	−0·6	−1·1	−0·9	−0·8	−3·4	−1·9	+0·8	+0·9	−1·6	0	+0·3	−0·7

TABLE XXII.—*Comparison of the mean cloud proportion in each month of 1900 with the averages of past years*—concld.

Meteorological Provinces.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Deccan.	Belgaum	+1·0	−1·1	−0·6	+0·3	−1·2	−0·4	−0·1	−0·1	+0·2	−1·5	−0·3	−0·2	−0·4
	Sholapur	+1·3	−0·7	−0·4	+0·6	−0·7	−0·2	+0·5	+0·2	+0·3	−2·2	−0·9	−1·2	−0·3
	Poona	+1·2	+0·1	−0·3	−0·5	−1·8	−1·7	−0·3	−0·3	−0·1	−1·8	−0·4	−0·5	−0·5
	Akola	+3·3	+0·3	−0·7	+0·9	−1·3	−1·6	−0·4	−0·7	+0·3	−1·6	−0·5	+1·4	−0·1
	Buldana	+1·2	+0·1	−0·7	−0·7	−1·3	−1·0	+1·1	+1·3	+1·8	−1·1	−1·2	−0·3	−0·1
	Khandwa	+1·7	+0·2	+0·4	+0·4	−0·8	−1·5	−0·3	+0·3	+1·6	−1·2	−0·2	+0·8	+0·1
	Nagpur	+2·5	+1·0	0	+1·7	+0·6	−0·3	0	+0·1	+0·9	−0·6	−0·8	+1·6	+0·6
	Hyderabad (Deccan).	+1·4	+0·4	+0·3	+1·3	+1·0	+0·5	+0·5	+0·7	+1·1	−0·6	−0·7	−0·7	+0·4
West Coast.	Bombay	+0·1	+0·3	−0·2	−0·4	−2·1	−1·0	−0·3	+0·3	−0·8	−1·8	−0·7	+0·5	−0·5
	Karwar	+0·7	+0·1	−0·5	−0·8	−1·6	+0·1	+1·1	+1·3	−0·2	−1·8	−0·7	−0·6	−0·2
South India.	Salem	0	−0·7	−1·1	+1·5	0	+0·3	+1·0	+0·4	+0·9	+0·2	+0·3	+0·3	+0·3
	Chitaldroog	+0·9	+0·2	−0·7	+1·0	−1·0	+0·1	+0·1	0	+0·5	−0·2	−0·6	−0·4	0
	Bangalore	−0·6	−1·0	−1·8	+0·5	−0·7	−0·7	+1·7	+1·0	+1·8	+0·2	−0·6	−0·5	−0·1
	Hassan	+0·3	0	−1·0	+0·2	+0·2	+0·1	+0·2	+0·2	+0·7	+0·1	−1·1	+0·2	0
	Mysore	+0·7	+1·6	+0·3	+1·8	+1·2	+1·6	+0·9	+0·8	+1·4	+1·6	−0·2	+1·9	+1·1
	Madras	+0·5	−0·6	−0·7	+1·6	−0·7	+0·2	+1·1	−0·3	+0·7	−0·2	+0·2	−0·2	+0·1
	Bellary	+2·3	+1·5	+1·1	+2·8	+0·4	+1·0	+1·0	+1·2	+1·1	+1·1	+1·3	+0·7	+1·3
Baluchistan.	Quetta	+0·3	+0·7	−0·7	+1·0	+2·6	−0·5	+0·6	+0·8	−0·1	+0·8	+2·2	+2·5	+0·9
Hill Stations, Northern India.	Leh	+0·2	−0·4	−0·7	+0·6	−0·3	−0·3	−0·1	−0·7	−0·5	+0·6	+0·2	+1·1	0
	Srinagar	−2·2	+0·3	+0·4	+1·5	+1·6	−0·5	−0·6	0	−0·1	+1·3	+0·6	+2·0	+0·4
	Kailang	+0·7	+0·6	+0·2	+1·2	+0·1	−0·1	+0·1	+1·0	+1·0	+0·8	+1·7	+1·5	+0·7
	Simla (Ridge)	+1·1	+1·0	+1·1	+1·9	+1·1	−3·3	−0·3	+0·9	+2·6	−0·2	+0·3	+1·7	+0·7
	Chakrata	+1·4	+1·1	−0·7	+1·2	+0·7	−1·6	−4·1	+0·6	+2·4	+0·1	+0·2	+0·7	+0·2
	Ranikhet	+1·5	+0·5	−0·2	+0·6	+0·2	−2·2	−0·2	+0·5	+2·0	−0·2	−0·2	+2·0	+0·4
	Katmandu	+1·3	−0·7	−1·5	−1·0	−0·4	−0·1	+0·9	−0·4	+0·5	−0·1	−0·5	+0·3	−0·1
	Darjeeling	+0·8	−1·3	−0·3	−1·0	−0·8	−1·6	−1·0	−1·8	−0·6	−0·8	−0·8	+0·6	−0·7
Hill Stations, Central India.	Mount Abu	+1·	−0·6	−0·8	−0·4	−0·2	−4·1	−1·5	+1·0	+2·4	−1·1	+0·5	+1·0	−0·2
	Pachmarhi	+2·6	+0·5	+0·2	+0·6	0	−1·0	+0·1	+0·8	+1·7	−0·1	−0·4	+1·9	+0·6
	Chikalda	+0·6	−0·4	−0·8	+0·5	−0·7	−2·0	−0·8	−0·2	+0·8	−3·1	−1·7	+0·4	−0·6
Hill Station, South India.	Wellington	−0·6	0	−1·4	+0·8	−0·6	+0·1	+1·1	+0·4	+1·5	+0·2	0	−0·5	+0·1
Extra India.	Aden	+0·5	+0·9	+0·3	−1·6	+2·1	+1·4	+1·7	+1·0	+0·5	−0·5	+0·5	+1·0	+0·7
	Perim	+1·1	+2·0	+1·2	−1·4	−0·8	−1·4	−1·8	−1·8	−1·0	−0·8	−1·0	+0·6	−0·4
	Zanzibar	+1·6	+1·4	+0·7	−0·4	+0·1	+1·1	+1·2	+1·5	+1·0	+1·6	+0·3	+3·5	+1·1
	Port Victoria (Seychelles).	−0·3	+0·1	−1·6	−0·1	−0·6	−2·5	−0·6	−1·5	+0·1	−0·7	−0·1	−0·7	−0·7

TABLE XXIII.—*Geographical Summary of the cloud data of Table II in the monthly weather reviews of 1900.*

METEOROLOGICAL AREA.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
North-West Himalaya	5—6	+0·5	+0·5	0	+1·2	+0·6	—1·3	—0·9	+0·4	+1·2	+0·4	+0·5	+1·5	+0·4
Sikkim Himalaya and Nepal.	2	+1·1	—1·0	—0·9	—1·0	—0·6	—0·9	—0·1	—1·1	—0·1	—0·5	—0·7	+0·5	—0·4
Punjab Plains .	3	+0·1	0	+0·5	+1·1	+0·9	—1·7	—1·2	—0·2	+2·1	+0·4	+1·1	+2·0	+0·4
Gangetic Plain .	5	+2·3	+0·1	—0·5	+0·9	+0·8	—0·1	+0·3	+0·3	+1·9	—0·2	—0·1	+1·9	+0·6
Western Rajputana .	4	+0·9	—0·5	—1·1	—0·6	—0·5	—2·7	—2·1	+0·1	+0·8	—0·7	+0·3	+1·2	—0·4
Eastern Rajputana and Central India.	1	+1·3	+0·8	—0·4	—0·3	0	—2·8	—2·4	+0·5	+3·0	—0·7	+0·6	+2·2	+0·2
Nerbudda Valley .	1	+1·7	+0·2	+0·4	+0·4	—0·8	—1·5	—0·3	+0·3	+1·6	—1·2	—0·2	+0·8	+0·1
Chota Nagpur .	1	+5·2	+0·9	—1·3	+2·6	+0·9	+1·3	+0·7	+1·0	+1·7	0	—1·0	+1·2	+1·1
Lower Bengal . .	2	+1·9	+2·1	—0·4	+1·0	—0·9	—0·4	0	+0·6	+0·7	—0·3	—1·1	—0·4	+0·3
Orissa . . .	1	+2·8	+2·8	+0·9	+1·6	—0·3	+0·1	+0·7	+0·8	+1·1	+0·8	—1·0	—0·8	+0·8
Central Provinces, South, and Berar.	5	+2·0	+0·3	—0·4	+0·6	—0·5	—1·2	0	+0·3	+1·1	—1·3	—0·9	+1·0	+0·1
Konkan . . .	2	+0·4	+0·2	—0·4	—0·6	—1·9	—0·5	+0·4	+0·8	—0·5	—1·8	—0·7	—0·1	—0·4
Deccan, Hyderabad and Mysore.	9	+0·9	+0·1	—0·3	+0·9	—0·3	0	+0·5	+0·4	+0·8	—0·4	—0·4	—0·1	+0·2
East Coast and Carnatic.	2	+0·3	—0·7	—0·9	+1·6	—0·4	+0·3	+1·1	+0·1	+0·8	0	+0·3	+0·1	+0·2
Arakan and Pegu .	4	+0·2	0	+0·5	—0·1	—0·2	+0·8	+0·2	+0·4	—0·3	—0·2	—1·2	0	0
Bay Islands . .	2	—0·1	—0·2	+1·1	—0·3	—0·3	+0·8	—0·1	+0·2	+0·8	+1·1	—1·1	+0·4	+0·2
Extra-Tropical India.	25—26	+1·3	+0·3	—0·3	+0·6	+0·2	—1·1	—0·7	+0·2	+1·4	—0·1	+0·1	+1·3	+0·3
Tropical India .	25	+0·8	0	—0·2	+0·5	—0·5	0	+0·4	+0·4	+0·6	—0·5	—0·6	+0·2	+0·1
Whole India . .	50—51	+1·1	+0·2	—0·3	+0·6	—0·1	—0·6	—0·2	+0·3	+1·0	—0·3	—0·3	+0·7	+0·1

TABLE XXIV.—*Variations of the mean cloud amount from the normal in 1900 in nine meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	YEAR.
Burma Coast and Bay Islands .	—0·2	—0·3	+0·7	—0·3	+0·1	+0·6	+0·1	+0·3	0	+0·3	—1·1	+0·2	0
Bengal and Orissa . .	+2·0	+2·1	+0·2	+1·1	—0·8	+0·2	+0·4	+0·7	+0·7	+0·3	—1·0	—0·4	+0·5
Gangetic Plain and Chota Nagpur.	+4·0	+0·2	—1·0	+1·1	+0·4	—0·1	+0·4	+0·3	+1·5	—0·2	—0·4	+1·1	+0·6
Upper Sub-Himalayas . .	+1·1	0	0	+1·2	+0·9	—0·7	—0·5	+0·4	+2·4	—0·1	+0·2	+2·3	+0·6
Indus Valley and North-West Rajputana.	+0·3	—0·1	—0·5	—0·1	+0·3	—1·1	—1·7	—0·7	+0·3	+0·3	+0·9	+1·9	0
East Rajputana, Central India and Gujarat.	+0·9	+0·1	—0·8	—0·6	—0·4	—3·1	—2·2	+0·7	+2·0	—1·2	+0·3	+1·3	—0·3
Deccan	+1·7	0	—0·3	+0·5	—0·7	—0·8	+0·1	+0·2	+0·8	—1·3	—0·6	+0·1	0
West Coast	+0·4	+0·2	—0·4	—0·6	—1·9	—0·5	+0·4	+0·8	—0·5	—1·8	—0·7	—0·1	—0·4
South India	+0·6	+0·1	—0·6	+1·3	—0·1	+0·4	+0·9	+0·5	+1·0	+0·4	—0·1	+0·3	—0·4

The cold-weather period:—Weather was less disturbed than usual in January. A large number of depressions affected the weather in North-Western India in February. They were feeble, but gave rise to much cloud. There was, on the mean of the period, more cloud than usual over nearly the whole of India, but less in Lower Burma. The

chief feature was an abnormally large amount of cloud in North-Eastern India.

Cloud was normal or in slight excess on the mean of the period in Baluchistan, North-Western and Central India and Bihar. The following gives data for these areas :—

Area.	Variation of mean cloud amount from normal in		
	January.	February.	Period January and February.
Baluchistan	+0·3	+0·7	+0·5
Punjab	+0·1	0	+0·1
Sind	+0·6	−0·5	+0·1
Rajputana	+0·9	+0·1	+0·5
Bihar	+2·3	−0·7	+0·8

The amount of cloud was, on the other hand, considerably above the normal at the majority of the hill stations in North-Western India, as shown below :—

Station.	Variation of cloud amount from normal in		
	January.	February.	Period January and February.
Leh	+0·2	−0·4	−0·1
Kailang	+0·7	+0·6	+0·7
Simla	+1·1	+1·0	+1·1
Ranikhet	+1·5	+0·5	+1·0
Mount Abu	+1·9	−0·6	+0·7

The chief feature in the distribution of cloud was the large excess in North-Eastern India, the North-Western Provinces, Berar and the Central Provinces :—

Area.	Variation of cloud amount from normal in		
	January.	February.	Period January and February.
Bengal	+1·7	+1·8	+1·8
Orissa	+2·8	+2·8	+2·8
Chota Nagpur	+5·2	+0·9	+3·1
North-Western Provinces	+2·4	+0·4	+1·4
Central Provinces	+2·1	+0·6	+1·4
Berar	+2·3	+0·2	+1·3

The amount of cloud was slightly greater than usual over the greater part of the Peninsula, as shown below :—

Area.	Variation of mean cloud amount from normal in		
	January.	February.	Period January and February.
Mysore	+0·3	+0·2	+0·3
South India	0	−0·7	−0·4
Madras (Central)	+2·3	+1·5	+1·9
Madras Coast	+0·5	−0·6	−0·1
West Coast	+0·4	+0·2	+0·3
Bombay Deccan	+1·2	−0·6	+0·3

Cloud was in defect throughout the period in Lower Burma, as shown by the following data :—

Station.	Variation of mean cloud amount from normal in		
	January.	February.	Period January and February.
Rangoon	−1·2	−0·9	−1·1
Diamond Island	−0·9	−0·7	−0·8

II. The hot-weather period.—March and May were drier months and, on the whole, less disturbed than usual in India generally, and there was hence less cloud than usual. Weather in April was, on the other hand, very unsettled over the whole area, but more especially in Northern and Central India and the interior of the Peninsula. Cloud was in marked excess in that month over the whole of India, except Burma, Rajputana, Sind and the West Coast districts.

The following is a summary of the chief abnormal features of the distribution of cloud during this season :—

(1) There was more cloud than usual throughout the period in the Punjab and in April and May in the North-Western Provinces. The following gives data :—

Area.	Variation of mean cloud amount from normal in			
	March.	April.	May.	Period March to May.
Punjab	+0·5	+1·1	+0·9	+0·8
North-Western Provinces	−0·4	+1·1	+1·1	+0·9

The variations in the amount of cloud at the hill stations in Upper India and Baluchistan were generally similar to those in the adjacent plains, and were generally larger in

amount on the mean of the period than at the neighbouring plains stations :—

Station.	Variation of cloud amount from normal in			
	March.	April.	May.	Period March to May.
Quetta	−0·7	+1·0	+2·6	+1·0
Kailang	+0·2	+1·2	+0·1	+0·5
Srinagar	+0·4	+1·5	+1·6	+1·2
Simla	+1·1	+1·9	+1·1	+1·4
Chakrata	−0·7	+1·2	+0·7	+0·4
Ranikhet	−0·2	+0·6	+0·2	+0·2

(2) Cloud was in moderate to considerable defect in the West Coast districts, the Bombay Deccan, Berar, Sind, Rajputana and Bihar, as shown below :—

Area.	Variation of cloud amount from normal in			
	March.	April.	May.	Period March to May.
Sind	−1·2	−0·6	−0·5	−0·8
Rajputana	−0·8	−0·6	−0·4	−0·6
Bombay Coast	−0·4	−0·6	−1·9	−1·0
Bombay Deccan	−0·4	+0·1	−1·2	−0·5
Berar	−0·7	+0·1	−1·3	−0·6
Bihar	−1·1	0	−0·2	−0·4

(3) Cloud was on the mean of the whole period normal or in slight excess over the remainder of India. This was chiefly or solely due to the large excess in April, as cloud was generally below the normal in March and May in these areas.

The following gives data :—

Area.	Variation of mean cloud amount from normal in			
	March.	April.	May.	Period March to May.
Chota Nagpur	−1·3	+2·6	+0·9	+0·7
Bengal	−0·1	+0·9	−0·9	0
Orissa	+0·9	+1·6	−0·3	+0·7
Burma	+0·5	−0·4	+0·1	+0·1
Central Provinces	+0·2	+1·1	−0·1	+0·4
Madras Deccan	+0·7	+2·1	+0·7	+1·2
Madras Coast	−0·7	+1·6	−0·7	+0·1

(4) Cloud was in large excess in the south-east of the Bay, as represented by Port Blair in March, and was about normal in April and May, as shown below :—

Station.	Variation of cloud amount from normal in			
	March.	April.	May.	Period March to May.
Port Blair	+1·3	+0·3	+0·3	+0·6

The south-west monsoon period.—The variations in the distribution of cloud from the normal during this period were very strongly marked. The south-west monsoon currents advanced over the Arabian Sea much later than usual, and extended very slowly into the interior of India, where they were not fully established until nearly the end of July. There was hence much less cloud than usual in June and July over nearly the whole of the interior of North-Western and Central India, the interior of the Peninsula and the West Coast districts. The Bombay current increased rapidly in strength during the last week of July, and was as a rain-giving current strong during the remainder of the period, *i.e.*, in August and September. Cloud was hence above the normal to a marked extent in August and September over the whole area dominated by the Bombay current.

The Bay current advanced into North-Eastern India about the middle of June, and was determined chiefly to Burma and North-Eastern India in June and July, when these areas had hence slightly more cloud than usual. In August and September the current was determined to the Gangetic Plain and Upper India, and hence diverted from North and East Bengal and Assam, thus diminishing the amount of cloud in these areas.

The following gives the chief features of the cloud distribution and its variations from the normal during the months of June and July.

(1). Cloud was in slight to moderate excess in the Andamans, Burma, Bengal, Orissa, Bihar and Chota Nagpur, as shown below :—

Area or Station.	Variation of cloud amount from normal in		
	June.	July.	Period June and July.
Port Blair	+0·5	+0·4	+0·5
Burma	+0·7	0	+0·4
Bengal	+0·2	+0·3	+0·3
Orissa	+0·1	+0·7	+0·4
Chota Nagpur	+1·3	+0·7	+1·0
Bihar	−0·2	+0·5	+0·2

(2) Cloud was in slight to moderate excess in the Central and South Deccan, Mysore and the Coromandel Coast districts. The following gives data in illustration :—

Station.	Variation of cloud amount from normal in		
	June.	July.	Period June and July.
Bellary	+1·0	+1·0	+1·0
Bangalore	−0·7	+1·7	+0·5
Mysore	+1·6	+0·9	+1·3
Madras	+0·2	+1·1	+0·7
Hyderabad	+0·5	+0·5	+0·5
Wellington	+0·1	+1·1	+0·6

(3) Cloud was in marked defect over nearly the whole area usually dependent upon the Bombay current, and more especially in the northern districts of that area. The following gives variation data of this area for this period :—

Area.	Variation of cloud amount from normal in		
	June.	July.	Period June and July.
Punjab	−1·7	−1·2	−1·5
Sind	−1·6	−2·4	−2·0
Rajputana	−3·1	−2·2	−2·7
Berar	−1·3	+0·4	−0·5
Central Provinces	−0·9	−0·2	−0·6
West Coast	−0·5	+0·4	−0·1

The area of greatest deficiency included Rajputana, Sind and the South Punjab.

(4) Cloud was normal in the North-Western Provinces, as shown below :—

Area.	Variation of cloud amount from normal in		
	June.	July.	Period June and July.
North-Western Provinces and Oudh	0	+0·2	+0·1

(5) The decreased cloud amount was very strongly marked at the hill stations in the North-Western Himalayas in June, which was an exceptionally dry month in the Western Himalayas and the cloud amount smaller than in the corresponding period of the past 25 years. The following gives data :—

Station.	Variation of cloud amount from normal in		Mean of period June and July.	
	June.	July.	Actual.	Variation from normal.
Simla	−3·3	−0·3	5·6	−1·8
Chakrata	−1·6	−4·1	3·9	−2·9
Ranikhet	−2·2	−0·2	5·8	−1·2

The following gives the mean actual cloud amount at these stations, month by month, during the period:—

Station.	Actual cloud amount in		Period June and July.
	June.	July.	
Simla	2·6	8·5	5·6
Chakrata	3·5	4·3	3·9
Ranikhet	3·3	8·3	5·8

The chief features of the distribution of cloud in August and September were as follows :—

(1) Cloud was in slight excess in the West Coast districts in August and in slight defect in September, and was on the mean of the period normal. It was throughout in slight defect in Sind.

The following gives data:—

Area.	Variation of mean cloud amount from normal in		
	August.	September.	Period August and September.
West Coast	+0·8	−0·5	+0·2
Sind	−0·7	−0·1	−0·4

(2). Cloud was normal or in slight excess generally in the North-Western Provinces, Rajputana and the Punjab in August and in large excess in September. It was hence in moderate to considerable excess on the mean of the period in these areas, as shown below :—

Area.	Variation of mean cloud amount from normal in		
	August.	September.	Period August and September.
Punjab	−0·2	+2·1	2·0
Rajputana	+0·7	+2·0	+1·4
North-Western Provinces and Oudh	+0·5	2·2	+1·4

(3) Cloud was also in moderate excess on the mean of the period over the greater part of the interior of the Peninsula. The following gives data:—

Area.	Variation of mean cloud amount from normal in		
	August.	September.	Period August and September.
Berar	+0·3	+1·1	+0·7
Central Provinces	+0·2	+1·3	+0·8
Bombay Deccan	−0·1	+0·1	0
Mysore	+0·5	+1·1	+0·8
Madras Deccan	+1·0	+1·1	+1·1
South India	+0·4	+0·9	+0·7

(4) Cloud was very slightly below the normal in Burma, and in slight to considerable excess in Bengal, Orissa, Chota Nagpur and Bihar, as is shown below:—

Area.	Variation of mean cloud amount from normal in		
	August.	September.	Period August and September.
Burma	+0·3	−0·5	−0·1
Orissa	+0·8	+1·1	+1·0
Bengal	+0·6	+0·5	+0·6
Chota Nagpur	+1·0	+1·7	+1·4
Bihar	−0·5	+0·8	+0·2

IV.—The retreating monsoon period.—The south-west monsoon currents retreated slightly earlier than usual from North-East India and Burma and a month to six weeks earlier than usual from the Deccan. From the fourth week of October the retreating monsoon current was chiefly determined to the south-west of the Bay and Southern India, and withdrew from the whole of the Bay in the third week of November, and hence much earlier than usual. A large number of feeble depressions appeared in the Persian area and Upper India during the period. They gave practically no rain in October, November and the first-half of December in Upper India, although they gave frequent cloud. Weather was disturbed with much cloud in the Punjab plains and with heavy rain or snow in the hills during the last fortnight of December. The following gives the chief features of the distribution of cloud during the period:—

(1) Cloud was throughout the period in slight to considerable excess in Baluchistan and North-Western India, the amount and extension of the area of excess increasing with the advance of the season, as is shown below:—

Area.	Variation of mean cloud amount from normal in			
	October.	November.	December.	Period October to December.
Baluchistan (Quetta)	+0·8	+2·2	+2·5	+1·8
Sind	0	+0·3	+1·8	+0·7
Punjab	+0·4	+1·1	+2·0	+1·2
North-Western Provinces and Oudh.	−0·1	0	+2 3	+0·7
Rajputana	−1·2	+0·3	+1·3	+0·1

(2) The variations in the hill districts in Upper India were, on the whole, similar to those of the adjacent plains, but less pronounced, as is shown by the following data:—

Station.	Variation of cloud amount from normal in			
	October.	November.	December.	Period October to December.
Leh	+0·6	+0·2	+1·1	+0·6
Simla	−0·2	+0·3	+1·7	+0·6
Chakrata	+0·1	+0·2	+0 7	+0·3
Ranikhet	−0·2	−0·2	+2·0	+0·5
Mount Abu	−1·1	+0·5	+1·0	+0·1

(3) Cloud was in defect on the mean of the period over the large area including Burma, Bengal, Bihar, Central India, Berar, the Central Provinces, the Deccan and Konkan. The deficiency generally decreased in amount with the advance of the season. The following gives comparative data:—

Area.	Variation of mean cloud amount from normal in			
	October.	November.	December.	Period October to December.
Burma	−0·1	−1·3	0	−0·5
Bengal	+0·1	−1·0	−0·3	−0·4
Bihar	−0·7	−0·4	+0·1	−0·3
Central Provinces	−0·9	−0·5	+1·2	−0·1
Berar	−1·4	−0·9	+0·6	−0·6
Deccan	−0·8	−0·1	−0·3	−0·4
Konkan	−1·8	−0·7	−0·1	−0·9

The deficiency was most marked at stations in the area for which data are given below :—

Station.	Variation of cloud amount from normal in.			
	October.	November.	December.	Period October to December.
Poona	—1·8	—0·4	—0·5	—0·9
Sholapur	—2·2	—0·9	—1·2	—1·4
Hyderabad (Deccan)	—0·6	—0·7	—0·7	—0·7
Diamond Island	+0·1	—1·5	—1·2	—0·9
Belgaum	—1·5	—0·3	—0·2	—0·7
Buldana	—1·1	—1·2	—0·3	—0·9
Karwar	—1·8	—0·7	—0·6	—1·0

(4) Cloud was in slight excess throughout the period in South India and normal in amount in Mysore and the Madras Coast districts. It was in excess at Port Blair in October and December and below the normal in November. The variation for the period was small, as is shown by the following data :

Area or Station.	Variation of mean cloud amount from normal in			
	October.	November.	December.	Period October to December.
Port Blair	+0·9	—0·4	+0·4	+0·3
Madras Coast	—0·2	+0.2	—0·2	—0·1
Mysore	+0·4	—0·6	+0·3	0
South India	+0·2	+0·3	+0·3	+0·3

(5) Cloud was considerably above the normal in Persia and slightly to considerably above in Arabia, as is shown below :—

Station.	Variation of cloud amount from normal in			
	October.	November.	December.	Period October to December.
Baghdad	+2·2	+1·7	+1·5	+1·8
Bushire	+1·0	0	+2·0	+1·0
Aden	—0·5	+0·5	+1·0	+0·3
Muscat	+0·1	+0·7	+3·5	+1·4

The year.—The mean cloud amount of the year in India was 0·2 above the normal. The variations in Tropical India and Extra-Tropical India and also of the whole of India for each of the four periods of the year are given below :—

Area.	Variation of mean cloud amount from normal in				
	I. Period.	II. Period.	III. Period.	IV. Period.	Whole year.
Extra-Tropical India	+0·8	+0·2	—0·1	+0·4	+0·3
Tropical India	+0·4	—0·1	+0·4	—0·3	+0·1
Whole India	+0·7	+0·1	+0·1	0	+0·2

The following table gives the variations of the mean amount of cloud in the Indian area, year by year, for the period 1875 to 1900 :—

Year.	Amount of variation.	Year.	Amount of variation.
1875	0	1888	—0·1
1876	—0·2	1889	+0·1
1877	+0·3	1890	+0·2
1878	+0·1	1891	+0·1
1879	—0·1	1892	+0·1
1880	—0·1	1893	+0·5
1881	—0·1	1894	+0·5
1882	0	1895	+0·1
1883	+0·1	1896	—0·2
1884	—0·1	1897	0
1885	+0·2	1898	—0·2
1886	+0·2	1899	—0·3
1887	-0·1	1900	—0·2

Rainfall.

The rainfall data of India are now issued in a separate volume. The tenth volume, that of 1900, contains the rainfall data of 2,326 stations, which are classified under their respective administrative divisions according to the following scheme:—

PROVINCE.	Number of stations.
Burma	149
Assam	116
Bengal, Bihar, Chota Nagpur and Orissa	360
North-Western Provinces and Cudh	277
Punjab	211
Bombay	277
Madras	379
Coorg	10
Central Provinces	67
Berar	43
Mysore	78
Baluchistan	47
Kashmir	35
Rajputana	143
Central India	59
Hyderabad (Deccan)	22
Travancore	39
Cochin	3
Pudukota	11

The volume contains the whole of the available information for the year 1900 of this important element of meteorological observation.

The information includes monthly statements of—

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

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

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

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

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

(*f*) the accumulated rainfall (up to the date of each statement) throughout each of the seasons into which the year is divided.

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

In Table XXV of the Annual Summary for 1896 are given the normal means of rainfall for 535 stations determined from the whole of the available data down to December 1896. The stations for which the means are given were selected by Mr. Blanford, and normal means were given in the rainfall sections of the Annual Reports on the Meteorology of India. The last series of means was given in the Annual Report on the Meteorology of India for 1890. The normal means in Table XXV of the Annual Summary for 1896 are based on six years' additional data. This period, however, includes the three years 1892—94 of abnormally heavy rainfall, and hence the means given in this table are in almost all cases higher than those given in Table XXXI of the Annual Report on the Meteorology of India for 1890. The following gives six instances of the considerable apparent increase in the mean rainfall:—

PROVINCE.	STATION.	Average annual rainfall based on data up to 1890.	Average annual rainfall based on data up to 1896.	Increase in average result.
		Inches.	Inches.	Inches.
BOMBAY	Lanavla	164·24	172·75	+8·51
	Jetalsar	23·60	30·39	+6·79
BENGAL AND ORISSA	Keonjhar	31·29	37·98	+6·69
	Narsingpur	39·02	44·72	+5·70
	Bispara	49·69	55·07	+5·38
CENTRAL PROVINCES	Sarangarh	50·50	55·84	+5·34

Table XXXV gives the variations of the monthly and annual rainfall in 1900 of 534 stations in India, Baluchistan and Burma.

The following four tables (Tables XXVI to XXIX) give summaries of the rainfall data of the year. In the first two tables (Tables XXVI and XXVII) the summaries are drawn up in the form that was used for many years in the Annual Reports issued by the Department and are based on the rainfall returns of 432 selected stations. In the two succeeding tables (Tables XXVII and XXIX) the actual average rainfall data (derived from the returns of 2,326 rain-gauge stations in India) are given for the 57 meteorological districts into which the Empire is divided for the comparison of crops and rainfall for the four periods into which the year may be arranged. The four periods are as follows:—

1st.—From January 1st to February 28th, which forms the period of the cold-weather rains of Upper India.

2nd.—From March 1st to May 31st, which includes the hot season, when rain occurs mainly in the coast districts, and in Assam during thunderstorms.

3rd.—From June 1st to October 31st, which forms the period of the south-west monsoon rains proper.

4th.—From November 1st to December 31st, which includes the period of the so-called north-east monsoon rains of Southern India, more especially of the Coromandel Coast districts.

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years.*

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inch.	Inches.	Inches.	Inches.
Baluchistan.	Kalat . .	−1·18	−1·48	−1·10	+0·21	+1·15	−0·21	−0·50	−0·10	−0·05	−0·07	+0·85	+4·18	+1·70
	Pishin . .	−0·46	+0·04	−0·46	+0·53	+0·47	−0·06	−0·21	−0·21	−0·01	−0·06	+1·27	+2·32	+3·16
	Chaman . .	−0·32	+0·20	−1·34	+1·01	+0·40	−0·22	−0·29	0	0	−0·09	+0·57	+2·55	+2·47
	Quetta . .	−0·03	+0·45	−1·16	+0·54	+0·74	−0·19	+0·57	−0·60	−0·13	−0·09	+1·36	+3·41	+4·87
	Mach . .	−1·53	−2·50	−0·35	−0·02	+0·07	−1·25	−0·93	+0·82	−0·05	−0·62	+0·77	+3·05	−2·54
	Beleli .	−0·12	−0·37	−0·66	+1·39	+0·19	−0·22	−0·11	−0·16	−0·04	−0·10	+1·18	+2·41	+3·39
	Kuchlak . .	−0·28	−0·28	−0·36	+0·88	+1·24	−0·13	−0·19	−0·25	−0·19	−0·13	+1·26	+1·60	+3·17
	Fort Sandeman	−0·71	−0·35	+0·08	+0·90	+1·49	−0·74	−2·12	−0·16	+0·23	−0·05	+0·13	+0·83	−0·47
	Bostan . .	+0·06	−0·82	−0·36	+0·59	+0·50	−0·29	−0·44	−0·26	−0·04	−0·07	+1·05	+1·59	+1·51
	Yarookarez .	+0·50	−0·21	−0·44	+0·86	+0·32	−0·08	−0·02	−0·23	0	−0·07	+1·24	+2·10	+3·97
	Syad Hamed .	+0·48	−1·44	−0·21	+0·91	0	−0·01	0	−0·13	0	−0·10	+0·67	+1·70	+1·87
	Gulistan . .	+0·69	−0·18	−1·35	+1·17	−0·01	−0·07	−0·05	0	−0·06	−0·10	+0·90	+1·94	+2·88
	Killa Abdulla .	+0·73	−0·26	−0·50	+0·97	−0·10	−0·05	−0·13	−0·04	−0·03	−0·15	+1·98	+1·91	+4·33
	Khanai . .	−1·77	−0·75	0	+0·30	+0·44	−0·28	−0·25	−0·30	0	−0·11	+1·18	+1·11	−0·43
	Fuller's Camp .	−2·28	−1·00	−1·41	+0·49	+0·21	−0·16	+0·35	−0·22	−0·09	−0·13	+1·25	+1·23	−1·76
	Kachh . .	+2·36	−0·08	−0·96	+0·36	+0·30	−0·36	+0·27	−0·23	−0·14	−0·10	+1·00	+7·25	+9·67
	Mudgorge .	−0·76	−0·62	−0·73	+0·72	+0·48	−0·30	+0·11	−0·44	−0·06	−0·13	+0·79	+2·48	+1·54
	Mangi . .	+0·41	−1·08	−0·12	−0·13	+0·08	−0·79	−0·46	−0·32	−0·16	−0·13	−0·24	+2·10	−0·84
	Dirgi . .	+0·06	−1·14	+0·29	+0·08	+0·19	−0·68	−0·52	−0·36	−0·15	−0·09	+0·03	+2·03	−0·26
	Khost . .	−2·20	−1·92	+0·65	−0·02	−0·17	−0·67	−1·03	+0·67	−0·24	−0·29	−0·39	+1·45	−4·16
	Shahrig . .	−2·21	−1·38	+0·43	−0·23	−0·33	−1·25	−1·73	+1·25	+0·98	−0·17	−0·30	+1·78	−3·16
	Nasak . .	−0·99	−2·27	+0·13	−0·25	−0·38	−1·69	−0·81	+1·28	−0·59	−0·13	−0·20	+1·58	−4·32
	Harnai . .	−1·31	−2·25	−0·20	−0·19	−0·16	−1·67	−1·89	+0·78	+0·48	−0·12	−0·60	+1·04	−6·09
	Sunari . .	−1·01	−1·62	−0·25	+0·01	−0·09	−1·39	−2·50	−0·40	−0·26	−0·12	−0·10	+1·11	−6·62
	Spintangi	−0·69	−1·82	−0·11	−0·30	−0·28	−1·11	−1·57	+0·81	+0·16	0	−0·57	+1·37	−4·11
	Mushkaf . .	?	?	−0·39	−0·06	0	−0·33	−0·69	+1·42	+0·28	0	−0·17	+3·39	?
	Baber Kach .	−0·77	−1·08	+0·22	+0·02	−0·06	−0·49	−1·29	+2·36	+0·76	−0·04	−0·31	+1·78	+1·10
	Loralai (Hospital)	−0·68	−0·80	+0·55	−0·05	+0·31	−0·67	+0·19	+0·54	−0·20	−0·14	−0·09	+1·30	+0·26
	Nari . .	−0·68	−0·80	+0·16	−0·08	−0·10	−0·35	−0·31	+0·11	+0·65	−0·01	−0·32	+1·83	+0·10
	Sibi . .	−0·03	−0·45	−0·07	+0·17	−0·04	−0·30	−1·61	+1·66	+1·05	0	−0·26	+2·14	+2·26
	Kolepur . .	+3·34	−1·77	−0·28	+0·41	+0·37	−0·16	−1·47	−0·76	−0·21	−0·06	+0·50	+4·93	+4·84
	Mittri . .	−0·69	−0·28	+0·08	−0·15	0	−0·28	+2·00	+0·53	+0·68	−0·03	−0·23	+1·33	+2·96
	Lindsay . .	−0·51	−0·53	−0·26	−0·11	−0·12	−0·23	−1·13	+1·86	+1·51	0	−0·19	+1·84	+2·13
	Bellput . .	−0·35	−0·22	+0·73	+0·22	−0·03	−0·15	−0·54	+1·59	+0·17	0	−0·28	+1·92	+3·06
	Nuttal . .	−0·59	−0·41	+0·01	+0·16	−0·17	−0·11	−0·26	−0·36	0	0	−0·56	+1·44	−0·25
	Temple Dera .	−0·61	−0·46	+0·13	+0·22	−0·06	−0·33	−0·59	?	−0·03	0	−0·33	+1·60	?

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

PROVINCE.	STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
BALUCHISTAN —*concld.*	Jhatput	−0·37	−0·43	−0·11	+0·07	+0·10	−0·16	−0·50	−0·27	−0·17	0	−0·29	+1·29	−0·87
	Sangal	+0·86	+0·76	−0·85	+0·48	+0·05	−0·02	−0·38	−0·09	0	−0·19	+1·44	+3·64	+5·70
	Shalabagh	+1·26	−0·86	−1·95	+0·92	+0·33	−0·04	−0·71	0	0	−0·16	+0·65	+1·28	+0·72
	Panir	−1·05	−0·66	+0·09	0	0	−0·31	−0·70	+0·36	−0·04	−0·01	+0·04	+2·61	+0·33
PUNJAB.	Abbottabad	+1·79	−0·04	−0·61	+2·13	+0·18	−2·17	+3·06	−3·08	+4·61	+1·99	−0·26	+1·65	+9·25
	Cherat	+0·51	+0·57	−2·99	+2·58	+2·19	−0·30	−2·66	+3·37	−0·20	+0·03	−0·18	+2·32	+5·64
	Murree (Obsy.)	+1·29	−2·07	+0·31	+3·13	−0·61	−1·56	+3·16	−3·73	+8·81	+0·48	−1·25	+1·31	+9·27
	Poo	+0·63	−1·45	−1·87	+2·97	+1·04	+0·08	−0·85	+0·14	−0·08	−0·64	−0·78	+2·19	+0·12
	Dharamsala	+0·27	−2·85	−1·94	+4·21	−0·12	−6·17	−2·17	+14·04	+23·83	−0·71	−0·38	+5·25	+33·26
	Kailang	−0·05	−1·01	−1·10	+6·60	+0·99	+0·03	+1·16	+2·98	−1·03	−0·42	−0·60	+2·33	+9·88
	Kilba	+0·64	+0·04	−3·03	+1·95	−0·44	−1·95	−1·24	−1·36	−1·80	−0·76	−1·98	+3·41	−6·52
	Simla (Obsy.)	+0·09	−0·64	−1·69	+0·43	+0·18	−5·98	+0·22	−2·38	−1·59	−1·12	−0·45	+2·38	−10·55
	Peshawar (Obsy.)	0	+0·14	−0·97	+0·21	+1·76	−0·21	−1·51	−0·87	+0·04	−0·15	−0·55	+0·35	−1·76
	Kohat	+1·41	+0·30	−1·11	+0·39	+0·19	−0·45	−1·32	+1·03	−0·43	−0·51	−0·66	+0·51	−0·65
	Bannu	+0·20	−0·08	−0·05	+1·46	+1·43	−0·53	−1·26	−2·23	+2·61	−0·15	−0·11	+0·38	+1·67
	Dera Ismail Khan	+0·11	−0·48	−0·41	+0·02	+1·24	−0·65	−0·97	−0·73	+0·01	0	−0·16	+0·32	−1·70
	Dera Ghazi Khan	−0·08	−0·31	−0·40	+0·42	−0·16	−0·51	−1·71	−0·71	+1·35	−0·05	−0·13	+0·41	−1·88
	Muzaffargarh	+0·08	−0·07	−0·17	+0·55	−0·06	−0·38	−1·34	−0·07	+0·90	−0·08	−0·09	+0·20	−0·53
	Mooltan (Obsy.)	−0·21	+0·02	−0·36	+0·12	+0·02	−0·30	−2·33	+0·05	−0·65	−0·08	−0·07	+0·33	−3·46
	Jhang	+0·01	−0·02	−0·68	−0·04	+1·03	−0·83	−2·11	−1·35	+1·58	−0·15	−0·06	+0·44	−2·18
	Montgomery	−0·56	−0·35	−0·47	−0·05	0	−1·20	−3·04	−1·86	+0·88	−0·14	−0·06	+0·18	−6·67
	Shahpur	−0·39	−0·42	−0·75	+0·35	+1·51	−0·58	−3·13	−2·45	+1·45	+0·26	−0·25	+0·68	−3·72
	Rawalpindi	+0·92	−0·78	−0·97	+1·66	+0·80	−1·88	−1·31	−2·98	+3·50	+0·05	−0·71	+2·00	+0·30
	Jhelum	+0·28	+0·10	+0·81	+2·70	−0·24	−1·55	+3·09	+1·03	+6·68	−0·38	−0·27	+0·85	+13·10
	Gujarat	−0·31	−1·12	−1·27	+1·17	+0·09	−2·36	−2·03	−0·77	+3·94	−0·47	−0·24	+0·38	−2·99
	Sialkot (Obsy.)	+0·36	−1·07	−0·78	−0·93	−0·56	−2·94	−2·31	−2·32	+2·52	−0·42	−0·29	+0·65	−8·09
	Gujranwala	−0·51	−0·94	−0·60	−0·31	+0·10	−1·82	−5·22	−0·07	+4·53	−0·46	−0·22	+0·47	−5·05
	Gurdaspur	+2·64	−1·32	−1·33	+0·31	−0·35	−4·20	+2·56	+12·57	+6·13	−0·54	−0·15	+1·28	+17·60
	Lahore	−0·45	−0·81	−0·77	−0·17	−0·37	−1·66	−0·61	+0·72	+5·03	−0·29	−0·13	+0·48	+0·97
	Amritsar	−0·22	−0·93	−0·01	+0·02	−0·46	−2·36	−0·23	+3·49	+5·54	−0·45	−0·20	+0·12	+4·31
	Ferozepore	−0·94	−0·39	−0·44	+0·54	+0·27	−1·36	−3·78	+2·27	+12·17	−0·55	−0·06	+0·36	+8·09
	Jullundar	+0·01	−1·02	−1·05	+0·77	−0·72	−2·72	+0·76	+11·57	+5·04	−0·41	−0·10	+1·71	+13·84
	Hoshiarpur	+2·47	−1·62	−1·18	+0·72	−0·48	−2·64	+2·65	+13·03	+8·72	−0·36	−0·15	+0·88	+22·04
	Ludhiana	−0·27	−0·91	−1·36	+1·61	−0·75	−1·09	−4·06	+20·00	+6·98	−0·96	−0·09	+0·67	+19·77
	Umballa	+0·50	−1·07	−0·67	+0·12	−0·84	−3·90	−1·15	+3·42	−0·84	−0·28	−0·26	+1·47	−3·50
	Sirsa	−0·79	−0·25	−0·43	+0·83	−0·12	−1·55	−3·83	−1·76	+0·32	−0·25	−0·03	+0·08	−7·87

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inch.	Inch.	Inch.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inch.	Inch.	Inches.	Inches.
Punjab—*concld.*	Hissar	−0·41	−0·34	−0·29	+0·40	−0·24	−1·42	−2·47	+2·15	+5·40	−0·28	−0·08	+0·38	+2·80
	Rohtak	−0·74	−0·58	−0·42	+0·48	−0·70	−1·32	−2·96	+1·00	+5·17	−0·37	−0·04	+1·21	+0·73
	Delhi (Obsy.)	−0·25	−0·60	−0·15	+0·69	−0·32	−1·92	−3·92	−3·51	+15·11	−0·28	−0·08	+0·63	+5·40
	Gurgaon	−0·18	−0·40	−0·41	+1·13	−0·13	−0·14	−4·13	−2·34	+10·90	−0·34	+0·17	+0·54	+4·67
	Karnal	+0·32	−0·83	−0·80	+0·57	−0·80	−2·88	+5·33	+3·01	+9·69	+0·42	−0·13	+1·18	+15·08
Sind.	Kurrachee	−0·73	−0·32	−0·16	−0·14	−0·04	−0·51	−3·12	−0·13	−0·63	−0·05	−0·18	+0·11	−5·90
	Sehwan	−0·33	−0·26	−0·09	−0·10	−0·11	−0·27	−1·87	−1·86	−0·25	−0·03	+0·14	+0·54	−4·49
	Tatta	−0·34	−0·22	−0·11	−0·31	−0·02	−1·01	−3·69	+0·73	−0·64	0	−0·22	+0·21	−5·62
	Hyderabad (Obsy.)	−0·29	−0·17	−0·12	−0·13	−0·13	−0·48	−2·71	+0·53	−0·53	0	−0·12	+0·60	−3·55
	Umarkot	−0·21	−0·08	−0·12	−0·07	−0·10	−0·88	−3·33	+1·22	0	−0·16	−0·06	+0·44	−3·35
	Shikarpur	−0·33	−0·34	−0·06	+0·20	−0·07	−0·11	−0·89	−0·97	−0·19	0	−0·14	+0·87	−2·03
	Rohri	−0·33	−0·46	−0·38	+0·19	−0·17	−0·24	−1·17	−0·73	−0·26	−0·01	+0·02	+0·20	−3·34
	Jacobabad	−0·21	−0·29	−0·23	−0·10	−0·06	−0·11	−1·23	+2·12	−0·04	−0·01	−0·06	+1·32	+1·10
Cutch	Bhuj	−0·07	−0·13	−0·08	0	−0·15	−2·25	−3·23	+9·53	−0·28	−0·70	−0·09	−0·06	+2·49
	Rhahpur	−0·03	−0·10	−0·06	+0·71	+0·42	−1·72	−8·12	+10·76	−0·69	−0·54	−0·20	−0·01	+0·42
	Nagar	−0·15	−0·10	−0·05	+0·53	−0·43	−2·06	−4·97	+8·11	−0·57	−0·27	+0·07	−0·02	+0·09
Rajputana.	Jaisalmer	−0·34	−0·13	−0·12	+0·16	−0·26	−0·88	−2·12	−0·25	+1·25	0	+0·33	−0·01	−2·37
	Phalodi	−0·21	−0·07	−0·12	−0·02	−0·19	+0·61	−2·70	+0·45	+0·73	0	+0·04	+0·13	−1·35
	Bikaner	−0·33	−0·21	−0·21	−0·16	−0·75	−1·71	−2·48	+0·92	+2·21	+0·15	−0·03	+0·08	−2·52
	Nagar	−0·33	−0·10	−0·19	−0·05	+0·14	−2·03	−2·11	−1·77	+4·20	−0·06	−0·09	+0·18	−2·21
	Didwana	−0·47	−0·16	−0·33	−0·03	−0·58	−1·48	−2·71	+0·58	+1·86	−0·15	−0·17	+0·43	−3·21
	Jhunjhunu	−0·94	−0·24	−0·28	+0·12	+0·35	−2·41	−3·89	−2·04	+3·11	−0·14	+0·21	+1·01	−5·14
	Khetri	−0·97	−0·71	−0·46	+0·49	+0·22	−1·98	+2·33	−2·79	+4·76	−0·26	+0·82	+1·55	+3·00
	Sikar	−0·56	−0·20	−0·25	+0·31	+2·36	−1·60	−1·99	+1·61	+6·25	−0·09	−0·10	+0·28	+6·02
	Sri Madhopur	−0·69	−0·50	−0·28	+1·08	+1·18	−1·60	−6·07	−3·76	+3·65	−0·06	−0·09	+0·24	−6·90
	Alwar	−0·64	−0·40	−0·30	+0·38	−0·93	−2·79	−5·99	−5·57	+4·37	0	−0·20	+0·57	−11·50
	Bharatpur	−0·34	−0·20	−0·27	+0·40	−0·11	−1·31	−1·19	−1·03	+5·65	−0·39	−0·06	+0·92	+2·07
	Bandikui	−0·46	−0·17	−0·40	+0·70	−0·12	−1·69	−2·33	−5·92	+7·96	−0·12	−0·22	+0·07	−2·70
	Jaipur	−0·45	−0·19	−0·35	+0·13	+2·36	−2·34	+0·12	−2·17	+2·14	−0·24	−0·16	+0·11	−1·04
	Sambhar	−0·33	−0·17	−0·16	+0·28	+0·94	−1·34	−2·90	+1·69	+2·02	−0·33	−0·23	+0·31	−0·22
	Karauli	−0·32	−0·14	−0·19	+0·87	+0·47	−3·48	−4·66	−1·87	+0·01	−0·15	−0·11	+0·69	−8·88
	Lalsot	−0·33	−0·07	−0·17	+0·57	+1·11	−3·31	+4·86	−3·50	+1·37	−0·14	−0·13	+0·65	+0·91
	Tonk	−0·22	−0·22	−0·26	+0·73	−0·07	−2·91	+3·17	−4·55	+4·79	−0·52	−0·05	+0·51	+0·46
	Siwai Madhopur	−0·40	−0·13	−0·25	+1·16	+0·01	−4·29	+5·35	−1·10	+6·44	−0·14	−0·14	+0·09	+6·60
	Deoli	−0·27	−0·17	−0·16	+1·17	−0·62	−3·40	−0·85	+0·40	+8·51	−0·42	−0·14	+0·39	+4·44
	Kotah	−0·28	−0·21	−0·10	+2·35	+0·06	−3·45	+3·80	+8·15	+2·19	−0·37	−0·17	+1·72	+13·69

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inch.	Inch.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inch.	Inches.	Inches.
Rajputana—*concld.*	Jhalrapatan	−0·23	−0·31	−0·15	+0·52	−0·13	−4·47	−2·60	+19·54	+4·70	−0·97	−0·05	−0·20	+15·6
	Ajmer	−0·23	−0·31	−0·35	+0·61	−0·52	−2·57	−2·95	+4·66	+4·26	−0·20	+0·19	+0·46	+ 3·05
	Nasirabad	−0·16	−0·33	−0·12	+1·23	−0·15	−2·06	−2·30	+3·10	+3·74	−0·23	+0·04	−0·09	+ 2·67
	Malpura	−0·43	−0·04	−0·31	+0·59	−0·19	−0·61	+1·71	−3·21	+5·20	−0·02	−0·03	−0·03	+ 2·63
	Beawar	−0·24	−0·11	−0·17	+0·37	+0·53	−1·05	−1·76	+0·37	+3·71	−0·18	+0·38	+0·30	+ 2·15
	Jodhpur	−0·28	−0·16	−0·03	+0·36	+0·15	−0·19	−2·43	+0·28	+4·44	−0·13	−0·03	+0·22	+ 2·20
	Pachpadra	−0·39	−0·07	−0·12	+0·23	−0·04	−1·75	−3·39	−1·52	+0·28	−0·06	+0·23	+0·06	− 6·54
	Jasol	−0·23	−0·05	−0·10	+0·48	+0·44	−1·89	−2·32	−0·99	−0·63	−0·01	+0·13	+0·03	− 5·14
	Barmer	−0·20	−0·07	−0·09	+0·77	+0·01	−1·81	−3·23	+0·70	+0·24	−0·04	−0·02	+0·07	− 3·67
	Pali	−0·15	−0·03	−0·12	+0·61	+0·50	−2·20	−1·95	+1·27	+7·86	−0·11	+0·15	−0·10	+ 5·73
	Shahpura	−0·14	−0·17	−0·17	+1·13	−0·66	−3·51	+0·40	+2·12	+8·89	−0·45	−0·10	−0·06	+ 7·28
	Erinpura	−0·19	−0·23	−0·11	+0·83	−0·41	−2·15	−2·24	+9·78	+6·04	−0·37	+0·16	−0·07	+11·04
	Sirohi	−0·19	−0·15	−0·11	+1·69	+1·28	−3·96	−2·68	+3·77	+3·20	−0·04	+0·12	−0·04	+ 2·89
	Mount Abu	−0·15	−0·17	−0·09	+0·49	−0·30	−2·99	−7·91	−1·04	+5·48	−0·78	−0·14	−0·08	− 7·68
	Kotra	−0·13	−0·22	−0·04	+0·22	−0·13	−4·08	−5·77	+11·60	+5·67	−0·58	−0·20	−0·14	+ 6·20
	Udaipur	−0·10	−0·15	−0·08	−0·07	+0·96	−3·84	−1·80	+11·05	+5·87	−0·44	−0·21	−0·16	+11·03
	Partabgarh	−0·23	−0·08	−0·03	+0·44	−0·13	−5·26	−4·92	+13·43	+7·15	−0·74	−0·31	−0·27	+ 9·05
	Kherwara	−0·10	−0·17	−0·06	−0·02	+0·10	−4·24	−3·59	+2·50	−0·36	−0·54	−0·16	+0·19	− 6·45
	Banswara	−0·30	−0·11	−0·01	+0·04	+0·19	−5·80	−8·05	+6·73	−3·13	−0·78	−0·26	−0·35	−11·83
Central India.	Neemuch (Obsy.)	−0·22	−0·15	−0·03	+0·07	−0·40	−3·24	−1·41	+4·25	+7·97	−0·71	+0·11	+0·10	+ 6·34
	Sirdarpore	−0·18	−0·18	−0·03	−0·02	−0·27	−2·69	−0·34	+2·34	−4·25	−1·11	−0·23	−0·16	− 7·12
	Agar	−0·22	−0·30	−0·04	+0·04	−0·36	−3·85	−2·78	+10·10	+7·18	−0·70	−0·20	+0·18	+ 9·05
	Rutlam	−0·16	−0·17	−0·03	+0·18	−0·41	−4·05	−3·69	+9·17	−0·62	−0·98	−0·28	−0·21	− 1·25
	Indore	−0·28	−0·26	−0·05	−0·08	−0·31	−5·03	+0·22	+6·39	+0·86	−1·21	−0·28	−0·20	− 0·23
	Bhopal (Sehore)	−0·35	−0·24	−0·16	−0·06	−0·35	−4·68	−4·86	+ 5·23	− 0·93	−1·31	−0·43	−0·78	− 8·92
	Goona	−0·32	−0·25	−0·21	+0·60	−0·04	−4·70	−0·52	+15·10	+ 5·90	−0·50	−0·39	−0·22	+14·45
	Morar	−0·25	−0·31	−0·17	+0·22	−0·40	−0·72	−1·59	− 1·51	+ 0·86	−0·50	−0·04	+1·08	− 3·33
	Nowgong	+0·57	−0·39	−0·24	−0·06	+0·17	−5·27	−9·69	− 0·02	+ 1·92	−1·16	−0·19	+1·32	−13·04
	Sutna	+1·82	−0·66	−0·43	−0·08	+1·08	−6·46	+1·82	− 2·71	+ 2·01	−0·47	−0·30	+2·09	− 2·29
	Nagode	+1·30	−0·43	−0·32	−0·15	+0·49	−5·20	−3·11	− 5·19	+ 1·71	−0·57	−0·19	+1·47	−10·19
	Maihar	+1·42	−0·47	−0·33	−0·09	+0·52	−6·84	−4·25	+ 1·10	+ 3·46	−1·25	−0·53	+0·47	− 6·79
	Rewah	+2·13	−0·78	−0·29	−0·22	+0·29	−8·54	−5·21	− 1·20	+ 2·54	−2·02	−0·33	+2·40	−11·23
	Ramnagar	+1·81	−0·25	−0·32	−0·06	−0·29	−8·74	+1·72	− 0·76	+ 3·14	−2·22	−0·37	−0·22	− 6·56
	Sihawal (Bardi)	+1·92	−0·34	−0·69	−0·07	+0·48	−5·41	−1·02	− 2·63	+ 1·29	+3·47	−0·60	+2·10	− 1·50
	Tyonthar	+1·89	−0·36	−0·35	−0·06	+0·38	−6·00	−3·15	− 6·45	+ 5·70	−1·04	−0·22	+2·28	− 7·38
	Sohagpur	+3·54	−0·71	−0·49	−0·22	+0·44	−7·53	−3·90	+ 4·76	+14·73	−0·52	−0·97	+0·15	+ 9·28

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inch.	Inches.	Inches.
North-Western Provinces	Chakrata . .	+6·28	+0·98	−1·33	+2·33	+0·20	−4·12	+2·92	−0·21	+6·25	−0·83	−0·38	+4·44	+16·53
	Mussooree .	+2·81	−0·59	−2·08	+3·31	+0·30	−7·32	+0·05	−7·98	+1·62	−0·64	−0·40	+5·56	−5·36
	Srinagar . .	+1·79	+0·09	−1·61	+1·17	+0·28	−3·19	+6·86	−0·59	+0·36	−0·46	−0·26	+1·19	+5·63
	Pauri . .	+1·44	+0·51	−1·76	+2·20	+1·73	−3·65	−0·86	+0·77	+1·98	−0·02	−0·31	+1·33	+3·36
	Ranikhet .	+1·25	+0·19	−1·21	+2·60	−0·86	−1·65	−3·72	−3·29	−0·58	−1·33	−0·28	+1·23	−7·65
	Almora . .	+2·04	+0·99	−0·39	+1·84	+1·76	−1·68	−0·97	+3·68	+0·89	−1·15	−0·21	+1·65	+8·45
	Pithoragarh .	+3·56	+0·15	−1·31	+3·48	+4·04	−2·56	−4·68	+2·53	−1·23	−1·33	−0·15	+1·37	+3·87
	Naini Tal .	+2·60	−2·33	−2·08	+1·92	−0·13	−6·83	+0·85	−4·48	−2·79	−1·18	−0·24	+2·17	−12·52
	Dehra Dun .	+2·29	−0·77	−1·21	+1·06	−0·77	−5·08	−1·85	−3·29	+6·86	−0·89	−0·21	+2·45	−1·41
	Saharanpur .	+0·25	−0·86	−0·92	+1·52	−0·19	−2·96	−1·36	−0·70	+5·34	−0·26	−0·23	+0·70	+0·33
	Roorkee . .	−0·35	−0·01	−0·81	+0·85	+0·10	−2·31	−0·73	+1·37	+5·56	−0·28	−0·25	+1·39	+4·53
	Muzaffarnagar .	−0·70	−0·80	−0·84	+0·66	−0·82	−3·21	+0·81	+2·63	+1·48	−0·06	−0·12	+2·17	+1·20
	Bijnor . .	+0·21	−0·59	−0·84	+0·72	−0·68	−3·31	+2·28	+0·36	+3·09	−0·30	−0·14	+0·91	+1·71
	Meerut . .	−0·73	−0·72	−0·57	+0·78	−0·56	−2·49	+3·34	+2·38	+12·54	−0·46	−0·09	+0·80	+14·22
	Moradabad .	+2·40	+0·82	−0·76	+0·13	+0·33	−3·62	+3·13	−1·59	+2·49	−0·87	−0·11	+1·09	+3·46
	Rudarpur .	+1·39	−0·51	−0·87	+0·42	−0·37	−3·09	+2·48	−2·28	+3·30	−1·09	−0·08	+1·19	+0·49
	Pilibhit . .	+1·62	−0·53	−0·37	+1·12	+1·43	−4·70	−2·65	−5·75	+2·59	−1·21	−0·10	+0·70	−7·85
	Bulandshahar .	+0·89	−0·83	−0·44	+0·90	−0·44	−1·87	−4·51	+0·07	+9·96	−0·45	−0·08	+1·03	+4·23
	Bareilly . .	+2·29	−0·66	−0·33	+0·66	−0·30	−2·90	+0·07	−3·19	+3·98	−1·26	−0·11	+0·92	−0·93
	Budaun . .	+0·82	−0·55	−0·34	+1·05	+0·69	−2·07	−2·75	−2·77	+0·75	−0·90	−0·11	+1·17	−5·01
	Shahjahanpur .	+0·03	−0·40	−0·50	+0·50	−0·74	−4·17	+1·76	−1·29	+0·52	−1·23	−0·14	+1·16	−4·50
	Aligarh . .	+0·09	−0·49	−0·26	+0·15	−0·40	−2·20	−5·06	−2·97	+10·23	−0·48	−0·04	+1·25	−0·18
	Muttra . .	−0·36	−0·30	−0·25	+0·13	+1·46	−1·49	−5·58	−2·81	+2·07	−0·12	−0·06	+0·76	−6·55
	Agra . .	−0·01	−0·29	−0·25	+0·47	−0·14	−1·65	−5·15	−1·22	+3·29	−0·41	−0·06	+1·00	−4·42
	Etah . .	+0·37	−0·28	+0·33	+0·65	+0·48	−2·07	−4·95	−1·18	+4·03	−0·84	−0·05	+1·41	−2·93
	Mainpuri .	+0·39	−0·32	−0·29	+1·18	−0·47	−1·87	−3·01	+2·15	+5·22	−0·84	−0·11	+2·04	+4·07
	Farrukhabad .	+0·55	−0·34	−0·39	+0·14	−0·35	−0·38	−3·72	−0·79	+3·54	−1·01	−0·09	+1·34	−1·50
	Etawah . .	−0·11	−0·25	−0·40	+0·13	+0·13	−0·53	+0·29	+2·69	+3·46	−0·97	−0·09	+2·73	+7·08
	Cawnpore .	+0·96	−0·45	−0·25	−0·01	−0·42	−2·12	−5·45	+3·88	−0·13	−1·27	−0·14	+1·25	−4·15
	Fatehpur .	+2·31	−0·43	−0·28	−0·05	−0·01	−3·87	−1·64	+2·51	+0·69	−1·56	−0·18	+1·82	−0·69
	Jalaun (Orai) .	+0·02	−0·25	−0·22	+0·20	+1·15	−2·67	−4·57	+1·59	+0·56	−0·78	−0·05	−1·41	−3·61
	Hamirpur .	+0·31	−0·37	−0·23	+0·04	+0·18	−3·66	−2·82	−2·11	+1·04	−1·11	−0·18	+2·55	−6·36
	Banda . .	+0·55	−0·37	−0·29	−0·11	−0·25	−4·38	−2·45	+3·32	−0·42	−1·08	−0·39	+2·90	−2·97
	Allahabad .	+4·20	−0·43	−0·41	−0·11	−0·14	−4·88	−3·07	+2·05	+0·20	−1·75	−0·26	+1·24	−3·35
	Basti . .	+3·04	−0·35	−0·31	−0·17	+0·17	−2·76	+4·88	−3·21	+5·60	−0·42	−0·06	+0·25	+6·66
	Gorakhpur .	+3·22	−0·35	−0·08	+0·11	+0·34	−5·91	−4·95	−5·96	+3·99	+2·78	−0·18	+0·52	−6·47

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inch.	Inch.	Inch.	Inches.	Inches	Inches.	Inches.	Inches.	Inches.	Inch.	Inches.	Inches.
North-Western Provinces—*concld.*	Azamgarh	+4·33	−0·35	−0·36	−0·14	−0·73	−3·75	+0·13	−5·54	+4·52	+3·04	−0·11	+0·48	+1·52
	Jaunpur	+4·19	−0·24	−0·30	−0·13	−0·65	−2·29	−2·10	−6·93	+8·91	−0·12	−0·16	+0·92	+1·10
	Benares	+0·80	+0·02	−0·34	−0·13	+0·08	−2·42	−3·67	−5·58	+4·30	+4·00	−0·19	+1·98	−1·15
	Mirzapur	+1·65	−0·04	−0·51	−0·13	−0·04	−3·68	−3·45	−3·01	−0·61	+1·91	−0·29	+1·99	−6·24
	Ballia	+4·49	−0·13	−0·23	−0·24	−0·76	+1·08	+2·30	−1·72	+0·23	−2·39	−0·20	+0·40	+2·83
	Dudhi	+1·58	−0·31	−0·29	+0·07	+0·64	−4·32	−3·94	−5·38	+3·14	+4·28	−0·31	+1·19	−3·65
	Robertsganj	+3·01	−0·06	−0·45	−0·19	+0·08	−4·19	−1·74	−6·23	+2·89	+5·41	−0·42	+2·06	+0·17
	Jhansi	+0·41	−0·28	−0·37	+0·06	+0·09	−4·48	−5·20	+8·36	+2·03	−0·69	−0·07	+1·26	+1·12
	Lalitpur	−0·13	−0·27	−0·34	−0·13	−0·48	−4·48	−2·23	+7·97	+3·44	−1·00	−0·19	+0·08	+2·24
Oudh	Kheri	+0·85	−0·13	−0·53	−0·03	+0·70	−4·88	+5·87	−6·46	+1·25	−0·87	−0·17	+0·13	−4·27
	Sitapur	+0·59	−0·41	−0·50	−0·24	−0·94	−4·94	−2·23	−5·40	+9·14	−1·47	−0·17	+0·38	−6·19
	Bahraich	+0·72	+0·21	−0·44	−0·22	−0·94	−4·96	+0·36	−7·51	+7·74	−1·83	−0·13	+0·51	−6·49
	Gonda	+1·15	−0·56	−0·36	+0·14	−0·17	−4·45	−0·03	−5·66	+5·33	−1·06	−0·10	+0·54	−5·23
	Hardoi	+0·59	−0·34	−0·65	−0·16	−0·25	−0·71	+1·50	−1·21	+6·67	−1·29	−0·13	+0·70	+4·72
	Nawabganj (Bara Banki.)	+1·46	−0·36	−0·40	−0·12	−0·30	−4·77	+10·42	−2·12	−1·18	−1·13	−0·08	+0·29	+1·71
	Lucknow	+1·63	−0·47	−0·34	+0·05	−0·33	−2·99	−3·20	−2·81	+2·80	−1·39	−0·09	+0·80	−6·14
	Unao	+1·77	−0·33	−0·31	+0·05	−0·56	−4·30	−1·21	+8·16	+4·07	−1·48	−0·10	+1·13	+6·89
	Fyzabad	+2·17	−0·32	−0·53	+0·13	−0·85	−3·69	+2·23	−5·38	+3·71	−0·62	−0·09	+0·71	−2·53
	Sultanpur	+2·97	−0·41	−0·24	−0·20	+0·06	−4·09	−3·48	−2·57	+2·31	−1·86	−0·17	+0·38	−7·30
	Rae Bareli	+1·65	−0·43	−0·26	+0·12	+0·53	−4·83	−3·29	−1·88	−0·66	−0·96	−0·12	+1·02	−9·11
	Partabgarh	+2·27	−0·33	−0·24	−0·04	+0·38	−3·75	+2·86	+0·28	+3·82	−2·04	−0·24	+1·02	+3·99
Bengal	Motihari	+2·91	−0·20	−0·42	−0·58	−1·59	+0·36	−0·99	−5·81	+4·99	−1·15	−0·13	+0·38	−2·23
	Darbhanga	+0·70	−0·40	−0·30	−0·59	−2·19	+4·71	−0·15	−8·45	+3·27	−1·84	−0·08	0	−5·32
	Siwan	+2·60	−0·17	−0·21	−0·16	−0·82	−1·94	−2·08	−6·96	−1·31	−2·20	−0·19	+0·24	−13·20
	Buxar	+2·25	−0·12	−0·30	−0·11	−0·47	−1·19	−1·09	−5·35	+1·81	−1·46	−0·43	+0·79	−5·67
	Chapra	+2·87	−0·20	−0·41	−0·31	−0·66	+2·02	−1·54	−3·06	+2·39	−1·78	−0·27	+0·26	−0·69
	Arrah	+5·79	−0·50	−0·49	−0·46	−0·18	−3·08	+4·02	−1·16	−0·21	−1·42	−0·24	+0·70	+0·77
	Patna (Bankipore)	+2·82	−0·28	−0·36	−0·28	+0·27	+0·61	+3·55	+0·31	+0·72	−1·86	−0·22	+0·09	+5·37
	Muzaffarpur	+0·76	−0·46	−0·41	−0·45	−0·76	+2·54	+2·29	−6·76	+0·33	−0·82	−0·13	+0·10	−3·77
	Barh	+3·30	−0·30	−0·34	−0·15	−1·32	+8·20	−6·21	−5·95	+0·19	−0·71	−0·21	+0·16	−1·44
	Sasaram	+1·44	+0·10	−0·38	−0·13	−0·01	+0·17	−2·28	−3·07	+3·10	−0·08	−0·31	+1·06	+0·61
	Gaya	+1·39	+0·46	−0·45	+0·27	+0·49	+0·96	−7·32	−2·87	+2·21	−0·49	−0·29	+0·56	−5·08
	Jamui	+1·29	+0·15	−0·39	+0·09	−0·30	+3·85	+1·28	−4·15	+1·14	−0·50	−0·10	+0·12	+2·48
	Madhipura	+0·44	−0·27	−0·41	−0·57	−0·11	+6·96	+1·58	−4·96	+5·65	−1·22	−0·06	+0·03	+7·06
	Monghyr	+1·74	−0·32	−0·45	+0·12	−0·57	+4·82	+0·83	−2·17	−1·07	−0·02	−0·21	−0·08	+2·62
	Bhagalpur	+1·86	−0·28	−0·38	−0·50	+0·12	+10·67	+4·92	+2·30	+2·28	+1·72	−0·19	−0·01	+22·51

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December.	Total.
		Inches.	Inch.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Bengal—*contd.*	Godda	+1·23	+0·10	−0·51	−0·28	+0·68	+7·28	−2·16	−0·32	+1·77	+0·79	−0·29	−0·10	+8·19
	Palamau	+2·90	−0·43	−0·67	+0·73	−0·53	−0·90	−5·97	−0·51	+1·54	−0·87	−0·40	+1·30	−3·81
	Hazaribagh	+2·91	−0·24	−0·71	+1·62	−0·18	+0·01	−8·30	+2·80	+4·50	+0·09	−0·34	+0·86	+3·02
	Ranchi	+1·12	−0·44	−1·18	+3·58	−0·40	+2·06	−5·22	+2·82	+8·57	−2·29	−0·35	+0·20	+8·47
	Lohardaga	+2·50	+0·01	−0·95	+2·24	−0·43	−0·23	−4·98	+0·56	+8·21	+0·15	−0·60	+0·10	+6·58
	Naya Dumka	+1·06	−0·43	−0·83	+0·25	+1·64	−2·21	+1·54	−2·73	+5·23	−2·40	−0·36	−0·18	+0·58
	Gobindpur	+0·98	−0·49	−0·61	+1·36	−0·05	+1·25	−3·35	−2·90	+7·04	−1·21	−0·20	−0·04	+1·78
	Purulia	+0·27	+0·20	−0·44	+3·50	+1·08	−4·37	−8·04	−0·87	+8·33	−2·25	−0·27	+0·17	−2·79
	Sirguja	+2·33	−0·76	−0·86	−0·06	−0·53	−5·34	−0·64	−1·61	+19·55	+5·47	−0·65	+2·13	+19·03
	Jushpore	+2·66	−0·89	−1·65	+4·43	−0·28	−4·52	0	+4·03	+13·85	+4·93	−0·52	+1·24	+23·28
	Gangpur	+1·88	−0·90	−0·97	−0·59	+0·52	+5·87	+1·94	+12·29	+10·65	+9·70	−0·84	+1·51	+40·97
	Chaibassa	−0·25	−0·94	−0·96	+3·12	+0·31	−3·65	−5·28	+3·55	+9·94	−1·06	−0·45	−0·01	+4·32
	Barreepudda	−0·15	+0·26	+1·26	+1·88	+1·26	−6·24	−4·64	+7·03	+11·05	−0·42	−0·99	−0·13	+10·17
	Keonjhar	+0·43	−0·45	+0·10	+1·39	−0·17	+6·31	−2·57	+12·61	+6·95	+2·34	−0·97	+0·76	+26·73
	Jellasore	−0·42	−0·60	+0·37	+3·36	+1·88	−2·91	−7·62	+13·62	+4·76?	−1·62	−0·76	−0·11	+9·95?
	Balasore	−0·48	+0·90	+2·01	−1·25	+1·51	−0·90	−0·78	+7·11	+7·87	−2·42	−1·29	−0·20	+12·08
	Bhadrak	−0·35	−0·44	−0·92	+0·59	−0·39	−1·52	+0·55	+4·32	+6·81?	+2·00	−1·40	−0·27	+8·98?
	Talcher	+0·02	−0·90	−0·98	+1·82	−0·16	+1·35	+2·84	+4·79	−1·22	+5·64	−1·29	−0·22	+11·69
	Narsinghpur	−0·23	−0·19	−0·71	+1·15	−0·08	−6·41	+0·92	+9·12	−2·48	−3·79?	−1·52	−0·07	−4·29?
	Angul	+0·10	−0·83	−1·22	−0·14	+1·35	−3·82	−6·18	+0·32	+4·50	−0·25	−1·51	−0·39	−8·07
	Dhenkanal	−0·30	−0·69	−0·89	+0·59	+2·59	−4·34	−6·51	+5·10	+12·51	+7·55	−1·34	−0·30	+13·97
	Bispara	−0·08	−0·27	−0·27	+2·25	+0·28	+3·02	−7·12	+7·63	+0·15	+0·37	−1·16	−0·30	+4·50
	Kunjabangar	−0·23	−0·24	−0·61	+0·09	−1·78	−0·50	−2·88	+1·60	+0·12	+3·37	−1·37	−0·13	−2·58
	Banki (Charchika)	−0·22	−0·14	+0·55	+1·84	+0·05	−1·89	−3·81	+3·60	+14·38	+6·23	−1·75	−0·44	+18·40
	Cuttack	−0·36	−0·52	−0·19	+1·52	−0·83	−7·17	−4·29	+9·01	+11·91	+2·58	−1·44	−0·38	+9·84
	Baramba	−0·26	−0·43	+1·46	+0·94	−1·20	−1·50	−1·22	+4·84	+0·53	−0·74	−1·50	−0·03	+0·89
	False Point	−0·55	−0·88	−0·91	−1·40	−2·28	−3·94	+3·16	+9·17	+6·81	−1·89	−2·96	−0·48	+3·85
	Puri	−0·27	−0·99	−0·09	+0·74	+1·70	−0·74	−2·71	+12·05	+4·15	−1·41	−2·73	−0·60	+9·10
	Darjeeling	+0·19	−0·66	−0·11	−0·72	−2·95	+5·57	+1·47	−8·16	−2·60	−5·14	−0·23	+0·14	−13·20
	Gantak	+0·95	−0·87	+4·30	−3·72	−14·95	−8·75	+6·04	+2·46	−6·98	−5·93	−0·92	−0·23	−2·38
	Mongpoo	+0·02	−0·54	+2·06	−3·02	−1·19	+6·78	+2·54	−1·66	+2·44	−3·78	−0·17	+0·06	+3·54
	Pedong	−0·27	−0·81	−0·56	−1·65	−3·11	+2·40	+1·27	−5·34	−4·67	−3·11	−0·32	−0·11	−16·28
	Buxa	−1·04	−0·43	−1·03	+0·56	−10·10	−17·97	+7·63	−15·93	−23·66	−7·01	−0·64	+2·46	−67·16
	Jalpaiguri	−0·50	−0·31	−0·77	−3·63	+5·67	−3·99	+4·42	−13·56	−6·06	−4·82	−0·16	−0·08	−23·79
	Cooch Behar	−0·47	−0·28	+0·97	−0·85	−0·08	−12·81	+1·43	−16·00	−6·72	−4·08	−0·15	−0·07	−29·11
	Kishanganj	−0·33	+0·96	−0·48	−1·76	+2·13	+1·08	+10·30	−10·26	+12·65	+0·89	−0·05	−0·11	+15·02

TABLE XXXIII.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years.*—contd.

Province.	Station.	January	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inch.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inch.	Inches.
Bengal—*concld.*	Purnea . .	—0·02	+0·41	—0·30	—1·35	—1·42	+13·08	+6·11	—7·95	+8·26	—2·11	—0·08	0	+14·63
	Rangpur . .	—0·51	+0·33	—0·85	—3·02	—2·38	+4·93	+6·66	—7·67	—5·31	—3·01	—0·26	—0·09	—11·18
	Dinajpur . .	—0·19	+1·28	—0·61	—2·03	+0·45	+8·09	+5·78	+1·45	+2·36	—3·87	—0·18	+0·10	+12·63
	Malda . .	+0·42	—0·35	—0·86	—0·09	—1·50	+3·00	+0·25	—1·73	+2·27	—3·33	—0·22	—0·27	—2·41
	Bogra . .	+0·22	—0·09	—0·93	+0·57	—6·01	+6·09	+4·16	—3·59	—6·94	—1·47	—0·91	—0·09	—8·99
	Rampur Boalia	+0·51	+0·09	—1·10	—0·88	—2·99	—1·25	+1·85	—0·26	+4·15	—1·83	—0·34	—0·07	—2·12
	Pubna . .	—0·21	+0·16	—1·11	+1·19	—3·15	+3·11	+2·41	—5·37	+5·36	—3·60	—0·56	—0·08	—1·95
	Suri . .	+0·11	—0·61	—0·80	+1·18	+2·23	—4·99	—3·12	—2·31	+9·58	—2·28	—0·36	—0·13	—1·50
	Bankura . .	—0·18	+0·24	—1·27	+3·25	+1·77	—4·38	—8·00	—0·94	+10·11	—3·94	—0·55	+0·03	—3·86
	Burdwan . .	—0·28	+1·97	—1·13	+1·34	+0·34	—1·88	—4·47	—2·58	+9·34	—3·84	—0·71	+0·07	—1·83
	Hooghly . .	—0·32	—0·74	—1·12	+0·58	—1·07	—0·65	—6·78	+4·48	+24·29	—3·32	—0·73	+0·26	+14·88
	Howrah . .	—0·46	—0·42	—1·43	+1·43	—1·47	—1·93	—5·16	+4·22	+33·62	—3·11	—0·56	—0·09	+24·64
	Midnapur .	—0·55	—0·64	+0·39	+0·35	+0·45	—3·79	+3·99	+2·66	+14·04	—2·70	—0·63	+0·40	+13·97
	Tamluk . .	—0·29	+0·72	—1·25	+1·28	+4·74	—1·16	—8·81	—2·10	+17·44	—1·89	—0·52	—0·16	+8·00
	Berhampur .	+0·5	+0·44	—0·58	—0·01	—3·00	—2·93	+6·33	—1·10	+12·46	—4·21	—0·44	—0·10	+7·38
	Krishnagar .	—0·36	+0·12	—0·91	+1·11	—1·79	—4·86	—1·51	—0·53	+21·90	—3·62	—0·11	—0·11	+8·63
	Faridpur . .	—0·37	+1·09	—1·16	—1·70	—0·25	—1·85	+2·02	—0·24	+4·57	+0·23	—0·83	—0·09	+1·42
	Jessore . .	—0·48	+5·04	—0·43	—2·19	—0·56	+2·51	—1·20	—1·44	+13·29	+0·71	—1·26	—0·01	+13·98
	Basirhat . .	—0·33	+0·01	—1·72	—1·14	—2·81	+1·44	—1·53	+3·95	+28·49	—3·14	—0·58	—0·16	+22·48
	Khulna . .	—0·47	+1·76	—1·75	—0·47	+0·81	+0·22	+2·10	—0·96	+11·43	—2·94	—0·83	—0·23	+8·67
	Barisal . .	—0·56	—0·73	—2·00	—0·01	—4·50	+2·09	+3·65	+1·49	+14·37	—1·80	—1·07	—0·32	+10·61
	Alipore (Obsy.)	—0·32	—0·36	—1·18	+1·27	—1·46	—0·74	—3·27	+3·78	+36·49	—2·88	—0·74	—0·32	+30·27
	Saugor Island .	—0·28	—0·68	—0·86	+0·16	+0·16	+3·68	+0·99	+0·42	+18·03	—2·36	—1·45	—0·17	—17·54
	Mymensing .	+0·02	+0·71	+8·66	+0·66	—3·94	+0·91	+23·17	—6·34	—3·12	—3·46	—0·84	—0·09	+16·34
	Kishorganj .	—0·45	+1·44	+0·81	+3·29	—5·92	+0·30	+14·12	—6·47	—1·56	—2·22	—0·75	—0·23	+2·36
	Atia (Tangail) .	—0·27	—0·46	—0·75	+1·36	—4·13	—0·39	—0·78	—5·50	—3·41	—2·19	—0·55	—0·09	—17·16
	Dacca . .	—0·32	+0·87	—0·44	—2·94	—5·71	—3·35	+3·48	—4·25	—3·49	—3·90	—0·82	—0·19	—21·06
	Comilla . .	—0·52	+1·13	—0·09	—1·82	—5·24	+2·63	+6·44	—6·10	—6·04	—2·37	—1·29	—0·24	—13·51
	Agartalla . .	—0·62	+8·34	+2·40	—2·15	—5·80	+3·81	+7·99	—9·33?	—4·37	—3·50	—1·45	—0·34	—5·02?
	Noakhali .	—0·48	—0·18	+1·20	—1·01	—0·96	+11·38	+5·60	—1·38	—3·94	—2·83	—1·02	—0·39	+5·99
	Demagiri .	—0·47	+1·90	+1·83	—1·86	—5·43	—0·74	—2·57	—10·17	—4·58	—4·32	—1·36	—0·40	—28·17
	Rangamatia Hills	—0·48	+1·49	—2·51	—1·03	—0·98	—1·47	—6·90	—5·97	—3·98	—4·22	—1·66	—0·54	—28·25
	Chittagong .	—0·44	—0·51	—1·85	—1·99	—3·26	+8·07	—5·40	—8·87	—9·63	—4·52	—1·57	—0·62	—28·59
	Cox's Bazar .	—0·54	+0·63	—1·61	—0·26	—4·20	+12·09	—4·85	—5·59	+2·07	—6·98	—2·13	—0·33	—11·72
Assam	Sylhet . .	—0·33	—1·08	+9·96	+0·55	—4·36	—13·25	+0·70	—10·74	—5·74	—6·43	—1·23	—0·27	—32·22
	Silchar . .	—0·06	—0·99	+4·10	+11·76	—6·13	—1·75	+0·34	—5·89	—8·17	—5·94	—1·37	—0·45	—14·55

TABLE XXV—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Assam—*concld.*	Cherra Poonjee	−0·70	+3·59	+18·89	+32·80	−10·90	−5·99	+13·32	−38·11	−28·18	−1·51	−1·69	−0·26	−18·74
	Tura . .	−0·32	−0·06	+0·66	−0·07	−5·54	+0·22	+23·00	−12·58	−9·79	−4·30	−0·46	−0·13	−9·37
	Shillong . .	−0·33	−0·33	−0·45	−1·06	+2·82	+0·40	+2·16	−4·87	−6·82	+1·67	−0·56	−0·27	−7·74
	Dhubri . .	−0·40	+0·.6	+2·40	−1·28	+7·01	−6·54	+6·23	−8·74	−8·96	−1·71	−0·16	−0·15	−12·04
	Goalpara . .	−0·46	−0·11	+0·61	−0·20	+2·11	−1·60	+0·03	−8·68	−2·48	−3·44	−0·22	−0·22	−14·66
	Kulsi . .	−0·44	+0·62	+1·04	+1·40	−2·58	+11·65	−2·07	+3·08	−5·71	−2·97	−0·28	+0·33	+4·07
	Gauhati . .	−0·61	−0·05	+1·75	−0·88	−2·18	−1·07	−2·53	−3·88	−2·97	−1·64	−0·36	−0·15	−14·57
	Nowgong . .	−0·73	−0·17	+1·36	+2·73	−4·03	−2·07	−0·41	−5·56	−6·46	−2·92	−0·33	−0·08	−18·67
	Tezpur . .	−0·61	+0·92	+2·65	+1·86	−2·29	+0·46	−1·73	−2·40	−1·29	−2·36	−0·72	−0·32	−5·837
	Charduer .	−0·73	−0·36	+0·71	−1·36	−3·89	−3·74	−1·28	−9·09	−7·60	−1·32	+0·43	−0·84	−29·07
	Sibsagar . .	−0·12	−1·29	−0·03	+2·55	−1·13	+2·58	−3·34	−4·66	−2·05	+1·73	+0·58	+0·38	−4·80
	Dibrugarh .	+0·13	+0·44	−1·20	+3·08	+2·22	−5·02	−5·55	−10·96	−8·07	−1·19	+0·46	−0·06	−25·72
	Kohima . .	−0·41	−0·36	+0·74	+2·70	−3·54	−5·38	−2·65	−8·50	−3·57	−0·14	−1·27	−0·21	−22·59
Central Provinces.	Saugor . .	−0·16	−0·52	−0·24	−0·07	−0·45	−4·95	−3·52	+6·92	−0·55	−1·27	−0·36	+0·31	−4·66
	Damoh . .	+0·27	−0·54	−0·22	−0·21	−0·13	−5·48	−4·95	+16·35	+1·33	−1·63	−0·34	+2·00	+6·45
	Jubbulpore .	+1·63	−0·49	−0·52	+0·40	−0·38	−8·14	−4·64	+9·37	+3·93	−0·88	−0·40	+0·66	+1·04
	Narsinghpur .	+1·29	−0·40	−0·29	+0·02	−0·33	−7·13	0	+2·41	−0·23	−1·57	−0·.7	+1·15	−5·35
	Hoshangabad .	+0·03	−0·21	−0·23	−0·03	−0·56	−5·38	+2·89	+3·84	−1·75	−1·44	−0·43	+0·11	−3·16
	Khandwa . .	−0·06	−0·22	−0·10	−0·13	−0·27	−4·17	+1·35	+3·93	+7·0	−1·18	−0·17	−0·42	+5·65
	Badnur (Betul) .	−0·20	−0·14	−0·61	−0·29	−0·40	−5·96	+1·94	+9·70	+7·90	−1·91	−0·42	+0·03	+9·64
	Pachmarhi .	+0·18	−0·36	−0·37	−0·05	−0·52	−8·65	−6·41	+10·64	+19·78	−2·07	−0·47	+0·59	+12·29
	Chhindwara .	−0·30	−0·26	−0·49	+1·97	−0·47	−6·11	−3·20	+3·67	+3·39	−2·08	−0·46	+0·40	−3·94
	Seoni . .	−0·13	−0·44	−0·51	−0·15	−0·41	−6·11	−4·44	−1·11	+6·11	−2·15	−0·47	−0·08	−9·89
	Balaghat . .	+0·61	+0·45	−0·41	0	−0·17	−8·71	−0·89	−3·33	+6·66	−2·11	−0·55	−0·25	−8·70
	Mandla . .	+2·34	−0·60	−0·80	−0·26	−0·46	−7·84	−6·80	+6·22	+6·32	−1·10	−0·31	+0·46	−2·83
	Bilaspur . .	+0·45	−0·28	−0·72	−0·04	−0·44	−5·59	+1·59	+7·24	+8·70	+2·62	−0·64	+0·12	+13·01
	Sarangarh .	+0·53	+0·22	−0·72	+1·01	+0·72	−1·44	−7·35	+4·40	+8·41	+0·22	−0·79	−0·16	+5·05
	Raigarh . .	+0·96	−0·39	−0·39	+0·25	+0·34	−5·18	−5·65	−5·21	+5·45	−1·59	−0·68	+0·21	−11·88
	Sambalpur .	−0·18	−0·44	−0·79	+0·44	−0·32	−1·66	−5·20	+6·94	+12·40	−1·22	−0·47	−0·27	+9·23
	Raipur . .	+0·26	+0·34	−0·32	−0·19	+0·15	−0·53	−4·02	−2·62	+11·50	+4·10	−0·69	−0·22	+7·76
	Dhamtari . .	+0·21	+0·88	−0·06	+1·14	−0·12	−1·28	−4·03	+8·99	+21·60	−0·27	−0·41	−0·3	+2·52
	Bhandara . .	−0·70	+1·76	0	+0·22	−0·79	−6·82	+3·29	+0·59	+8·11	−1·84	−0·77	−0·36	+2·69
	Nagpur . .	−0·61	+0·09	−0·61	−0·33	−0·57	−6·05	+0·76	+11·05	+3·04	−2·29	−0·55	−0·46	+3·47
	Arvi . .	−0·55	−0·26	−0·51	−0·18	−0·63	−3·59	−4·77	+8·01	+5·74	−2·51	−0·40	−0·42	−2·07
	Wardha . .	−0·30	−0·31	−0·32	0	−0·96	−4·47	−1·36	+5·36	+4·35	−2·30	−0·63	−0·38	−1·05
	Brahmapuri .	−0·05	−0·20	−0·95	+0·02	−0·55	−3·51	+2·04	+14·13	+17·90	−2·20	−0·62	−0·41	+25·60

TABLE XXV—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

PROVINCE.	STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
		Inch.	Inch.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inch.	Inches.
CENTRAL PROVINCES—*concld.*	Chanda	−0·16	−0·61	−1·24	−0·11	−1·48	−4·02	+2·28	+ 6·30	+ 9·95	−2·22	−0·82	−0·33	+7·54
	Sironcha	−0·09	−0·32	−0·63	−0·30	−1·50	−2·10	+0·70	+ 2·56	+20·24	−1·06	−0·45	−0·26	+16·79
	Baster (Jagadalpore).	−0·11	+0·05	+0·54	−0·75	−0·61	−2·57	−3·33	+ 0·18	+ 7·44	−1·03	−0·64	−0·23	− 1·06
	Chikalda	−0·34	−0·27	−0·52	−0·20	−0·60	−5·62	+2·30	+ 8·55	+11·57	−4·34	−0·74	−0·83	+ 8·96
BERAR	Ellichpur	−0·33	−0·23	−0·40	−0·02	−0·35	−1·14	−1·80	+ 4·85	+ 3·00	−2·52	−0·62	−0·41	+ 0·03
	Amraoti	−0·43	−0·21	−0·31	−0·17	−0·61	−4·20	−2·99	+ 3·83	+ 4·33	−1·87	−0·40	−0·45	− 0·45
	Akola	−0·46	−0·19	−0·48	−0·13	−0·31	+0·52	−1·87	+13·14	+ 2·19	−2·36	−0·49	−0·65	+ 8·91
	Buldana	−0·44	−0·24	−0·27	−0·26	−0·53	−2·85	+0·05	− 0·94	+ 0·05	−2·32	−0·53	−0·50	− 8·78
	Basim	−0·28	−0·21	−0·28	+0·60	−0·49	+0·13	+3·68	+ 3·26	− 2·27	−2·13	−0·85	−0·50	+ 0·66
	Yeotmal	−0·14	−0·17	−0·48	+1·63	−0·80	−3·92	+0·04	+ 2·51	+ 1·79	−2·59	−0·63	−0·43	− 3·19
	Wun	−0·33	−0·18	−0·86	+0·42	−0·42	−4·86	+1·05	+ 3·65	+ 3·20	−1·78	−0·82	−0·33	− 1·26
BOMBAY	Dhulia	−0·30	−0·06	−0·04	−0·06	−0·31	− 4·83	− 2·31	+ 2·97	− 1·37	−1·78	−0·69	−0·35	− 9·13
	Nasik	−0·08	−0·04	−0·04	+1·23	−0·66	− 2·76	+ 1·49	+ 5·47	+ 3·24	−3·74	−0·53	−0·24	+ 3·34
	Igatpuri	−0·16	−0·08	−0·03	−0·07	−0·98	−12·97	−13·30	+32·01	+27·63	−4·51	−0·43	−0·19	+26·92
	Malegaon	−0·22	−0·12	−0·04	−0·15	−0·74	− 2·73	− 0·62	− 0·79	− 7·81	−2·30	−0·49	−0·39	−11·30
	Ahmednagar	−0·30	−0·14	−0·16	−0·40	−1·25	+ 1·36	+ 2·12	− 1·13	− 3·02	−3·33	−0·97	−0·48	− 7·70
	Poona	−0·20	−0·05	−0·13	−0·58	−1·55	− 4·12	+ 4·68	+ 5·33	− 1·76	−1·83	−0·90	−0·22	− 1·33
	Lonavla	−0·07	−0·05	−0·07	−0·07	−0·76	−16·73	− 3·84	+67·29	+28·75	−4·22	−0·85	−0·18	+69·20
	Satara	−0·30	−0·10	−0·01	+1·02	−1·52	− 3·05	+ 0·80	+11·57	− 3·28	−2·06	−0·86	−0·45	+ 1·92
	Mahabaleshvar	−0·34	−0·04	−0·24	−0·87	−1·39	−22·82	− 8·48	+86·37	+19·16	−4·78	−1·26	−0·34	+64·97
	Sholapur	−0·07	−0·08	+0·37	−0·27	−1·03	+ 1·93	− 0·23	− 4·35	− 3·43	−2·10	−0·89	−0·33	−10·48
	Kolhapur	+0·02	−0·08	+0·34	−0·25	−1·51	− 1·48	+ 3·80	+ 7·26	− 2·98	−3·06	−0·91	−0·21	+ 0·94
	Belgaum	−0·07	−0·03	−0·48	−0·34	−1·37	+ 2·01	+ 6·38	+14·48	− 2·85	−3·09	−1·40	−0·26	+12·98
	Gokak	−0·07	−0·01	+0·83	−0·21	−0·79	+ 3·37	+ 0·36	+ 1·44	− 3·07	−4·13	−1·06	−0·64	− 3·98
	Dharwar	−0·13	−0·02	−0·30	+1·21	+2·18	+ 1·31	+ 0·51	+ 2·44	− 2·20	−4·77	−1·89	−0·41	− 2·07
	Hubli	−0·03	−0·02	−0·34	+0·60	−1·94	− 1·23	− 0·65	+ 0·33	− 2·89	−3·56	−1·11	−0·22	−11·06
	Nargund	−0·19	−0·09	−0·26	+4·23	−2·28	+ 1·07	+ 0·10	+ 1·90	− 0·69	−4·26	−0·94	−0·29	− 1·70
	Mundargi	−0·22	0	+0·16	−0·17	−0·28	+ 1·25	− 0·96	− 1·09	− 0·86	−0·39	−1·40	−0·10	− 4·06
	Kalghatgi	+0·81	0	−0·35	−0·03	−0·16	− 0·24	− 1·27	+ 2·45	− 1·00	−4·17	−0·93	−0·21	− 5·10
	Bijapur	−0·06	−0·05	−0·16	+0·44	−0·51	+ 0·55	+ 2·07	− 3·07	− 5·07	−3·52	−0·94	−0·63	−10·95
	Honavar	−0·18	0	−0·11	−0·32	−3·59	+15·02	+10·01	− 4·55	+ 2·81	−6·32	−1·24	−0·13	+11·42
	Karwar	−0·13	0	−0·04	−0·32	−3·29	+19·51	+12·86	− 0·76	− 3·10	−5·08	−1·56	−0·12	+17·97
	Goa	+0·89	0	−0·02	−0·22	−1·62	+ 0·39	− 0·05	− 3·70	− 2·64	−4·78	−1·08	−0·09	−12·92
	Vengurla	−0·21	0	−0·06	−0·14	−2·17	+ 0·04	+10·37	− 2·53	− 2·42	−4·58	−0·94	−0·17	− 2·39
	Ratnagiri	−0·69	−0·01	+1·24	−0·14	−1·38	+ 5·09	− 5·94	− 1·15	+ 0·71	−3·45	−0·71	−0·07	− 6·50
	Colaba (Obsy.)	−0·13	−0·02	−0·01	−0·03	−0·59	− 3·23	− 4·81	+ 8·71	− 2·84	−1·81	−0·50	−0·05	− 5·31

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	Total.
		Inch.	Inch.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inch.	Inches.
Bombay—*concld.*	Byculla (J. J. Hospital.)	−0·17	−0·01	−0·01	0	−0·43	− 6·08	− 7·27	+ 9·06	− 2·53	−2·54	−0·21	−0·04	−10·23
	Thana	−0·20	−0·05	−0·06	0	−0·38	−17·89	−12·43	+17·25	+ 6·49	−2·95	−0·25	−0·05	−10·52
	Matheran	−0·09	−0·01	−0·01	−0·02	−0·79	−23·36	− 3·86	+44·63	+ 10·89	−4·92	−1·00	−0·05	+ 21·41
	Surat	−0·04	−0·02	0	−0·01	−0·06	− 9·58	− 2·88	+ 9·05	− 3·92	−1·73	−0·17	−0·03	− 9·39
	Broach	−0·05	−0·02	−0·02	−0·01	−0·13	− 7·76	−11·68	+11·98	+ 1·40	−1·62	−0·18	− 0·04	− 8·13
	Kaira	−0·03	−0·15	−0·02	+0·15	−0·13	− 4·62	−12·57	+ 7·54	− 2·25	−0·57	−0·35	0	−13·00
	Bariya	−0·05	−0·23	0	+0·78	−0·13	− 5·05	− 9·95	+ 3·36	− 3·18	−0·99	−0·19	−0·11	−15·74
	Godhra	−0·04	−0·13	−0·01	+0·51	−0·42	− 5·01	−10·72	+ 4·65	+ 2·60	−1·02	−0·16	−0·09	− 9·84
	Dohad	−0·07	−0·17	−0·01	+0·07	−0·50	− 3·46	− 4·96	+ 7·96	− 3·46	−1·19	−0·19	−0·14	− 6·12
	Ahmedabad	−0·03	−0·08	−0·01	+0·43	−0·42	− 4·01	− 7·17	− 0·61	− 0·81	−0·62	−0·21	0	−13·54
	Idar	−0·05	−0·14	−0·03	−0·02	−0·20	− 4·83	−12·60	+ 4·01	+ 1·84	−0·29	−0·25	−0·07	−12·63
	Deesa	−0·16	−0·15	−0·09	+0·31	−0·12	− 2·46	− 5·64	+12·07	+ 1·07	−0·62	−0·15	−0·03	+ 4·03
	Wadhwan	−0·05	−0·06	−0·04	+0·14	+0·03	−2·47	−6·17	+ 3·83	−0·40	−0·49	−0·53	−0·03	− 6.24
	Palanpur	−0·12	−0·20	−0·07	+1·57	−0·28	−3·14	−7·24	+ 7·51	+ 1·57	−0·49	+0·07	−0·09	− 0·91
	Rajkot	−0·05	−0·10	−0·01	−0·01	−0·31	−5·53	−5·99	+25·95	−1·61	−0·70	−0·37	−0·06	+11·21
	Songad	−0·04	−0·08	−0·06	−0·04	+0·16	−3·60	−3·67	+12·01	−1·72	−1·75	−0·25	−0·03	+ 0·93
	Jetalsar	−0·05	−0·12	0	0	+0·21	−7·92	−3·73	+27·53	+0·85	−1·07	−0·94	−0·01	−14·75
Hyderabad.	Aurangabad (Cantt.)	−0·05	−0·11	−0·08	−0·15	−0·78	+0·78	−2·05	− 3·41	−2·37	−2·64	−1·15	−0·70	−12·71
	Hingoli	−0·23	−0·27	+0·05	+0·39	−0·65	−0·82	+6·45	+ 5·72	−4·11	−2·57	−1·00	−0·43	+ 2·53
	Parbhani	−0·07	−0·06	−0·26	−0·18	−0·59	−0·51	+5·10	− 2·81	−2·51	−2·73	−0·74	−0·27	− 5·63
	Nanded	−0·03	−0·24	−0·41	+0·26	−0·72	−4·24	+5·76	− 2·86	−2·17	−3·01	−0·81	−0·63	− 9·10
	Bheer	−0·12	−0·05	+0·01	−0·16	−0·58	+3·19	−2·17	− 4·05	−3·38	−2·99	−1·15	−0·65	−12·10
	Mominabad	−0·21	−0·15	−0·21	+0·01	−0·49	+4·24	+1·29	− 4·79	−4·92	−2·84	−1·42	−0·97	−10·46
	Indur (Indur)	−0·06	−0·07	−0·58	−0·33	−0·36	−3·92	+9·07	− 1·27	+5·43	−2·30	−0·97	−0·39	+ 4·25
	Karimnagar (Yelgandal).	+0·22	−0·02	+1·17	+0·25	−0·72	−2·24	+2·82	− 0·50	+6·31	−1·63	−0·55	−0·33	+ 4·98
	Kandi (Medak)	−0·06	−0·17	−0·09	+0·16	+0·46	+5·24	+4·04	− 4·25	+0·61	−1·27	−1·18	−0·20	+ 3·29
	Shumsabad (Ibrahimpatan).	−0·07	−0·13	−0·52	−0·48	−0·81	+0·72	+4·07	− 2·40	−0·63	−2·46	−1·55	−0·18	− 4·44
	Sundanully (Ibrahimpatan).	−0·03	−0·21	−0·60	−0·17	−0·12	−0·48	+1·36	− 4·17	−1·34	−2·56	−1·09	−0·08	− 9·49
	Dharasev (Naldurg).	−0·02	−0·03	+0·67	+0·03	−1·20	+0·64	−0·80	− 2·07	−6·86	−2·68	−0·83	−0·41	−13·55
	Bidar (Bidar)	−0·02	−0·12	+0·47	+0·95	−0·88	+0·45	+2·94	− 4·62	−0·40	−4·00	−1·52	−0·62	− 7·37
	Gulbarga (Gulbarga).	−0·09	−0·15	−0·32	+0·63	−0·98	+2·26	+3·75	− 3·76	−0·04	−3·32	+1·09	−0·28	− 1·21
	Bolaram	−0·12	−0·14	−0·26	+0·22	−0·99	−0·69	+4·39	− 0·92	+2·25	−2·70	−0·94	−0·35	− 0·25
	Secunderabad	−0·25	−0·21	−0·10	+0·15	−1·19	−0·04	+2·96	− 2·10	−0·60	−1·26	−0·15	−0·23	− 3·02
	Hyderabad (Residency).	−0·11	−0·08	−0·39	+2·11	−0·85	−0·05	+5·58	− 3·06	−0·10	−2·18	−0·99	−0·45	− 0·57
	Zanawada (Hyderabad).	−0·08	−0·49	−0·79	−0·29	−0·75	−1·86	+4·07	− 6·35	−0·67	−2·18	−0·87	−0·01	−10·27
	Bhongir (Nalgunda.	−0·16	−0·08	−0.49	+1·17	−0·83	−1·24	+3·90	− 3·32	+1·74	−2·59	−1·23	−0·13	− 3·26

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inch.	Inch.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Hyderabad—*concld.*	Hanumkonda (Warangal).	−0·28	−0·21	−0·95	−0·29	−0·14	−0·37	+5·82	−3·30	+1·48	−0·61	−1·05	0	+0·10
	Sirpur Tandur	+0·11	−0·24	−0·48	+0·15	−0·24	−2·67	−1·70	+2·07	+5·05	−2·37	−1·19	−0·76	−2·25
	Palmoor (Mahbubnagar).	0	−0·16	−0·89	+1·14	−0·11	+1·13	−1·96	−9·01	−0·60	−2·08	−1·02	0	−13·56
	Raichur	−0·03	−0·06	−0·32	+0·01	−0·43	+1·69	+3·66	−4·37	+0·86	−4·03	−0·97	−0·12	−4·11
	Raichur (Cantt.)	0	−0·11	−0·45	+0·33	+1·02	+1·33	+0·83	−5·86	+2·40	−3·02	−1·07	−0·17	−4·77
Madras	Rambha	−0·20	−0·76	−0·08	−0·49	+0·36	+5·21	−4·59	+9·87	+0·79	+5·36	−2·31	−0·89	+12·27
	Gopalpur	−0·15	−0·51	−0·35	−0·61	−0·34	+0·74	−4·04	+1·83	−0·20	+3·90	−4·67	−0·81	−5·21
	Aska	−0·23	−0·60	+0·85	+1·77	+1·27	+0·76	+2·54	+2·02	−2·50	+2·36	−2·22	−0·52	+5·50
	Vizianagram	−0·13	−0·39	−0·56	+0·14	−0·90	+1·01	−2·18	−2·13	+8·14	−6·71	−2·45	−1·16	−7·32
	Bimlipatam	−0·22	−0·43	−0·05	+0·58	+0·02	+0·20	+1·52	−0·44	+0·38	−3·30	−0·14	−1·00	−2·88
	Rayaghadda	−0·14	−0·28	−0·34	−0·65	−0·37	−0·20	−3·71	−2·15	+5·40	−1·99	−1·61	−0·38	−6·42
	Nourangapur	−0·14	−0·08	−0·20	−0·65	−0·25	−3·31	−5·35	+1·12	+5·99	+2·61	−0·71	−0·08	−1·05
	Gunipore	−0·08	−0·20	+0·32	−1·28	+0·77	+1·18	−6·64	−0·16	+5·63	−2·23	−1·93	−0·33	−4·95
	Jeypore	−0·07	+0·99	−0·37	+0·30	−0·94	−6·02	+0·30	−3·54	+4·22	−1·57	−1·30	−0·05	−8·05
	Koraput	−0·10	+0·71	+0·47	+0·10	+0·40	−2·95	−5·40	−0·79	+1·97	−1·06	−1·42	−0·19	−8·26
	Malkanagiri	−0·07	−0·14	+1·37	−0·98	−0·39	−4·53	+4·66	−4·57	+4·02	−0·65	−0·51	−0·05	−11·16
	Narsapatnam	−0·26	−0·33	−0·43	−0·07	+0·08	−0·85	−0·65	−1·33	+1·99	−4·17	−0·26	−0·82	−7·10
	Cocanada	−0·18	−0·28	−0·26	+1·65	+1·35	−3·16	−2·60	−1·51	−1·68	−4·76	−3·28	−0·77	−15·78
	Rajahmundry	−0·16	−0·23	−0·29	+1·96	+3·04	+1·29	+0·21	−1·31	+4·57	−0·79	−2·00	−0·17	+6·12
	Ellore	−0·17	−0·09	−0·38	+1·19	+0·17	−3·77	+1·27	−2·93	+1·50	−5·48	−2·25	−0·32	−11·25
	Masulipatam	−0·20	−0·13	−0·27	+4·15	−1·23	−2·90	+5·10	−4·22	+1·24	−4·02	−4·11	−0·59	−7·18
	Guntur	−0·26	−0·15	−0·49	+0·29	+0·23	−1·28	+5·44	−4·49	+3·11	−3·44	−2·03	−0·41	−3·48
	Vinukonda	−0·21	−0·02	−0·51	+1·21	−0·96	−0·43	−0·94	−3·67	+0·16	−3·61	−2·83	−0·59	−12·40
	Ongole	−0·22	−0·07	−0·24	+1·80	−1·38	−1·40	+2·17	−3·46	+6·21	−5·23	−4·80	−3·34	−7·18
	Nellore	−0·24	−0·08	−0·20	+2·91	−1·12	+0·58	−0·53	−2·64	+1·42	−2·75	−2·37	−2·43	−7·45
	Udayagiri	−0·33	−0·24	−0·49	+0·64	−0·02	+4·08	+1·27	−1·33	−0·79	−4·58	−5·15	−0·82	−8·56
	Tada	−0·33	−0·48	−0·21	+1·46	−1·75	−0·84	+0·85	−3·82	−2·11	−1·25	−3·91	+1·15	−11·24
	Kurnool	−0·05	−0·03	−0·45	−0·24	−1·44	−0·65	+6·50	−3·49	−0·78	−3·29	−0·20	−0·16	−4·28
	Nandyal	−0·08	−0·03	−0·17	+1·38	−0·70	−1·91	−0·05	−5·25	+0·79	−2·56	−0·46	−2·02	−9·25
	Bellary	−0·11	−0·03	−0·26	+1·51	+0·67	−0·78	+1·98	−1·48	+0·71	−1·41	−1·23	−0·22	−0·65
	Gooty	−0·04	−0·05	−0·08	+0·01	−1·06	−1·28	−0·06	−2·75	+3·20	−3·28	−1·00	−0·12	−6·51
	Adoni	−0·04	0	−0·29	−0·04	+3·59	−1·68	+0·32	−3·97	+1·16	−3·88	−0·88	−0·17	−5·88
	Dharmavaram	−0·01	−0·11	−0·18	+0·32	−0·18	−1·95	+1·90	−2·29	+5·15	−1·04	−1·96	−0·26	−0·61
	Cuddapah	−0·16	−0·04	−0·19	+0·77	+0·40	−1·30	−0·21	−4·90	+2·52	−3·24	−2·83	+0·33	−8·85
	Madanapalle	−0·13	−0·14	−0·35	+0·53	−2·36	−0·21	+4·22	−2·07	−1·18	−4·15	−2·55	+0·05	−8·34
	Chittoor	−0·11	−0·20	−0·34	+0·32	−1·83	+0·07	+1·01	−4·89	+3·49	−2·45	−1·96	−0·83	−7·72

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches	Inch.	Inches	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Madras—*contd.*	Vellore	0	−0·33	−0·18	+1·45	−1·85	−0·59	+5·68	−2·38	+1·25	−2·47	−3·11	−0·88	−3·41
	Chandragiri	−0·20	−0·23	−0·24	+1·02	−1·37	−0·54	−0·88	−0·63	+1·81	−3·01	−4·54	−1·33	−10·14
	Arcot	−0·30	−0·45	−0·33	+0·88	−0·46	−1·21	+0·58	−5·44	+1·50	−2·22	−3·67	+1·53	−9·59
	Madras	−0·53	−0·28	−0·39	+2·48	−2·03	−0·61	−1·56	−3·14	+1·33	−1·76	−10·45	−2·87	−20·21
	Palmaner	+0·07	−0·18	−0·40	+0·73	−2·14	−2·25	+3·49	−3·76	−1·39	−2·30	−2·98	−0·86	−11·97
	Saidapet	−0·53	−0·19	−0·32	+2·34	−0·73	−0·97	−2·68	−3·53	−2·19	−3·02	−10·55	−3·32	−25·69
	Chingleput	−0·44	−0·31	−0·13	+4·14	−1·50	−1·08	+0·76	−4·84	+1·33	+1·16	−8·95	−0·01	−9·87
	Conjeeveram	−0·39	−0·30	−0·12	+2·79	−0·60	−1·54	−0·50	−5·06	−2·05	+1·62	−6·68	−0·64	−13·47
	Tindivanam	−0·38	−0·47	−0·27	+3·51	−1·98	−1·71	+0·11	−1·29	+1·80	+2·24	−3·05	−2·02	−3·51
	Cuddalore	−0·80	−0·28	−0·38	+2·00	−0·62	−1·09	+0·31	−1·76	+7·43	−0·32	−4·74	+1·23	+0·98
	Vriddhachalam	−0·23	−0·31	−0·30	+1·04	−0·13	−1·49	+0·48	−2·63	+4·39	+0·60	−0·36	−0·87	+0·19
	Udayarpalaiyam	−0·55	−0·32	−0·34	+2·81	−0·85	−1·08	+0·87	−0·03	+3·34	+0·29	+1·02	+0·14	+5·30
	Salem	+0·65	−0·21	−0·87	+2·02	−2·82	−2·29	+4·10	−4·65	+7·00	−3·86	−1·65	−0·83	−3·41
	Atur	−0·23	−0·28	−0·77	+3·58	−1·36	−1·67	+1·54	+0·54	+2·20	−0·43	−2·99	−0·88	−0·75
	Shevaroy Hills	+2·28	−0·41	−0·84	+1·73	−2·97	−1·52	+0·33	−4·01	+15·46	−4·59	−4·06	−1·66	−0·26
	Kumbakonam	−0·47	−0·47	−0·52	+1·78	−1·64	+0·65	+0·45	−2·46	+0·73	−3·04	+1·38	+1·12	−2·49
	Tirupatur	−0·15	−0·33	−0·50	+3·77	−2·24	−1·17	+0·68	+1·16	+0·04	−3·51	−0·25	+0·88	−1·62
	Hosur	+0·04	−0·26	−0·49	+1·68	−2·89	−0·31	+3·71	−2·55	+2·46	−1·40	−2·68	+1·44	−1·25
	Tranqueber	−0·10	−0·43	−0·13	+0·90	−0·60	−1·25	+1·88	−0·63	+8·43	−4·00	−2·04	+3·76	+5·79
	Negapatam	−0·71	−0·70	−0·35	+3·12	−0·51	−1·16	+2·91	+2·12	−0·12	−1·05	+4·51	+2·57	+10·63
	Tanjore	−0·28	−0·40	−0·46	+2·73	−0·45	−1·38	+0·69	−3·66	+2·09	−2·21	−0·20	−0·41	−3·94
	Patukota	−0·52	−0·64	−0·15	+6·36	+0·32	−1·69	+4·33	−4·58	+1·90	+0·19	+0·97	−0·64	+15·85
	Trichinopoly	−0·61	−0·57	−0·62	+3·69	−0·21	+0·56	−0·15	−1·74	−0·16	−3·69	−0·26	+0·05	−3·71
	Karur	−0·12	−0·11	−0·33	+1·95	−1·60	−1·15	−0·66	−2·27	+1·51	−1·22	−2·07	−0·31	−6·38
	Coimbatore	+5·51	−0·26	−0·58	+1·21	−0·76	+0·50	+0·07	+0·82	+0·48	+3·89	−1·20	−0·15	+9·53
	Kollegal	+0·56	−0·11	−0·93	+0·58	−1·71	−0·52	+0·48	−3·23	+4·69	−1·34	−2·55	−0·35	−4·43
	Dindigul	−0·04	−0·42	−0·57	+2·91	−1·59	−1·72	+0·75	−1·08	−0·62	−2·35	−2·08	+0·96	−5·85
	Madura (Obsy.)	−0·33	−0·39	−0·70	+3·46	+2·40	−1·31	−0·27	+1·49	−0·99	−2·88	−2·48	−0·76	−2·76
	Vattanum	−0·08	−0·86	−0·61	+2·41	−1·10	−0·86	+0·39	−0·85	+0·76	+0·25	−3·53	−0·72	−4·80
	Periyakulam	+1·30	−0·68	−1·80	+1·56	+0·68	−0·04	+1·68	−0·42	−0·34	−0·79	−0·05	+0·11	+1·21
	Tinnevelly	−0·60	−0·42	−1·39	+0·05	+0·22	−0·33	−0·29	−0·49	−0·39	−0·43	+0·70	−1·10	−4·47
	Tuticorin	+2·21	+0·53	−0·88	−1·41	+2·12	−0·20	−0·18	−0·33	+0·99	+5·60	+3·03	+1·33	+12·81
	Satur	−0·12	−0·66	−1·14	−0·23	+4·79	+0·33	−0·94	−1·29	+1·22	−1·49	+0·38	+0·98	+1·83
	Cochin	+0·61	−0·66	−1·27	+9·11	−8·17	−1·84	−3·99	−1·32	−2·27	−3·76	−1·83	−0·56	−15·95
	Palghat	+0·26	−0·20	−0·84	+2·43	−0·94	+7·26	+11·60	+15·28	−1·16	+7·02	−2·43	−0·67	+37·61
	Wellington	+0·69	−0·68	−2·51	−0·26	−1·94	−1·34	+0·20	+0·82	+0·49	+4·44	−5·55	−2·04	−7·68

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Provinces.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Madras—*contd.*	Manantoddy	+0·52	−0·25	−1·28	+2·11	−3·26	+14·13	+22·29	+34·81	+0·20	−1·97	−1·76	−0·52	+65·02
	Calicut	−0·18	−0·18	−0·85	+2·81	−4·07	−1·25	+5·25	+4·68	+1·19	−1·02	−2·54	−0·13	+3·71
	Tellicherry	−0·30	−0·10	−0·44	+1·04	−7·98	+1·24	−7·29	+4·98	−4·03	−4·66	−3·11	+2·23	−18·42
	Cannanore	−0·36	−0·22	−0·16	−0·08	−6·62	+1·63	−2·40	+2·16	−2·16	−4·18	−3·22	+0·19	−15·42
	Mangalore	−0·14	−0·07	−0·12	−1·67	−7·23	+1·46	+16·87	+0·08	+11·59	−6·29	−1·62	+0·22	+13·08
Mysore and Coorg.	Bangalore	−0·16	−0·13	−0·56	+0·26	+0·12	−0·32	+0·28	−3·18	+2·20	−0·43	−1·83	−0·09	−3·84
	Mysore	−0·08	−0·15	−0·68	+0·48	−4·33	−0·23	−0·30	−2·67	+2·53	+3·19	−1·74	−0·09	−4·07
	Shimoga	−0·06	−0·12	−0·36	+0·82	−0·60	+3·59	+2·33	+4·07	−0·26	+1·32	−1·40	−0·37	+8·96
	Mercara	−0·21	−0·06	−1·01	−0·58	−4·89	+15·04	+0·82	+19·46	+4·94	−3·14	−1·98	−0·46	+27·93
	Kolar	−0·18	−0·04	−0·57	+0·50	+1·31	−2·47	+3·55	−3·23	−1·00	−1·52	−2·06	+0·33	−5·38
	Tumkur	−0·16	−0·20	−0·36	−0·57	−3·25	−0·60	+5·05	−1·83	+0·20	−0·20	−0·27	−0·39	−2·58
	Chitaldroog	−0·19	−0·03	−0·29	+0·05	−2·48	−0·30	−0·76	−0·34	−1·61	−1·52	−2·25	−0·41	−10·13
	Chikmagalur	−0·22	−0·18	−0·72	−0·55	−3·70	+2·21	+0·53	+1·96	−0·52	−2·19	−2·19	−0·51	−6·08
	Hassan	−0·70	−0·09	−0·51	+1·63	−0·92	+1·49	+1·98	+4·62	+0·98	+5·27	−0·78	−0·65	+12·32
Ceylon.	Trincomalee	−0·62	−2·28	−1·43	+3·43	−1·01	−1·46	−1·12	+1·02	−2·16	+1·88	+7·27	−7·82	−4·30
	Colombo	+0·63	−1·27	−1·21	+3·65	−1·26	−0·51	+2·28	+3·68	−1·01	−5·05	−3·41	−1·19	−6·67
	Ratnapura	+2·84	−0·33	−1·03	+7·24	−12·30	+5·57	+10·62	+3·71	+3·59	+3·30	+0·32	+6·89	+30·42
	Puttalam	+1·24	−1·23	−3·13	+4·29	−0·88	+1·61	−0·38	−0·11	+0·02	+0·95	−3·96	−3·06	−4·64
	Anuradhapura	+1·50	−1·18	+0·55	−0·08	−2·33	−0·63	+0·74	−1·63	−0·87	−0·79	−1·59	−0·87	−7·18
	Mannar	+1·60	−1·11	−0·88	+3·24	−0·95	+0·40	+0·02	−0·33	+0·97	−4·48	+1·93	−2·36	−1·95
	Jaffna	−0·90	−1·30	−0·64	+11·83	−1·22	−0·38	+2·77	−1·55	−1·54	+4·35	+6·46	−5·19	+12·69
	Batticaloa	+3·74	−2·90	−2·69	+2·23	+1·88	−1·02	+1·98	−2·19	+0·59	+5·01	+8·17	−4·35	+10·45
	Hambantota	+0·23	−1·61	−0·81	+1·84	−2·78	+6·95	+1·61	+3·21	+0·70	+8·05	+8·63	−3·89	+22·13
	Galle	−1·31	+0·61	+1·01	+2·82	−1·61	+4·35	+5·97	+1·86	+0·41	−3·66	−3·21	+0·95	+8·19
	Kandy	+5·12	−1·77	−0·79	−1·75	−3·07	+3·09	+7·66	+4·76	+3·86	−3·13	+9·18	−1·75	+21·41
	Nuwara Eliya	−0·98	−1·33	−2·98	+1·35	−1·53	+0·57	+3·71	+3·27	+2·79	−3·43	+3·86	−3·01	+2·29
	Hakgala	−2·85	−1·85	−3·82	−2·61	−1·60	+1·88	+3·56	+3·45	+1·08	−2·45	+5·93	−8·58	−7·86
	Padulla	−2·20	−2·45	−0·52	−3·92	+3·08	−2·24	+0·24	−1·97	+0·47	+1·41	+0·28	−3·07	−10·89
	Kurunegala	+0·42	−1·57	−4·03	+4·88	−4·01	−0·39	+8·61	+4·09	−0·53	−0·25	+2·01	−0·49	+8·74
Burma.	Akyab	−0·14	−0·19	−0·46	−0·95	−10·68	−1·05	−5·89	−0·41	+2·61	−7·22	−3·11	−0·48	−27·97
	Kyaukpyu	−0·12	−0·05	−0·25	−0·64	−7·52	+4·33	−17·31	+3·92	−1·08	−7·26	−1·11	−0·12	−27·21
	Sandoway	−0·08	−0·05	−0·11	−1·02	−9·23	+15·63	−9·55	+11·49	−6·63	−3·45	+0·95	+0·05	−2·00
	Rangoon	0	−0·27	−0·18	−1·66	+2·56	+0·09	+2·23	+5·01	−1·72	−0·27	−1·24	−0·07	+4·48
	Bassein	−0·18	−0·23	−0·05	−1·27	−3·47	+10·03	−7·16	+11·88	+2·29	−4·13	−1·09	−0·05	+6·57
	Diamond Island	−0·22	−0·09	−0·01	−1·35	−1·35	+3·16	−0·33	−1·78	+0·53	−5·68	−4·30	−0·80	−12·22
	Henzada	−0·07	−0·21	−0·04	−0·88	−1·44	+7·68	−7·80	−2·90	+1·37	−3·21	−1·36	−0·07	−8·93

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—contd.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Burma—*concld.*	Myanaung	−0·06	−0·03	−0·01	−1·92	−0·66	+8·57	+6·77	+2·61	+7·04	−0·20	−1·04	−0·08	+21·89
	Prome	−0·02	−0·01	−0·02	+0·11	−3·84	+2·15	−0·16	+4·36	+1·68	+1·28	−0·65	−0·08	+4·80
	Thayetmyo	−0·01	−0·03	−0·07	−0·57	−1·66	+6·15	−0·41	+4·26	+0·81	+0·29	−1·23	−0·04	+7·49
	Mandalay	−0·08	−0·07	−0·20	+0·82	−1·24	−3·15	+0·68	+2·00	−2·86	−3·84	−0·89	−0·07	−8·90
	Shwebo	−0·09	−0·08	−0·11	−0·35	−1·35	+3·93	+2·73	+3·71	−0·75	+0·60	−0·40	−0·19	+7·64
	Ye-u	−0·10	−0·09	−0·27	−0·73	−1·43	+1·11	+0·77	+4·88	+4·15	−0·51	−0·68	−0·14	+6·96
	Minbu	−0·05	−0·02	0	−0·69	−2·55	+5·11	+3·67	+0·37	−0·49	+3·29	−1·18	−0·14	+7·32
	Pyinmana	−0·06	−0·09	−0·02	−0·02	+9·65	−0·50	−2·45	−0·11	+0·64	+3·25	−0·33	+0·52	+8·64
	Pagan	−0·04	−0·05	−0·14	−0·72	−1·62	+0·92	+0·57	+4·34	+4·19	+4·71	−1·03	+0·64	+11·77
	Kyauksai	−0·21	−0·04	−0·12	−0·91	+3·16	−2·63	+2·66	+1·55	+0·89	−0·74	−1·24	−0·08	+2·14
	Bhamo	−0·23	−0·40	+0·34	−0·45	−3·53	−5·82	+0·26	−2·03	−5·74	−0·05	−0·87	−0·07	−18·59
	Kindat	−0·31	−0·24	−0·38	−1·17	−2·17	+2·20	+11·92	+3·40	+0·33	−0·06	−1·71	−0·43	+11·38
	Magwe	0	−0·04	0	−1·05	−2·17	+8·04	+0·33	−0·07	+0·70	+1·97	−0·95	−0·47	+6·29
	Yemethin	−0·02	−0·13	−0·11	+0·66	+8·12	+3·30	+0·82	+0·71	+0·20	−0·82	+2·71	+0·39	+13·42
	Fort Sagaing	−0·05	−0·06	−0·24	−0·72	−0·13	−2·37	−2·09	+3·43	−2·01	−1·38	+0·03	+0·08	−5·51
	Mingin	−0·14	−0·04	+0·85	−0·76	+0·89	+6·15	+5·50	+5·23	+8·09	+1·49	−1·62	−0·23	+25·41
	Toungoo	−0·07	−0·13	+0·13	−0·71	−0·57	+0·93	−3·82	+7·43	+2·22	+2·94	−0·62	+0·10	+7·83
	Shwegyin	−0·12	−0·39	−0·28	−2·45	−1·88	−6·14	+3·25	+0·96	−3·25	+4·00	−0·92	−0·08	−7·30
	Moulmein	−0·16	−0·14	−0·25	−2·38	−1·76	−2·86	−14·30	+12·92	+2·50	+0·95	+1·06	−0·02	−4·44
	Tavoy	−0·19	−0·48	+1·63	−1·61	+1·07	+8·57	+8·28	+9·22	+15·31	−5·67	+0·28	−0·11	+36·30
	Mergui	+0·14	+1·47	+0·93	−1·97	−6·12	+5·10	−1·01	−2·36	+8·99	−3·92	−1·98	−0·46	−1·19
	Myingyan	−0·06	−0·07	+0·05	−0·40	−0·83	+2·60	+3·37	+2·35	+0·38	−1·35	−0·74	+0·17	+5·47
	Monywa	0	−0·01	−0·29	−1·04	−1·33	−0·74	+0·98	+4·17	+3·06	−1·24	−0·35	−0·22	+2·99
Bay Islands.	Port Blair	−0·80	−1·08	−0·34	−0·67	−2·82	−7·02	−6·14	−1·66	−5·74	−1·72	−4·75	+1·17	−31·57
	Cocos Island	−0·33	−0·10	−0·01	−1·02	−1·05	+17·10	+7·30	+2·26	+0·59	−2·89	−6·62	−1·27	+13·96
Kashmir.	Leh	+0·36	−0·09	+0·02	+0·99	+0·09	−0·02	+0·51	+0·10	−0·21	−0·05	−0·10	0	+0·58
	Srinagar	+0·79	−0·73	+0·64	+7·67	+1·52	−2·31	−4·69	−3·80	+0·25	+1·27	−0·25	+1·64	+2·00
	Skardu	−1·75	−1·11	−0·97	−2·76	−0·95	+0·05	+0·02	−0·13	+0·61	+0·10	−0·11	+0·32	−6·68
	Gilgit	−0·10	+0·12	−0·29	−0·22	−0·06	−0·10	−0·91	+0·04	−0·05	+0·13	−0·06	+0·21	−1·29
Nepal	Katmandu	+4·08	−0·01	−1·14	−1·51	−0·19	−1·47	+3·55	−6·51	−0·78	−1·14	−0·18	+0·37	−4·93
Extra India.	Meshed	−0·23	−0·02	−1·20	+0·26	+0·85	+0·27	−0·03	−0·02	−0·10	−0·70	+0·41	+0·32	−0·02
	Teheran	−0·66	+0·02	−2·54	+0·22	+0·64	+0·01	−0·51	−0·09	−0·02	+0·16	+1·57	−0·26	−0·13
	Ispahan	−0·11	+0·38	−1·19	−1·07	−0·09	0	−0·10	0	0	+0·41	−0·81	−0·40	−0·25
	Bushire	−1·57	+4·14	−1·41	−0·34	+0·01	0	0	0	0	+0·95	−0·68	+0·71	+0·15
	Jask	+0·83	+0·37	−1·21	−0·04	0	−0·13	−0·02	0	0	+0·10	+0·38	+2·42	+0·23
	Muscat	+0·17	+0·18	−0·44	−0·05	0	0	−0·08	0	0	−0·04	−0·02	+2·05	+0·15

TABLE XXV.—*Comparison of the monthly and total rainfall (in inches) in 1900, with the averages of past years*—concld.

Province.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches
Extra India *concld.*	Baghdad	−1·16	−1·33	−0·90	−1·19	−0·26	+0·01	0	−0·13	0	+0·01	+0·66	−0·55	−0·38
	Aden	−0·09	+0·91	−1·13	−0·66	−0·21	−0·01	0	−0·21	−0·21	−0·02	−0·21	−0·45	−0·19
	Perim	+0·61	+0·92	+1·03	−0·03	+0·21	0	+1·40	+0·10	0	−0·09	−0·03	+0·01	+0·34
	Kabul	?	+0·72	−2·44	−0·61	+0·90	−0·37	−0·14	−0·11	0	+0·01	+2·05	−0·38	?
	Kashgar	+0·14	0	−0·05	+0·37	−1·32	−0·37	+0·25	+0·13	−0·13	−0·07	−0·04	−0·27	−0·11
	Zanzibar	+1·50	+1·53	+2·63	+2·86	+1·11	−0·01	+2·98	−0·51	+1·97	+1·32	−0·44	+6·50	+1·79
	Port Victoria (Seychelles)	+0·07	−1·61	−4·04	+5·36	−0·17	−4·91	−0·13	−2·08	−1·41	+2·35	+16·43	+5·74	+1·30
	Mauritius	−3·56	−1·99	+0·86	−2·20	−2·86	−0·61	+0·02	−0·65	−0·56	−0·01	−0·48	−4·02	−1·34

TABLE XXVI.—*Geographical summary of rainfall anomalies in 1900.*

Meteorological Division.	Area, square miles.	Number of stations.	Normal rainfall.	Actual rainfall.	Mean excess or defect.	Total excess square miles × 1 inch.	Total defect square miles × 1 inch.
			Inches.	Inches.	Inches.		
I. Punjab Plains	120,000	29	21·71	24·48	+2·77	332,400	
II. North-Western Provinces and Oudh	83,500	44	38·07	36·97	−1·10		91,850
IIIa. Rajputana, East	67,000	29	27·02	28·69	+1·67	111,890	
IIIb. „ West	53,000	10	12·51	10·61	−1·90		110,200
IV. Central India States	91,000	26	44·26	42·18	−2·08		189,280
V. Bihar	30,000	15	44·75	43·64	−1·11		33,300
VI. Western Bengal	38,000	14	52·75	61·93	+9·18	348,840	
VII. Lower „	54,000	28	65·53	71·66	+6·13	331,020	
VIII. Assam and Cachar	61,000	17	95·19	82·23	−12·96		790,560
IX. Orissa and Northern Circars	27,000	32	52·75	54·79	+2·04	55,080	
X. Central Provinces, South	61,000	19	53·46	58·68	+5·22	318,420	
XI. Berar and Khandesh	43,000	13	36·41	34·46	−1·95		83,850
XII. Gujarat	54,500	13	33·82	29·32	−4·50		245,250
XIII. Sind and Cutch	68,000	10	8·59	6·13	−2·46		167,280
XIV. North Deccan	48,000	13	30·83	27·55	−3·28		157,440
XV. Konkan and Ghats	16,000	11	139·95	155·79	+15·84	253,440	
XVI. Malabar and Ghats	18,000	8	114·50	126·69	+12·19	219,420	
XVII. Hyderabad	74,000	17	34·58	30·77	−3·81		281,940
XVIII. Mysore and Bellary	58,000	18	29·28	25·90	−3·38		196,040
XIX. Carnatic	72,000	36	36·94	33·08	−3·86		277,920
XX. Arakan	11,000	6	152·36	131·41	−20·95		230,450
XXI. Pegu	32,500	7	72·24	78·55	+6·31	205,075	
XXII. Tenasserim	10,500	4	173·30	179·15	+5·85	61,425	
XXIII. Upper Burma	?	13	39·02	44·19	+5·17		

On the mean of the whole are a represented in the above table there was a defect of 0·52 inch or, excluding the Burmese Peninsula of 0·57 inch.

TABLE XXVII.—*Geographical summary of the distribution of rainfall in 1900 according to season.*

Meteorological Division.	January and February.			March to May.			June to October.			November and December		
	Normal average.	Actual average.	Difference.	Normal average.	Actual average	Difference.	Normal average.	Actual average.	Difference.	Normal average.	Actual average.	Difference.
	Inches.	Inches.	Inches	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
North-West Himalayas	6·43	7·33	+0·90	7·21	8·86	+1·65	41·54	41·56	+0·02	1·74	3·52	+1·78
Punjab Plains	2·24	1·78	−0·46	2·75	2·48	−0·27	16·22	18·99	+2·77	0·75	1·23	+0·48
North-Western Provinces and Oudh.	1·48	2·48	+1·00	1·41	1·11	−0·30	35·69	32·96	−2·73	0·45	1·47	+1·02
Rajputana	0·55	0·02	−0·53	0·76	1·30	+0·54	21·59	22·10	+0·51	0·39	0·62	+0·23
Central India States	0·97	1·30	+0·33	0·80	0·48	−0·32	41·76	39·30	−2·46	0·73	1·10	+0·37
Bihar	1·19	3·23	+2·04	2·51	1·30	−1·21	40·34	37·33	−3·01	0·34	0·46	+0·12
Western Bengal and Chota Nagpur.	1·38	2·60	+1·22	3·59	4·37	+0·78	47·13	54·11	+6·98	0·65	0·83	+0·18
Lower Bengal	1·41	1·65	+0·24	10·64	8·71	−1·93	52·25	60·80	+8·55	0·79	0·10	−0·69
Eastern Himalayas	1·65	1·51	−0·14	18·38	15·04	−3·34	104·53	84·90	−19·63	0·50	0·64	+0·14
Assam and Eastern Bengal	1·83	1·81	−0·02	22·77	23·42	+0·65	69·30	56·47?	−12·83?	1·27	0·52	−0·75
Orissa and Northern Circars	0·74	0·29	−0·45	4·75	5·51	+0·76	44·68	47·56?	+2·88?	2·42	0·31	−2·11
Central Provinces South	0·86	0·96	+0·10	1·84	1·06	−0·78	49·58	56·41	+6·83	0·90	0·26	−0·64
Berar and Khandesh	0·53	0·08	−0·45	1·13	0·52	−0·61	33·56	33·84	+0·28	1·19	0·02	−1·17
Gujarat	0·18	0	−0·18	0·37	0·44	+0·07	32·72	28·54	−4·18	0·35	0·02	−0·33
Sind and Cutch	0·53	0·03	−0·50	0·46	0·32	−0·14	8·22	6·36	−1·86	0·22	0·52	+0·30
North Deccan	0·19	0·08	−0·11	3·36	2·81	−0·55	25·71	24·54	−1·17	1·55	0·12	−1·43
Konkan and Ghâts	0·23	0·09	−0·14	1·71	0·13	−1·58	132·38	148·73	+16·35	0·97	0·01	−0·96
Malabar and Ghâts	0·50	0·31	−0·19	11·39	7·13	−4·26	98·52	117·45	+18·92	4·09	1·81	−2·28
Hyderabad	0·27	0·04	−0·23	1·95	1·40	−0·55	30·80	27·91	−2·89	1·49	0·26	−1·23
Ceded Districts and Mysore	0·25	0·05	−0·20	4·82	3·84	−0·98	21·63	21·13	−0·50	2·57	0·87	−1·70
Carnatic	0·89	0·60	−0·29	3·97	4·68	+0·71	21·05	19·35	−1·70	10·97	8·24	−2·73
Nilgiris	2·05	2·06	+0·01	9·56	4·85	−4·71	26·85	31·46	+4·61	11·91	4·32	−7·59
Arakan	0·97	0·75	−0·22	16·37	7·22	−9·15	125·56	122·20	−3·36	2·95	1·26	−1·69
Pegu	0·22	0·02	−0·20	8·46	6·21	−2·25	66·57	74·58	+8·01	2·89	1·31	−1·58
Tenasserim	1·02	1·05	+0·03	22·02	18·25	−3·77	147·95	158·09	+10·14	2·32	1·76	−05·6
Upper Burma	0·24	0·05	−0·19	6·12	5·53	−0·59	29·78	36·32	+6·54	1·56	0·92	−0·64
Bay Islands	1·17	0·02	−1·15	15·03	12·09	−2·94	69·08	70·11	+1·03	11·73	6·00	−5·73

TABLE XXVIII.—*Average actual and normal rainfall data of the 57 meteorological divisions in India for the four seasons of the year 1900 and for the whole year.*

Province.	Division.	January and February.			March to May.			June to October.			November and December.			Whole year.		
		Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Burma	1. Tenasserim	0·76			19·10			171·70			1·39			192·95		
	2. Lower Burma Deltaic	0·01			8·87			98·77			1·12			0·77		
	3. Central do.	0			4·03			58·66			0·74			63·43		
	4. Upper do.	0·08	0·24	−0·16	5·54	6·12	−0·58	39·27	29·78	+ 9·49	0·69	1·56	−0·87	45·58	37·70	+ 7·88
	5. Arakan	0·02			5·04			147·88			1·07			154·01		
Bengal and Assam	6. Eastern Bengal	1·74	1·43	+0·31	83·19	17·32	−4·13	66·36	68·27	− 1·91	0·24	1·62	−1·38	81·53	88·64	− 7·11
	7. Assam Surma	2·02	2·38	−0·36	41·54	38·62	+2·92	65·77	90·72	−24·95	0·15	1·89	−1·74	109·48	133·61	−24·13
	8. Do. Hills	1·95	1·86	+0·09	26·17	27·44	−1·27	68·98	94·54	−25·56	0·46	1·72	−1·26	97·56	125·56	−28·00
	9. Do. Brahmaputra	1·77	2·17	−0·40	23·79	23·52	+0·27	62·78	73·06	−10·28	1·27	0·95	+0·32	89·61	99·70	−10·09
	10. Deltaic Bengal	1·85	1·64	+0·21	9·32	10·18	−0·86	65·76	47·67	+18·09	0·16	1·09	−0·93	77·09	60·58	+16·51
	11. Central do.	1·58	1·29	+0·29	6·45	7·72	−1·27	47·75	46·59	+ 1·16	0·08	0·67	−0·59	55·86	56·27	− 0·41
	12. North do.	1·05	1·02	+0·03	11·51	15·49	−3·98	63·96	78·28	−14·32	0·03	0·25	−0·22	76·55	95·04	−18·49
	13. Bengal Hills	0·96	1·69	−0·73	12·58	18·95	−6·37	87·02	116·36	−29·34	0·21	0·56	−0·35	100·77	137·56	−36·79
	14. Orissa	0·62	1·18	−0·56	6·86	6·78	+0·08	64·09	49·39	+14·70	0·06	2·41	−2·35	71·63	59·76	+11·87
	15. Chota Nagpur	2·71	1·41	+1·30	4·54	4·31	+0·23	51·00	47·57	+ 3·43	1·00	0·71	+0·29	59·25	54·00	+ 5·25
	16. South Bihar	3·54	1·29	+2·25	1·34	2·37	−1·03	35·87	39·81	− 3·94	0·98	0·39	+0·59	41·73	43·86	− 2·13
	17. North do.	2·50	1·20	+1·30	2·88	4·42	−1·54	47·06	47·83	− 0·77	0·20	0·23	−0·03	52·64	53·68	− 1·04
North-Western Provinces and Oudh.	18. North-Western Provinces East.	3·69	0·99	+2·70	0·60	0·91	−0·31	30·96	35·98	− 5·02	1·66	0·37	+1·29	36·91	38·25	− 1·34
	19. South Oudh	2·83	0·95	+1·88	0·70	0·99	−0·29	31·41	33·73	− 2·32	1·32	0·43	+0·89	36·26	36·10	+ 0·16
	20. North do.	2·43	1·09	+1·34	1·08	1·55	−0·47	34·36	35·89	− 1·53	0·80	0·42	+0·38	38·67	38·95	− 0·28
	21. North-Western Provinces Central.	1·32	0·76	+0·56	0·64	0·73	−0·09	27·28	32·41	− 5·13	1·85	0·39	+1·46	31·09	34·29	− 3·20
	22. North-Western Provinces West.	0·50	0·88	−0·38	1·00	1·04	−0·04	23·91	24·06	− 0·15	1·31	0·35	+0·96	26·72	26·33	+ 0·39
	23. North-Western Provinces East Submontane.	4·26	0·98	+3·28	1·35	1·75	−0·40	37·73	39·50	− 1·77	0·58	0·27	+0·31	43·92	42·50	+ 1·42
	24. North-Western Provinces West Submontane.	3·02	2·51	+0·51	2·11	2·12	−0·01	38·80	41·13	− 2·33	1·81	0·60	+1·21	45·74	46·36	− 0·62
	25. North-Western Provinces Hills.	6·84	4·63	+2·21	5·79	5·16	+0·63	45·14	50·67	− 5·53	2·52	0·73	+1·79	60·29	61·19	− 0·90
Punjab	26. South-East Punjab	0·47	1·13	−0·66	1·65	1·32	+0·33	25·07	20·76	+ 4·31	1·44	0·33	+1·11	28·63	23·54	+ 5·09
	27. South do.	0·54	1·08	−0·54	1·06	1·40	−0·34	20·34	13·19	+ 7·15	0·65	0·33	+0·32	22·59	16·00	+ 6·59
	28. Central do.	1·16	2·00	−0·84	1·86	2·36	−0·50	15·37	14·00	+ 1·37	0·86	0·51	+0·35	19·25	18·87	+ 0·38
	29. Punjab Submontane	2·87	2·90	−0·03	2·01	2·69	−0·68	36·76	24·52	+12·24	1·77	0·75	+1·02	43·41	30·86	+12·55
	30. Do. Hills	7·06	6·55	+0·51	7·25	8·53	−1·28	52·65	45·43	+ 7·22	5·34	1·63	+3·71	72·30	62·14	+10·16

TABLE XXVIII.—*Average actual and normal rainfall data of the 57 meteorological divisions in India for the four seasons of the year 1900 and for the whole year*—concld.

Province.	Division.	January and February.			March to May.			June to October.			November and December.			Whole year.		
		Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.
		Inches.	Inches.	Inches	Inches.	Inches.	Inches.	Inches.	Inches	Inches.	Inches.	Inches.	Inches.	Inches	Inches.	Inches.
Punjab—*concld.*	31. North Punjab	3·83	3·23	+0·60	6·16	4·56	+1·60	14·61	12·26	+ 2·35	1·92	1·23	+0·69	26·52	21·28	+ 5·24
	32. West do.	0·68	0·98	—0·30	1·90	1·40	+0·50	4·76	6·25	— 1·49	0·65	0·27	+0·38	7·99	8·90	— 0·91
Bombay and Malabar Coast Districts (Madras).	33. Malabar	0·08	0·37	—0·29	6·13	10·95	—4·82	128·21	109·54	+18·67	1·47	4·21	—2·74	135·89	125·07	+10·82
	33A. Travancore	1·06			11·08			65·74			7·58			85·46		
	34. Madras South Central	0·88	0·46	+0·42	6·28	5·94	+0·34	19·24	17·88	+ 1·36	2·10	5·05	—2·95	28·5	29·33	—0·83
	35. Coorg	0·14			5·94			115·91			0·45			122·44		
	36. Mysore	0·10	0·18	—0·08	3·73	5·18	—1·45	34·87	25·91	+ 8·96	0·47	3·19	—2·72	39·17	34·46	+ 4·71
	37. Konkan	0·01	0·14	—0·13	0·37	2·08	—1·71	113·74	111·73	+ 2·01	0·09	1·24	—1·15	114·21	115·19	— 0·98
	38. Bombay Deccan	0·05	0·10	—0·05	1·72	2·79	—1·07	31·37	31·25	+ 0·12	0·11	1·85	—1·74	33·25	35·99	— 2·74
	39. Hyderabad North	0·08	0·17	—0·09	1·09	1·42	—0·33	31·36	32·38	— 1·02	0·07	1·89	—1·82	32·60	35·86	— 3·26
	40. Khandesh	0·02	0·13	—0·11	0·07	1·23	—1·16	28·35	29·93	— 1·58	0	1·48	—1·48	28·44	32·77	— 4·33
Central Provinces and Berar.	41. Berar	0·15	0·65	—0·50	0·22	1·25	—1·03	31·61	37·48	—5·87	0·04	1·18	—1·14	32·02	40·56	—8·54
	42. Central Provinces West.	0·56	0·77	—0·21	0·28	0·95	—0·67	45·49	42·05	+3·44	0·28	0·90	—0·62	46·61	44·67	+1·94
	43. Central Provinces Central.	1·49	0·77	+0·72	0·62	1·27	—0·65	51·83	48·79	+3·04	0·47	0·70	—0·23	54·41	51·53	+2·88
	44. Central Provinces East.	1·46	0·82	+0·64	2·17	1·94	+0·23	59·91	46·55	+13·36	0·32	0·77	—0·45	63·86	50·08	+13·78
Bombay (North)	45. Gujarat	0	0·08	—0·08	0·34	0·32	+0·02	34·51	43·57	—9·06	0·01	0·24	—0·23	34·86	44·21	—9·35
	46. Kathiawar and Cutch	0·01	0·14	—0·13	0·55	0·37	+0·18	28·81	27·32	+ 1·49	0·02	0·36	—0·34	29·39	28·19	+ 1·20
	47. Sind	0·03	0·71	—0·68	0·25	0·60	—0·35	3·43	4·51	—1·08	0·67	0·18	+0·49	4·38	6·00	—1·62
	48. Baluchistan Hills	2·21	3·57	—1·36	1·85	1·68	+0·17	1·67	2·42	—0·75	4·41	1·71	+2·70	10·14	9·38	+0·76
Rajputana and Central India.	49. Central India East	0·67	0·96	—0·29	0·35	0·75	—0·40	36·67	40·48	—3·81	1·02	0·72	+0·30	38·71	42·91	—4·20
	50. Rajputana East, Central India West.	0·06	0·69	—0·63	1·21	0·81	+0·40	29·02	26·19	+2·83	0·80	0·49	+0·31	31·09	28·18	+2·91
	51. West Rajputana	0·02	0·43	—0·41	0·79	0·72	+0·07	12·64	11·13	+1·51	0·31	0·25	+0·06	13·76	12·53	+1·23
Madras	52. East Coast North	0·17	0·36	—0·19	4·53	3·54	+0·99	31·37	34·33	—2·96	0·70	3·29	—2·59	36·77	41·52	—4·75
	53. Hyderabad South	0	0·24	—0·24	1·48	2·24	—0·76	24·41	25·92	—1·51	0·39	1·56	—1·17	26·28	29·96	—3·68
	54. Madras Central	0	0·12	—0·12	2·60	2·46	+0·14	17·84	19·67	—1·83	0·90	2·59	—1·69	21·34	24·84	—3·50
	55. East Coast Central	0·09	0·58	—0·49	2·48	1·89	+0·59	15·99	20·51	—4·52	6·25	10·19	—3·94	24·81	33·17	—8·36
	56. East Coast South	0·24	0·93	—0·69	5·06	3·37	+1·69	20·73	23·13	—2·40	10·47	14·14	—3·67	36·50	41·57	—5·07
	57. Madras South	1·72	1·46	+0·26	6·71	4·87	+1·84	13·60	12·39	+1·21	11·26	9·82	+1·44	33·29	28·54	+4·75

TABLE XXIX.—*Average actual and normal number of rainy days of the 57 meteorological divisons of India for the four seasons of the year 1900 and for the whole year.*

Province.	Division.	January and February.			March to May.			June to October.			November and December.			Whole year.		
		Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.
Burma	1. Tenasserim	1·0			19·8			110·8			3·0			134·6		
	2. Lower Burma Deltaic	0			12·4			98·4			2·0			112·8		
	3. Central do.	0			7·5			77·5			1·9			86·9		
	4. Upper do.	0·3			10·0			51·7			1·5			63·5		
	5. Arakan	0·1			9·4			94·3			1·7			105·5		
Bengal and Assam	6. Eastern Bengal	3·2	2·5	+0·7	18·6	19·4	—0·8	66·7	71·3	— 4·6	0·4	2·0	—1·6	88·9	95·2	— 6·3
	7. Assam Surma	4·1	4·2	—0·1	43·7	35·7	+8·0	70·6	88·2	—17·6	0·3	2·4	—2·1	118·7	130·5	—11·8
	8. Do. Hills	4·4	3·9	+0·5	33·0	29·4	+3·6	77·5	86·0	— 8·5	1·4	3·2	—1·8	116·3	122·5	— 6·2
	9. Do. Brahmàputra	4·9	5·5	—0·6	35·6	32·0	+3·6	62·9	72·8	— 9·9	3·0	2·2	+0·8	106·4	112·5	— 6·1
	10. Deltaic Bengal	3·3	2·3	+1·0	15·5	14·0	+1·5	64·0	62·4	+ 1·6	0·4	1·4	—1·0	83·2	80·1	+ 3·1
	11. Central do.	3·4	2·3	+1·1	10·9	11·0	—0·1	57·6	58·7	—1·1	0·2	1·0	—0·8	72·1	73·0	— 0·9
	12. North do.	2·7	2·1	+0·6	15·3	17·7	—2·4	59·5	64·9	—5·4	0·1	0·5	—0·4	77·6	85·2	— 7·6
	13. Bengal Hills	3·7	3·6	+0·1	23·2	24·9	—1·7	80·6	89·9	—9·3	0·6	1·4	—0·8	108·1	119·8	—11·7
	14. Orissa	1·4	2·0	—0·6	12·5	9·1	+3·4	60·2	59·0	+1·2	0·1	2·5	—2·4	74·2	72·6	+ 1·6
	15. Chota Nagpur	4·1	2·8	+1·3	9·7	7·1	+2·6	59·2	58·3	+0·9	1·4	1·2	+0·2	74·4	69·4	+ 5·0
	16. South Bihar	7·1	2·6	+4·5	2·7	3·6	—0·9	44·6	46·5	—1·9	1·6	0·6	+1·0	56·0	53·3	+ 2·7
	17. North do.	5·3	2·4	+2·9	4·7	6·5	—1·8	48·2	50·3	—2·1	0·8	0·6	+0·2	59·0	59·8	— 0·8
North-Western Provinces and Oudh.	18. North Western Provinces East.	6·8	2·2	+4·6	1·4	2·1	—0·7	41·4	40·9	+0·5	2·1	0·6	+1·5	51·7	45·8	+ 5·9
	19. South Oudh	4·5	2·0	+2·5	1·8	2·2	—0·4	37·1	37·8	—0·7	2·9	0·7	+2·2	46·3	42·7	+ 3·6
	20. North do.	4·5	2·1	+2·4	2·7	3·1	—0·4	37·5	38·1	—0·6	1·9	0·7	+1·2	46·6	44·0	+ 2·6
	21. North-Western Provinces Central.	3·2	1·9	+1·3	1·8	1·9	—0·1	37·9	36·2	+1·7	3·8	0·6	+3·2	46·7	40·6	+ 6·1
	22. North-Western Provinces West.	1·6	2·2	—0·6	3·4	2·7	+0·7	31·1	27·5	+3·6	3·9	0·5	+3·4	40·0	32·9	+ 7·1
	23. North-Western Provinces East Submontane.	5·8	2·2	+3·6	3·3	3·1	+0·2	41·1	41·6	—0·5	1·6	0·6	+1·0	51·8	47·5	+ 4·3
	24. North-Western Provinces West Submontane.	5·5	4·5	+1·0	5·0	4·4	+0·6	40·6	37·3	+3·3	3·4	1·1	+2·3	54·5	47·3	+ 7·2
	25. North-Western Provinces Hills.	7·5	8·1	—0·6	12·3	11·1	+1·2	55·4	58·0	—2·6	3·7	1·7	+2·0	78·9	78·9	0
Punjab	26. South-East Punjab	1·7	2·5	—0·8	4·0	3·0	+1·0	29·3	22·7	+6·6	3·3	0·8	+2·5	38·3	29·0	+ 9·3
	27. South do.	1·6	2·4	—0·8	3·4	2·9	+0·5	19·9	15·5	+4·4	1·6	0·5	+1·1	26·5	21·3	+ 5·2
	28. Central do.	4·1	4·1	0	5·3	4·8	+0·5	17·0	15·9	+1·1	2·5	0·8	+1·7	28·9	25·6	+ 3·3
	29. Punjab Submontane	5·4	4·9	+0·5	6·1	4·9	+1·2	29·5	23·8	+5·7	3·2	1·1	+2·1	44·2	34·7	+ 9·5
	30. Do. Hills	12·3	8·7	+3·6	17·2	13·4	+3·8	50·1	46·0	+4·1	6·0	2·2	+3·8	85·6	70·3	+15·3

TABLE XXIX.—*Average actual and normal number of rainy days of the 57 meteorological divisions of India for the four seasons of the year 1900 and for the whole year*—concld.

Province.	Division.	January and February.			March to May.			June to October.			November and December.			Whole year.		
		Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.
Punjab—*concld.*	31. North Punjab	8·0	5·4	+2·6	15·0	7·8	+7·2	20·0	15·4	+4·6	4·0	1·6	+2·4	47·0	30·2	+16·8
	32. West do.	2·4	2·4	0	4·8	2·9	+1·9	8·0	8·6	−0·6	2·0	0·4	+1·6	17·2	14·3	+2·9
Bombay and Malabar Coast Districts (Madras)	33. Malabar	0	0·4	−0·4	7·6	13·7	−6·1	100·7	97·8	+2·9	2·6	6·2	−3·6	110·9	118·1	−7·2
	33 A. Travancore	1·8			14·4			83·0			11·2			110·4		
	34. Madras South Central	1·0	0·7	+0·3	9·2	9·2	0	31·7	28·1	+3·6	5·4	7·9	−2·5	47·3	45·9	+1·4
	35. Coorg	0·5			11·8			100·9			1·1			114·3		
	36. Mysore	0·2	0·3	−0·1	6·0	8·7	−2·7	45·7	39·4	+6·3	1·3	4·9	−3·6	53·2	53·3	−0·1
	37. Konkan	0	0·2	−0·2	0·9	3·2	−2·3	86·3	94·3	−8·0	0·2	2·0	−1·8	87·4	99·7	−12·3
	38. Bombay Deccan	0·2	0·3	−0·1	3·8	5·6	−1·8	39·3	45·1	−5·8	0·3	3·1	−2·8	43·6	54·1	−10·5
	39. Hyderabad North	0·3			2·8			42·2			0·2			45·5		
	40. Khandesh	0·1	0·2	−0·1	0·1	2·1	−2·0	38·0	42·1	−4·1	0	2·2	−2·2	38·2	46·6	−8·4
Central Provinces and Berar.	41. Berar	0·5			0·5			39·5			0·2.			40·7		
	42. Central Provinces West.	1·2	1·4	−0·2	0·6	1·2	−0·6	48·8	49·1	−0·3	0·7	1·2	−0·5	51·3	52·9	−1·6
	43. Central Provinces Central.	2·9	1·7	+1·2	1·7	2·8	−1·1	56·1	52·4	+3·7	1·1	1·1	0	61·8	58·0	+3·8
	44. Central Provinces East.	3·4	1·7	+1·7	5·7	3·7	+2·0	63·3	49·5	+13·8	0·1	1·3	−1·2	72·5	56·2	+16·3
Bombay (North)	45. Gujarat	0	0·2	−0·2	0·9	0·5	+0·4	35·1	47·9	−12·8	0	0·5	−0·5	36·0	49·1	−13·1
	46. Kathiawar and Cutch	0	0·2	−0·2	1·0	0·6	+0·4	26·1	27·3	−1·2	0·1	0·3	−0·2	27·2	28·4	−1·2
	47. Sind	0			0·9			4·9			1·8			7·6		
	48. Baluchistan Hills	2·6			5·8			3·2			9·7			21·3		
Rajputana and Central India.	49. Central India East	1·6			1·3			46·3			2·1			51·3		
	50. Rajputana East, Central India West.	0			3·3			33·9			2·4			39·6		
	51. West Rajputana	0·1			2·3			16·7			1·1			20·2		
Madras	52. East Coast North	0·3	0·5	−0·2	7·0	5·8	+1·2	43·8	45·6	−1·8	1·3	3·5	−2·2	52·4	55·4	−3·0
	53. Hyderabad South	0			3·6			41·2			0·9			45·7		
	54. Madras Central	0	0	0	4·6	4·7	−0·1	31·3	30·6	+0·7	2·0	4·1	−2·1	37·9	39·4	−1·5
	55. East Coast Central	0	1·1	−1·1	3·1	2·7	+0·4	29·0	28·3	+0·7	8·1	9·4	−1·3	40·2	41·5	−1·3
	56. East Coast South	0·8	1·6	−0·8	6·4	4·8	+1·6	29·3	31·2	−1·9	14·0	14·3	−0·3	50·5	51·9	−1·4
	57. Madras South	2·7	2·1	+0·6	8·7	7·3	+1·4	21·5	18·9	+2·6	15·4	12·5	+2·9	48·3	40·8	+7·5

I. The cold weather period.—The first half of January in Northern India was unusually free from cold weather storms of any consequence. The principal features of the weather at this time were abnormal dryness of the air, a general absence of rain, more cloud than usual and very unsteady and changeable temperature conditions. From the 1st to the 13th there was practically no rain over the plains of Northern India, though there were some showers in parts of Burma, Assam and the south of the Peninsula at different times during this period. There were, however, slight falls of snow on two or three occasions on the hills around the north-west frontier, each of which falls was followed by a strong outflow of cool, dry air from the hills to the plains reducing both temperature and humidity to considerably below the normal.

Thus on the 1st there was a slight fall of snow in Kashmir. Snow again fell in Kashmir and around the north-west frontier on the 5th and 6th. The weather became somewhat unsettled and thunderstorms occurred over the south of the Peninsula on the 9th, 10th and 11th. Falls of two to six inches were recorded at a considerable number of stations in the Coimbatore, Tinnevelly and Salem districts and in Travancore. About the 12th of January the weather changed and became very unsettled over Northern India. On that day pressure was giving way briskly to rapidly in Baluchistan, the West Punjab, Sind, Rajputana and Gujarat, and on the following day an ill-defined depression lay over the Western Desert. This depression developed a secondary depression over the East and Central Punjab on the 14th, and the two depressions continued to affect the weather until the 18th by which date they had both filled up. Rain commenced in the Central Provinces on the 13th, and rain on the plains and snow on the hills of Northern India continued until the disappearance of the depressions on the 18th. On the 19th a fresh depression was passing eastward along the Mekran Coast. This storm entered Lower Sind on the 20th and at the same time a secondary depression began to make its apppearance over the Punjab and Kashmir Himalayas. These two depressions drifted eastward, the former through Rajputana, Central India and the Central Provinces to West Bengal, where it filled up on the 24th, and the latter along the line of the Himalayas to the east submontane division of the North-Western Provinces where it also filled up on the 24th. This double depression occasioned the heaviest burst of snow on the hills and of rain on the plains that was experienced during the month.

The rainfall of the month was more or less above the normal over a considerable part of Northern India and the greater part of the Central Provinces. It was also in excess over the extreme south of the Peninsula but was less than usual over the remainder of India and Burma.

There were in all six disturbances or cold-weather storms during the month of February—a larger number than usual. They were, however, very feeble and gave much less rain, both in amount and extent, than occasionally accompanies these storms. The chief periods of disturbance and hence of partial or general rainfall were the 1st and 2nd, the 7th to the 9th, the 10th to the 12th, the 16th to the 19th and the 24th to the 27th. The first and second disturbances gave rain to Baluchistan, Kashmir and the Gangetic Plain, and the third, fourth and fifth to Northern India generally.

The rainfall of the month was small in amount in the areas of rainfall and was more or less in defect. It was locally in excess in Assam, East, Deltaic and North Bengal, the North Punjab and the western and central districts of the Central Provinces.

(1) The following data show that the precipitation of the cold weather period was very irregularly distributed at the hill stations in Upper India and was probably on the mean of the Western Himalayas slightly above the normal:—

Station.	Rainfall.					
	Actual, January.	Actual, February.	Total actual of period January and February.	Total normal of period January and February	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	Inches.	Inches.	
Murree . .	5·19	2·28	7·47	7·25	+0·22	+3
Simla . . .	3·38	2·45	5·83	5·03	+0·80	+16
Dalhousie . .	7·20	3·71	10·91	5·80	+5·11	+88
Dharmsala . .	5·34	2·01	7·35	8·95	—1·60	—18
Mussooree . .	6·53	3·40	9·93	5·72	+4·21	+74
Ranikhet . .	3·88	2·32	6·20	4·89	+1·31	+27
Kailang . .	3·02	2·19	5·21	6·27	—1·06	—17

(2) Accurate snowfall measurements are made at several stations in the Western Himalayas. The following gives the amounts registered at six of these stations where the measurements are believed to be carefully taken:—

District or state.	Station.	Height in feet above sea level.	Total snowfall in the month of				Total.		Approximate normal snowfall of period.	
			January.		February.					
			ft.	in.	ft.	in.	ft.	in.	ft.	in.
Rawalpindi .	Murree . .	6,344	7	7	4	6	12	1	11	9
Lahoul . .	Kailang .	10,087	2	8½	1	6	4	2½	4	7
Chamba .	Thanela .	7,000	11	9	5	6	17	3	11	7
	Kalatap .	8,000	7	11	1	10	9	9	9	11
Kumaon .	Pindari Pass .	...	13	6	4	6	18	0	13	5*
	Ralumdhura Pass . .	...	30	6	19	0	49	6	33	3*

* Mean of 4 years.

(3) The rainfall of the period was considerably to largely in defect, relatively to the normal, in Baluchistan, Sind,

Rajputana and Central India and in slight defect in the Punjab, as shown below :—

Area.	Rainfall of period January and February.			
	Average, actual.	Average, normal.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Baluchistan	2·21	3·57	—1·36	—38
Punjab	1·59	1·89	—0·30	—16
Rajputana	0·04	0·56	—0·52	—93
Sind	0·03	0·71	—0·68	—96
Central India	0·67	0·96	—0·29	—30

The deficiency was very pronounced in both months in Sind and Rajputana and practically no rain fell in either of these areas.

(4) North-Eastern India (with the exception of Orissa and Assam) and the Central Provinces received more than the normal amount of rain, due chiefly to the passage of two cold-weather depressions in January and in part to a series of hot weather thunderstorms in East Bengal and Assam in February. The following gives data :—

Area.	Rainfall of period January and February.			
	Average, actual.	Average, normal.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
North-Western Provinces and Oudh	2·58	1·17	+1·41	+121
Bihar	3·02	1·25	+1·77	+142
Bengal	1·56	1·35	+0·21	+16
Chota Nagpur	2·71	1·41	+1·30	+92
Central Provinces	1·17	0·79	+0·38	+48

(5) The rainfall of the period was, on the other hand, in defect in Burma, Orissa and Assam. The following gives data :—

Area.	Rainfall of period January and February.			
	Average, actual.	Average, normal.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inch.	
Orissa	0·62	1·18	—0·56	—47
Assam	1·90	2·28	—0·38	—17
Burma	0·17	0·21	—0·04	—19

(6) The rainfall of the period was very scanty over nearly the whole of the Peninsula except South Madras which received moderate rain from thunderstorms in January. The following gives comparative data for that area :—

Area.	Rainfall of period January and February.			
	Average, actual.	Average, normal.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inch.	
Berar	0·15	0·65	—0·50	—77
Hyderabad	0·04	0·21	—0·17	—81
Bombay Deccan	0·05	0·10	—0·05	—50
Madras Central	0	0·12	—0·12	—100
Madras Coast	0·17	0·62	—0·45	—73
Malabar	0·08	0·37	—0·29	—78
Konkan	0·01	0·14	—0·13	—93
Mysore	0·10	0·18	—0·08	—44
Madras South	1·72	1·46	+0·26	+18

II. The hot weather period.—The rainfall of March was largely in defect over nearly the whole of India. Three depressions, the first and the second originating in the Persian area, crossed Northern India during the month. They gave little cloud and no rain over the greater part of the area they traversed. Baluchistan, Kashmir, the Punjab hills and the North Punjab received moderate showers during the advance of these depressions across North-Western India. North and East Bengal and Assam had moderate rain during two periods of thunderstorms, chiefly from the 9th to the 11th and the 17th to the end of the month.

Over a large part of India, including the Gangetic Plain, Chota Nagpur, Rajputana, West India and South India, the rainfall was absolutely or practically *nil*.

April was more disturbed than usual over the whole of India. A succession of four depressions formed in Baluchistan or Sind and passed eastwards across North-Western India. Each depression during its advance gave series of dust-storms in the plains and thunderstorms in the lower ranges and snowstorms in the higher ranges of the Kashmir and Punjab Himalayas. The snowfall of the month in the Western Himalayas was greater than usual.

The third depression was the most important as it gave a late and heavy fall of snow down to comparatively low elevations.

A noteworthy feature of the month was that the disturbed periods in Northern India were followed by disturbed weather giving frequent thundershowers and rain in the Deccan and Southern India.

The rainfall of the month was in considerable defect in Burma and normal in Bengal. It was in excess over nearly the whole of the remainder of the area, more especially in North-West and South India.

The most important feature of the precipitation was the late and heavy snowfall in the Western Himalayas.

A noteworthy feature of the month of April was the severity of the hailstorms and thunderstorms which occurred in Assam. The most remarkable fall occurred in the Goalpara district on the 18th. This storm or tornado extended over a narrow belt, not more than half a mile in width and not more than 30 or 40 miles in length. It destroyed every thing over which it passed, killing and injuring a large number of people (*vide* account in April Monthly Review pages 211-213).

The next month, May, usually witnesses the commencement of heavy and general rain, characteristic of the monsoon period, in two areas, *viz.*, Burma and the Malabar Coast. The rain in Burma is frequently initiated by a cyclonic storm. This was the case in 1900. A small storm formed in the Andaman Sea and advanced northwards to the Lower Pegu Coast. Its advance gave heavy rain in Lower Burma on the 2nd and 3rd and its disappearance was followed by frequent rain, more especially in Lower and Central Burma.

The first burst of monsoon rains in Malabar did not occur in May due to delay in the initiation of monsoon conditions in the south of the Arabian Sea. The rainfall of May was hence in large defect in parts of South India and the Malabar Coast districts.

Weather was very disturbed in North-Western India from the 5th to the 7th. A deepish depression formed in that area and advanced eastwards to the hills. It gave heavy thunderstorms in the plains of North-Western India on the 5th, 6th and 7th and much rain and snow in the Kashmir and Punjab Himalayas.

North-East India had almost daily series of thunderstorms and *nor'westers* from the 7th to the 12th.

A feeble but noteworthy disturbance commenced in Kathiawar on the 12th and extended eastwards across the head of the Peninsula during the next week. It gave series of thundershowers from day to day and the greater part of Northern and Central India received light to moderate rain during the period from the 13th to the 20th.

The third disturbance of the month, from the 25th to the 27th, was similar in character to the first, but was feeble. It gave light rain in Baluchistan and the Punjab and rain or snow in the Western Himalayas.

Assam and parts of Bengal obtained daily rain from thunderstorms during the last ten days of the month.

The rainfall of the month of May was abnormally distributed and was considerably below the normal over by far the greater part of the country. It was more or less considerably in defect over the Peninsula and slightly to moderately in defect over the greater part of Burma and North-Eastern India. It was, on the other hand, above it in the areas in North-Western India which received abnormal rain from the first and third disturbances of the month *viz.*, Baluchistan, the North and West Punjab and Rajputana.

Assam and Bengal received frequent moderate to heavy showers during the month. The rainfall of the month was, however, irregularly distributed and was also in general defect in that area. Over the greater part of the Central Provinces and Berar the rainfall of the month was practically *nil*. The eastern districts of the Central Provinces had moderate rain. Parts of Madras also had more rain than usual due to local thunderstorms.

The following is a summary of the chief features of the distribution of rainfall throughout the whole period of the hot weather in 1900 :—

(1) The rainfall was more or less in excess over the area including Baluchistan, the Punjab, Rajputana, Kathiawar and Gujarat (with a few local exceptions of no importance) but was practically *nil* in Sind and Central India.

The following gives data in illustration :—

Area.	Variation of rainfall from normal.				
	March.	April.	May.	Total of period March to May.	Percentage variation from normal.
	Inch.	Inch.	Inch.	Inch.	
Baluchistan . .	—0·31	+0·28	+0·20	+0·17	+10
Punjab . . .	—0·43	+0·47	+0·11	+0·15	+7
Rajputana . . .	—0·18	+0·40	+0·02	+0·24	+31
Central India . .	—0·25	+0·03	—0·18	—0·40	—53
Sind	—0·25	—0·02	—0·08	—0·35	—58
Kathiawar . . .	—0·05	+0·11	+0·12	+0·18	+49
Gujarat . . .	—0·01	+0·14	—0·11	+0·02	+6

(2) The precipitation of the period was more or less largely in excess in the North-Western Himalayas, as shown by the data for the stations in that area. The following gives variation data for selected stations :—

Station.	Variation of rainfall from normal.				
	March.	April.	May.	Total of period March to May.	Percentage variation from normal.
	Inches.	Inches.	Inches.	Inches.	
Srinagar . . .	+0·64	+7·67	+1·52	+9·83	+165
Murree . . .	+0·61	+3·33	—0·98	+2·96	+28
Simla . . .	—1·26	+0·93	+0·43	+0·10	+1
Kailang . . .	—1·10	+6·60	+0·99	+6·49	+77
Kotgarh . . .	—3·10	—0·74	—3·18	—7·02	—48
Kilba . . .	—2·79	+1·21	—1·29	—2·87	—19
Chakrata . . .	—0·96	+2·31	+0·13	+1·48	+23
Ranikhet . . .	—1·50	+2·66	—1·03	+0·13	+2

(3) The rainfall of the period was in defect over nearly the whole of the Gangetic Plain and Bengal in March and May, and was in excess over the greater part of that area in April. It was more or less in excess in Assam in March and April and considerably in defect in May. It was in defect on the mean of the whole period over the whole area excepting five rainfall districts, *viz.*, Chota

Nagpur, Orissa, Assam Brahmaputra, Assam Surma and the North-Western Provinces, West Submontane.

The following gives data :—

Division.	Variation of rainfall from normal.				
	March.	April.	May.	Total of period March to May.	Percentage variation from normal.
	Inches.	Inches.	Inches.	Inches.	
North-Western Provinces, West Submontane.	—0·76	+0·95	—0·20	—0·01	0
North Western Provinces, East Submontane.	—0·22	—0·06	—0·12	—0·40	—23
North-Western Provinces, West.	—0·36	+0·46	—0·14	—0·04	— 4
North-Western Provinces, Central.	—0.27	+0·11	+0·07	—0·09	—12
North Oudh . .	—0.39	+0·09	—0·17	—0·47	—30
South Oudh . .	—0.30	0	+0·01	—0·29	—29
North-Western Provinces, East.	—0.25	—0·12	+0·06	—0·31	—34
North Bihar . .	—0.41	—0·72	—0·41	—1·54	—35
South Bihar . .	—0.44	+0·01	—0·60	—1·03	—43
Chota Nagpur . .	—0·84	+1·50	—0·43	+0·23	+ 5
Orissa . . .	+0·10	+0·44	—0·46	+0·08	+ 1
Bengal Hills . .	+0·11	—2·06	—4·42	—6·37	—34
North Bengal . .	—0·45	—1·80	—1·73	—3·98	—26
Central Bengal . .	—0·85	+0·97	—1·39	—1·27	—16
Deltaic Bengal . .	—1·23	+0·50	—0·13	—0·86	— 8
Eastern Bengal . .	—0·14	—0·25	—3·74	—4·13	—24
Assam Brahmaputra .	+1·27	+1·74	—2·74	+0·27	+ 1
Assam Surma . .	+5·61	+5·15	—7·84	+2·92	+ 8

(4) The precipitation was about normal in Burma and Tenasserim in March and less than usual in April and May, and was hence in moderate to large defect for the period over the whole of that area, except Upper Burma, where it was practically normal, as shown below :—

Division.	Variation of rainfall from normal.				
	March.	April.	May.	Total of period March to May.	Percentage variation from normal.
	Inch.	Inches.	Inches.	Inches.	
Tenasserim . .	+0·81	—1·76	—4·49	—5·44	—22
Lower Burma . .	—0·08	—0·72	—3·69	—4·49	—34
Central Burma . .	—0·03	—0·84	—2·99	—3·86	—49
Upper Burma . .	+0·18	—0·53	—0·23	—0·58	— 9
Arakan . . .	—0·32	—1·37	—17·06	—18·75	—79

The rainfall in Upper Burma is, it may be noted, frequently similar in distribution and character to that of Assam and usually follows a different law from that in Lower Burma.

(5) The rainfall of the period was generally in considerable to large defect over the interior of the Peninsula and in the West Coast districts, as shown below :—

Division.	Variation of rainfall from normal.				
	March.	April.	May.	Total of period March to May.	Percentage variation from normal
	Inch.	Inch.	Inches.	Inches.	
Berar . . .	—0·46	—0·06	—0·51	—1·03	—82
Central Provinces .	—0·32	+0·19	—0·23	—0·36	—26
Malabar . . .	—0·50	+0·07	—5·29	—4·82	—44
Konkan . . .	—0·02	—0·13	—1·56	—1·71	—82
Khandesh . . .	—0·03	—0·09	—1·04	—1·16	—94
Bombay Deccan . .	+0·07	+0·02	—1·16	—1·07	—38
Hyderabad . .	—0·03	+0·28	—0·80	—0·55	—30
Mysore . . .	—0·31	+0·85	—1·99	—1·45	—28

(6) It was, on the other hand, in moderate to considerable excess in the Madras Coast districts and South and Central Madras, chiefly due to frequent and heavy thundershowers in April. The following gives comparative data for that area :—

Division.	Variation of rainfall from normal.				
	March.	April.	May.	Total of period March to May.	Percentage variation from normal.
	Inch.	Inches.	Inches.	Inches.	
Madras (Central,) .	—0·17	+0·70	—0·39	+0·14	+6
" East Coast North	—0·12	+0·79	+0·32	+0·99	+28
" " " Central	—0·17	+1·54	—0·78	+0·59	+31
" " " South	—0·26	+2·43	—0·48	+1·69	+50
" South	—0·78	+0·90	+1·72	+1·84	+38

III. The south west monsoon period.—The following gives the dates of the establishment of the monsoon (*i.e.*, of the commencement of the heavy rainfall which marked the first burst of the monsoon) in different parts of India in 1900 :—

Province or Division.	Date of commencement of the monsoon rains in 1900.
Malabar	12th June.
Konkan	25th "
Kathiawar	11th July.
Central Provinces	25th June.
Central India	10th July.
Rajputana	"
Bengal	11th June.
Chota Nagpur	14th June.
Bihar	"
North-Western Provinces and Oudh . . .	10th July.
Punjab	"

The preceding data show the unusually slow advance of the Bombay current over the area of its extension in North-Western India. The period may hence from this standpoint be divided into two, the first including the months of June and July, when the Bengal current was strong and the Bombay current weak, and the second the months of August and September when both currents were strong.

The following gives the approximate dates of the termination of the rains in India :—

Province or Division.	Date of termination of the monsoon rains in 1900.
Malabar	29th October.
Konkan	27th September.
Kathiawar	28th September.
Central Provinces	28th September.
Central India	28th September.
Rajputana	27th September.
East Punjab	28th September.
North-Western Provinces	28th September.
Bihar	12th October.
Bengal	13th October.
Burma	26th October.
Tenasserim	31st October.

The following is a brief statement of the chief features of the rainfall in India in June and July during which the Bombay monsoon current was below its normal strength, more especially as estimated by the intensity and extension of the rainfall.

The chief features of the period were the great delay in the establishment of the Arabian Sea monsoon current and the character of its progress, the abnormal northerly tracks of the cyclonic storms of the Bay and the determination of the Bay monsoon current to North-Eastern India.

The first advance of the monsoon current towards the West Coast commenced on the 12th June. The Malabar Coast districts received fairly heavy and general rain between the 16th and 20th. A break occurred until the 24th when moderately heavy rain recommenced on the West Coast extending as far north as Bombay. The rainfall this time extended into the interior of the Peninsula, and Mysore, the Deccan and Central Provinces obtained light to moderate rain from the 25th of Jnne until the 7th or 8th July, when a short partial break occurred. The Arabian Sea current again increased in intensity on the 10th or 11th July and extended further inland through Central India to the western districts of the North-Western Provinces and the East and South Punjab. This burst of rain continued until the 17th or 18th but failed to extend to Gujarat and Kathiawar and the western states of Central India and Rajputana and was followed by a marked break in the rains due to the Arabian Sea current which held until the 26th. A strong advance of humid winds occurred in Ceylon and on the Malabar Coast on the 26th and 27th and it extended rapidly over the whole area dependent on the Bombay current. Gujarat and Kathiawar for the first time during this period received heavy and general rain. At the end of the period general rain was falling over nearly the whole of North Western, Western and Central India and the Deccan area.

The Bay current was fairly normal in strength and character but was more largely determined by the pressure and other conditions to Burma and North-Eastern India than usual. The rains were initiated in Bengal by a cyclonic storm which formed in the Bay on the 10th and 11th of June. It crossed the Orissa Coast and passed by a curved path into Central Bengal. It gave a very heavy burst of rain, especially to North and Central Bengal. Rain continued in Bengal until the 17th when a partial break set in, lasting until the 23rd, when a storm formed in the north-west angle of the Bay. It passed northwards into Bengal, and gave more or less heavy rain to the whole of Bengal. Falls of five inches and upwards in 24 hours were recorded by a very large number of stations. The most noteworthy falls were 15·18 inches at Mirsarai in the Chittagong District on the 29th and 13·90 inches at Netrokona in the Mymensingh District on the 30th.

Light to moderate rain continued to fall daily in North-Eastern India and Burma until the 13th of July. A small cyclonic storm formed on the 12th and 13th at the head of the Bay. It advanced north-westwards across Chota Nagpur into the North-Western Provinces on the 15th, where it filled up during the next 24 hours. It gave moderate to heavy rain during its existence to Bengal and the Gangetic Plain. The following falls exceeding 10 inches were registered :—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A. M. of date.
			Inches.
Balasore	Chandbali	13th July	13·40
	Akhyapada	,,	10·09
Cuttack	Pal Lahara	,,	10 05

Moderate to general rain continued in the Gangetic Plain until the 21st and in Bengal until the 22nd. The break in the rains, which had commenced in North-Western India on the 18th, extended to the Gangetic Plain and Bengal on the 22nd and 23rd, and continued until the 26th, when winds increased very considerably in the south of the Bay. These strong winds extended rapidly northwards and gave increasing rainfall in North-Eastern India from the 27th. A cyclonic storm began to form on the 28th and 29th in the north-west angle of the Bay, the advance of which in the beginning of August gave a heavy burst of rain to Northern India.

The following gives the chief features in the distribution of rainfall during this period, June and July 1900 :—

(1) The rainfall of the period was in excess over practically the whole of Burma, Bengal, Assam Brahmaputra

and Bihar and in defect in Chota Nagpur and Orissa, as shown by the following data :—

Division.	Variation from normal of rainfall.			
	June.	July.	Total of period June and July.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Tenasserim	—1·54	—7·98	— 9·52	—11
Lower Burma Deltaic	+4·85	—0·55	+ 4·30	+10
Central "	—4·61	—1·62	+ 2·99	+11
Upper "	+1·93	+3·14	+ 5·07	+43
Arakan	—6·86	—8·91	—15·77	—16
Assam Surma	—5·43	+1·90	— 3·53	— 8
" Brahmaputra	+0·96	+1·95	+ 2·91	+ 7
" Hills	+0·04	—2·54	— 2·50	— 6
Eastern Bengal	+4·09	+3·13	+ 7·22	+21
Deltaic "	—0·52	—1·20	— 1·72	— 8
Central "	+0·89	—0·52	+ 0·37	+ 2
North "	—1·09	+3·36	+ 2·27	+ 6
Bengal Hills	—5·92	—2·01	— 7·93	—13
Orissa	—1·26	+0·11	— 1·15	— 6
Chota Nagpur	—0·69	—3·98	— 4·67	—21
South Bihar	+1·41	—3·09	— 1·68	— 9
North "	+2·47	+0·93	+ 3·40	+15

(2) The rainfall was in excess in the West Coast districts from Ratnagiri southwards to Calicut and in the West Deccan districts. The following gives data for the collectorates in this area of increased rainfall due to the Bombay current :—

District.	Variation from normal of rainfall.			
	June.	July.	Total of period June and July.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Ahmednagar	+0·86	+1·43	+2·29	+29
Sholapur	+0·67	—0·09	+0·58	+ 7
Bijapur	+1·63	—0·26	+1·37	+20
Belgaum	+1·31	+0·24	+1·55	+ 7
North Canara	+10·88	+10·77	+21·65	+35
South Canara	+7·33	+11·02	+18·35	+22
Malabar	+2·04	+7·58	+9·62	+15

(3) The rainfall of the period was in general defect over the whole of North-Western and Central India, as shown below :—

Area.	Variation from normal of rainfall.			
	June.	July.	Total of period June and July.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
North-Western Provinces and Oudh	—2·58	—1·39	—3·97	—25
Punjab	—1·09	—1·29	—2·38	—33
Rajputana	—2·06	—1·80	—3·86	—43
Central India	—5·18	—2·50	—7·68	—39
Kathiawar and Cutch	—3·07	—6·90	—9·97	—64
Gujarat	—5·97	—9·40	—15·37	—62

(4) It was in considerable to large defect over the whole of the Peninsula, with the exception of Hyderabad and the Madras Deccan and of the districts for which data are given under (2)

The following gives comparative data :—

Area.	Variation from normal of rainfall.			
	June.	July.	Total of period June and July.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Central Provinces	—4·37	—1·83	—6·20	—26
Berar	—2·80	—2·15	—4·95	—26
Khandesh	—1·85	+0·61	—1·24	—9
Konkan	—5·27	—1·96	—7·23	—11
Hyderabad	—0·34	+3·06	+2·72	+23
Madras Deccan	—0·23	+2·29	+2·06	+39

The following gives the chief features of the occurrence and distribution of rainfall in the second half of the monsoon period (August and September) :—The south-west monsoon currents were fully and finally established over India during the last week of the previous month of July. They were unusually steady and strong during the greater part of August, though there was a partial break in the rains over Western and North-Western India during the last ten days of the month. General rain fell daily during the first three weeks of the month, and over part of Northern India throughout the whole month. One of the most noteworthy features of the month was the succession of cyclonic storms which passed from the Bay into Upper India and gave heavy to very heavy rain over the greater part of the country.

At the commencement of the month one of these cyclonic storms lay over the north-west of the Bay and the Orissa Coast and was giving heavy rain to the stations in South-West Bengal. At the same time the winds were blowing strongly on the Bombay and Kathiawar Coasts and moderate to heavy rain was falling over Bombay the Central Provinces, Gujarat, Rajputana, the west of Central India and the Punjab.

The storm from the Bay advanced into the North-Western Provinces reaching the west of those provinces on the 3rd, where it remained nearly stationary until the 8th, when it finally disappeared. General rain fell over Western, Central and Northern India during its existence.

As is usual when a strong monsoon is established in North-Western India, the rainfall was not heavy over the centre and east of the Peninsula.

On the 8th the second cyclonic storm of the month of August appeared over the north of the Bay. This storm intensified on the 10th, passed into Orissa on the 11th, reached the east of the Central Provinces on the 12th, the centre of the Central Provinces on the 13th and Rajputana on the 14th and 15th. Its principal feature was the excessive rain it occasioned during its passage through the Central Provinces and Rajputana and subsequently in the East Punjab. The following were the heaviest falls of rain in these areas exceeding 10 inches in amount:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Raipur . . .	Dhamtari . . .	12th August .	10·26
Nagpur . . .	Umrer . . .	13th ,, .	10·30

On the 15th a fresh depression, the third of the month, appeared over the north of the Bay. This storm proved to be the most important and most intense storm of the month. The centre crossed the Orissa Coast during the 18th, Chota Nagpur on the 19th, the south of the North-Western Provinces on the 20th, the east of Rajputana and the west of the North-Western Provinces on the 21st and disappeared on the 22nd. Heavy rain was again experienced by stations near the path of the storm, more particularly at those in Orissa, South-West Bengal and the Central Provinces. The largest amount recorded was 12·75 inches at Narsinghgarh in Bhopal.

A fourth depression appeared over the Bay on the 24th. This storm crossed the Orissa Coast during the 26th and advanced through Chota Nagpur into the North-Western Provinces, where it disappeared on the 31st.

It thus followed, like the third storm of the month, a fairly northerly path and the rainfall accompanying it was hence mainly confined to Bengal, the Gangetic Plain and the Central Provinces. The rainfall was not very heavy.

A partial break in the rains set in over the Peninsula and North-West India on the 18th, and though this break was to a certain extent interrupted by the action of the last storm of the month, the weather over the Peninsula and North-Western India was generally finer, drier and hotter than usual from the 18th till the close of the month.

The monsoon currents prevailed steadily in September until almost the end of the month, and the rainfall was hence heavier than usual over nearly the whole country. This was more particularly the case with regard to the Bay monsoon which continued to blow into Upper India as late as the 25th. The cyclonic storms of the month also presented unusual features, more particularly the storm of the second half of the month which was remarkable on two grounds, *viz.*, the unusually long period during which it existed and the remarkable halt which it made over the east of the Central Provinces.

From the 1st to the 9th the trough of low pressure extending roughly from the Punjab south-eastward to the north-west of the Bay was uninterruptedly present, and along this trough there passed a number of slight depressions travelling north-westward. These depressions were accompanied with more or less rain, and the area of rainfall progressed north-westward with the each succeeding depression. On the 10th an important change commenced. Barometric gradients began to increase over the south of the Peninsula and the south of the Bay and this change was apparently accompanied with a strong advance of monsoon winds over the Bay. This extension of monsoon winds was first noticeable in the heavy rainfall of the Tenasserim and Burma stations. On the 14th the advance of monsoon winds reached the head of the Bay and a depression which formed the principal feature of the weather during the second half of the month was developed in that area. The above depression passed from the head of the Bay westward through Orissa into the east of the Central Provinces between the 15th and the 17th, and on the 18th a second storm was shown at the head of the Bay. The second depression also passed westward and coalesced with the former storm on the 19th. From the 19th to the 22nd the combined storm was practically stationary over the east of the Central Provinces and South-West Bengal. During this time steep gradients for southerly winds prevailed on the eastern side of the storm and a flow of moist winds from the Bay into Lower Bengal took place and was accompanied with phenomenal rain over Deltaic Bengal. The most important of these falls are given below:—

District.	Station.	Date.	Rainfall during 24 hours preceding 8A.M of date.
Khulna . . .	Kaliganj .	19th September	10·30
	Morellganj . .	,, ,, .	10·25
Jessore . . .	Bangaon . .	20th ,, .	17·27
24-Parganas . .	Diamond Harbour .	,, ,, .	16·73
	Alipore . . .	,, ,, .	14·53
Howrah . . .	Howrah . .	,, ,, .	14·05
Khulna . . .	Rampal . .	,, ,, .	13·00
24-Parganas . .	Basirhat . .	,, ,, .	12·89
Hooghly . . .	Serampore . .	,, ,, .	12·31
	Do. . . .	21st ,, .	16·65
24-Parganas . .	Dum-Dum . .	,, ,, .	11·34
	Alipore . . .	,, ,, .	10·83
Howrah . . .	Howrah . .	,, ,, .	10·13

On the 22nd the storm commenced to move. It travelled slowly through the Central Provinces during the 23rd, 24th, 25th and 26th giving moderate to heavy rain to the central parts of the country.

On the afternoon of the 26th the storm entered the North-Western Provinces, passed through those provinces during the 27th, and filled up on the 28th. The storm occasioned heavy rain in Bihar.

On the 23rd, 24th and 25th there occurred a fall of snow on the North-West Himalayas and of rain over the plains of the North Punjab. The weather was again disturbed in a similar manner in the same area on the 27th and 28th. This was the termination of the monsoon rains in Upper India.

The following gives a statement of the chief abnormal features of the rainfall of the period including the months of August and September 1900.

(1) The rainfall of the period was in slight to moderate excess in Burma, as shown below :—

Division.	Variation of rainfall from normal.			
	August.	September.	Total of period August and September.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Tenasserim	+9·66	+14·36	+24·02	+39
Lower Burma	+8·26	+2·68	+10·94	+32
Central "	−0·76	+3·03	+2·27	+10
Upper "	+3·55	+0·65	+4·20	+30
Arakan "	+8·66	−1·22	+7·44	+14

(2) The rainfall of the period was in moderate to considerable defect in Assam and North and East Bengal. The following gives comparative data :—

Division.	Variation of rainfall from normal.			
	August.	September.	Total of period August and September.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Assam Surma	−8·12	−8·66	−16·78	−43
" Brahmaputra	−5·18	−5·87	−11·05	−41
" Hills	−10·53	−9·37	−19·90	−48
Bengal, East	−4·44	−1·26	−5·70	−21
" North	−9·18	−4·43	−13·61	−41

(3) The rainfall of the period was very heavy and in large excess in South-West Bengal, Orissa, the Central Provinces, Central India and Rajputana, which areas all received more or less heavy rain from the cyclonic storms of the period :—

Division.	Variation of rainfall from normal.			
	August.	September.	Total of period August and September.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Deltaic Bengal	+0·99	+20·71	+21·70	+105
Central "	−2·95	+5·87	+2·92	+14
Orissa	+7·93	+6·30	+14·23	+63
Central Provinces, West	+6·54	+5·33	+11·87	+64
" " Central	+6·09	+6·47	+12·56	+60
" " East	+5·53	+10·70	+16·23	+81
Central India	+2·89	+2·20	+5·09	+26
Rajputana, East, and Central India, West.	+2·12	+5·41	+7·53	+56
West Rajputana	+1·57	+3·23	+4·80	+89

(4) The rainfall of the period was in slight to large excess in the Punjab, the North-Western Provinces and Chota Nagpur and in moderate defect in Bihar, as is shown below :—

Area.	Variation of rainfall from normal.			
	August.	September.	Total of period August and September.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Punjab	+1·97	+4·89	+6·86	+90
North-Western Provinces and Oudh.	−1·83	+3·48	+1·65	+10
Bihar	−5·13	+2·12	−3·01	−15
Chota Nagpur	+0·93	+7·90	+8·83	+40

(5) The rainfall of the period was in slight to considerable excess in the west coast districts, as shown below :—

District.	Variation of rainfall from normal.			
	August.	September.	Total of period August and September.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
North Canara	+5·62	−2·76	+2·86	+9
Ratnagiri	+7·01	−1·70	+5·31	+12
Kolaba	+20·61	+8·35	+28·96	+58
Thana	+21·00	+1·55	+22·55	+70
Malabar	+12·18	−1·30	+10·88	+46
South Canara	−0·02	+4·64	+4·62	+12

(6) The rainfall was in defect in both months in a part of the Deccan including the districts of Ahmednagar, Bijapur and Sholapur.

District.	Variation of rainfall from normal.			
	August.	September.	Total of period August and September.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Ahmednagar	−0·88	−3·57	−4·45	−46
Bijapur	−4·03	−2·22	−6·25	−58
Sholapur	−3·24	−5·26	−8·50	−64

(7) The rainfall was generally in defect over the remainder of the Peninsula, including the greater part of Madras and Hyderabad in August and above it in September and was for the whole of the period practically normal or in slight defect, as is shown below :—

Division.	Variation of rainfall from normal.			
	August.	September.	Total of period August and September.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Hyderabad, North	−2·16	+1·01	−1·15	−7
„ South	−3·02	+0·69	−2·33	−18
Madras, Central	−2·37	+0·76	−1·61	−17
„ East Coast Central. .	−2·82	+1·59	−1·23	−16
„ „ South . .	−3·07	+1·56	−1·51	−15
„ South	−0·55	+0·49	−0·06	−2

The following gives the chief features of the distribution of rainfall for the whole monsoon period, June to September and also June to October, in India.

(1) The rainfall of the period, June to October, was in slight to moderate excess in Burma with the exception of Arakan where it was nine per cent. in defect. The following gives data :—

Division.	Rainfall of period.							
	June to September.				June to October.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches	Inches	Inches.		Inches	Inches	Inches.	
Tenasserim . .	162·97	148·47	+14·50	+10	171·70	159·13	+12·57	+8
Lower Burma .	91·71	76·47	+15·24	+20	98·77	85·05	+13·72	+16
Central „ .	53·53	48·27	+5·26	+11	58·66	54·05	+4·61	+9
Upper „ .	34·85	24·58	+9·27	+36	39·27	29·78	+9·49	+32
Arakan . .	144·84	153·17	−8·33	−5	147·88	162·38	−14·50	−9

(2) It was on the mean of the whole period, June to October, in slight to considerable defect in Assam and North and Esat Bengal :—

Division.	Rainfall of period.							
	June to September.				June to October.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches	Inches	Inches.		Inches	Inches	Inches.	
Assam Surma .	63·62	83·93	−20·31	−24	65·77	90·72	−24·95	−28
„ Brahmaputra	60·26	68·40	−8·14	−12	62·78	73·06	−10·28	−14
„ Hills. .	64·41	86·81	−22·40	−26	68·98	94·54	−25·56	−27
Bengal, East .	64·16	62·64	+1·52	+2	66·36	68·27	−1·91	−3
„ North .	62·34	73·68	−11·34	−15	63·96	78·28	−14·32	−18

(3) It was in slight to large excess in West and Central Bengal, Chota Nagpur, Orissa and the Central Provinces which received heavy to excessive rain from the cyclonic storms of August and September. The following gives comparative data :—

Division.	Rainfall of period.							
	June to September.				June to October.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches	Inches	Inches.		Inches	Inches	Inches.	
Deltaic Bengal .	63·14	43·16	+19·98	+46	65·76	47·67	+18·09	+38
Central „ .	46·32	43·03	+3·29	+8	47·75	46·59	+1·16	+2
Orissa . . .	56·62	43·54	+13·08	+30	64·09	49·39	+14·70	+30
Chota Nagpur .	48·83	44·67	+4·16	+9	51·00	47·57	+3·43	+7
Central Provinces, East	56·38	44·49	+11·89	+27	59·91	46·55	+13·36	+29
Central Provinces, Central.	51·59	46·94	+4·65	+10	51·83	48·79	+3·04	+6
Central Provinces, West.	45·49	39·97	+5·52	+14	45·49	42·05	+3·44	+8

(4) It was practically normal in the northern districts of the North-Western Provinces and Bihar and in slight to moderate defect in the southern

divisions of these areas and in Central India, as shown below :—

Division.	Rainfall of period. June to September. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	June to October. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches	Inches	Inches.		Inches	Inches	Inches.	
South Bihar .	33·19	37·21	—4·02	—11	35·87	39·81	—3·94	—10
North Bihar .	44·76	45·04	—0·28	—1	47·06	47·83	—0·77	—2
North-Western Provinces, East.	27·03	33·80	—6·77	—20	30·96	35·98	—5·02	—14
South Oudh .	30·91	32·13	—1·22	—4	31·41	33·73	—2·32	—7
North Oudh .	33·75	34·28	—0·53	—2	34·36	35·89	—1·53	—4
North-Western Provinces, Central	27·18	31·37	—4·19	—13	27·28	32·41	—5·13	—16
North-Western Provinces, West.	23·84	23·52	+0·32	+1	23·91	24·06	—0·15	—1
North-Western Provinces, East Submontane.	34·33	36·63	—2·30	—6	37·73	39·50	—1·77	—4
North-Western Provinces, West Submontane.	38·72	40·30	—1·58	—4	38·80	41·13	—2·33	—6
North-Western Provinces, Hills.	44·87	49·16	—4·29	—9	45·14	50·67	—5·53	—11
Central India .	36·39	38·98	—2·59	—7	36·67	40·48	—3·81	—9

(5) The rainfall of the period was, relatively to the normal, in moderate to large excess in Kathiawar, Rajputana and the Punjab (excepting the western division). The following gives comparative data:—

Division.	Rainfall of period. June to September. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	June to October. Average actual, 1900.	Average normal.	Variation of from normal.	Percentage variation from normal.
	Inches	Inches	Inches.		Inches	Inches	Inches.	
South-East Punjab	24·90	20·40	+4·50	+22	25·07	20·76	+4·31	+21
South " .	20·25	13·00	+7·25	+56	20·34	13·19	+7·15	+54
Central " .	15·30	13·65	+1·65	+12	15·37	14·00	+1·37	+10
Punjab, Submontane.	36·73	24·14	+12·59	+52	36·76	24·52	+12·24	+50
Punjab, Hills .	52·43	44·53	+7·90	+18	52·65	45·43	+7·22	+16
North Punjab .	14·13	11·78	+2·35	+20	14·61	12·26	+2·35	+19
Kathiawar and Cutch.	28·81	26·63	+2·18	+8	28·81	27·32	+1·49	+5
Rajputana, East, Central India, West.	28·96	25·85	+3·11	+12	29·02	26·19	+2·83	+11
West Rajputana .	12·63	11·06	+1·57	+14	12·64	11·13	+1·51	+14

The excess was largest and most pronounced in the Submontane Punjab, where it was 50 per cent. and the South Punjab, where it was 54 per cent.

(6) The rainfall of the period was in slight defect in Baluchistan, the West Punjab and Sind, as shown below :—

Division.	Rainfall of period. June to September. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	June to October. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches	nches	Inches.		Inches	Inches	Inches.	
West Punjab .	4·69	6·15	—1·46	—24	4·76	6·25	—1·49	—24
Baluchistan Hills.	1·67	2·32	—0·65	—28	1·67	2·42	—0·75	—31
Sind . . .	3·43	4·48	—1·05	—23	3·43	4·51	—1·08	—24

(7) It was below the normal in Gujarat, Khandesh, Berar, the greater part of the Deccan and the coast districts of Madras. The following gives data in illustration :—

Division.	Rainfall of period. June to September. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	June to October. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches	Inches	Inches.		Inches	Inches	Inches.	
Khandesh . .	28·29	26·32	+1·97	+7	28·35	29·93	—1·58	—5
Berar . . .	31·61	34·99	—3·38	—10	31·61	37·48	—5·87	—16
Hyderabad, North	30·97	29·53	+1·44	+5	31·36	32·38	—1·02	—3
" South.	23·51	22·98	+0·53	+2	24·41	25·92	—1·51	—6
Gujarat . .	34·51	42·21	—7·70	—18	34·51	43·57	—9·06	—21
Madras East Coast, North.	26·23	27·29	—1·06	—4	31·37	34·33	—2·96	—9
Madras, Central .	15·28	14·83	+0·45	+3	17·84	19·67	—1·83	—9
Madras East Coast, Central	10·33	11·83	—1·50	—13	15·99	20·51	—4·52	—22
Madras East Coast, South.	13·91	14·87	—0·96	—6	20·73	23·13	—2·40	—10

The deficiency was most marked in East Coast, Central, in which it averaged 22 per cent., and Gujarat where it was 21 per cent.

(8) It was in slight to considerable excess in the West Coast districts, the Bombay Deccan, Mysore and the South and South-Central divisions of Madras—

Division.	Rainfall of period. June to September. Average actual 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.	June to October. Average actual 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches	Inches	Inches		Inches	Inches	Inches	
Konkan.	113·19	106·10	+7·09	+7	113·74	111·73	+2·01	+2
Malabar	121·79	100·20	+21·59	+22	128·21	109·54	+18·67	+17
Bombay Deccan.	30·40	26·86	+3·54	+13	31·37	31·25	+0·12	0
Mysore	29·32	20·42	+8·90	+44	34·87	25·91	+8·96	+35
Madras, South-Central.	13·58	11·74	+1·84	+16	19·24	17·88	+1·36	+8
Madras, South	5·98	5·60	+0·38	+7	13·60	12·39	+1·21	+10

(9) The rainfall of the period, June to October, was above the normal in 26 divisions. The excess was small to moderate in amount in nineteen of these divisions, and exceeded 25 per cent. in the divisions for which comparative data are given below :—

Division.	Rainfall of period June to October. Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Upper Burma	39·27	29·78	+ 9·49	+32
Deltaic Bengal	65·76	47·67	+18·09	+ 38
Orissa	64·09	49·39	+14·70	+ 30
South Punjab	20·34	13·19	+ 7·15	+ 54
Punjab Submontane	36·76	24·52	+12·24	+ 50
Mysore	34·87	25·91	+ 8·96	+ 35
Central Provinces, East	59·91	46·55	+13·36	+ 29

The rainfall of the period, June to October, was below the normal in 30 divisions. The deficiency was generally small in percentage amount, but exceeded 25 per cent. in the divisions for which comparative data are given below:—

Division.	Rainfall of period June to October. Average actual 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Assam Surma	65·77	90·72	—24·95	— 28
Hills	68·98	94·54	—25·56	— 27
Baluchisatn Hills	1·67	2·42	— 0·75	— 31

IV.—The retreating south-west monsoon period.—This season was unusually dry over the greater part of India, including Central and North-Eastern India and the Deccan.

October 1900 was characterized by finer weather than usual over the greater part of the country. Two storms, which is about the normal average number, appeared over the Bay during the month. The first formed in the centre of the Bay, and travelling along a curved course passed through Orissa, the east of the Central Provinces and West Bengal. This storm gave moderate rain along its course, but did not seriously affect the weather outside the storm area. The second storm formed in the south-west of the Bay, and drifting north-westwards struck the Madras Coast to the north of Madras, and apparently broke up among the broken ground of the interior of the Peninsula. This storm occasioned heavyish rain over the south of the Peninsula. The rainfall of the month was hence normal or in slight excess over Southern India, while elsewhere it was generally lighter than usual. Over North-Western and Central India practically no rain fell throughout the month.

The weather over India during November was exceptionally quiet and fine and was of an uniform character throughout. One or two very slight and feeble disturbances of the cold weather type appeared in the extreme north-west, but, except on one occasion, when rain followed and temperature fell quickly, they occasioned no important change in the weather.

The rainfall and snowfall of the month were heavy over the north-west frontier of India and over the countries to the westward, but the fall ceased at the frontier and with a few local exceptions the whole of Northern and Central India and the head of the Peninsula were actually or practically rainless. Occasional rain was, however, received in Burma and Assam and over the southern half of the Peninsula. The rainfall was in excess of the normal in Tenasserim, Baluchistan, Western Rajputana and South Madras ; it was normal in the Brahmaputra Valley and more or less in defect elsewhere.

There was no cyclonic storm over the Bay during the month and hence there were no very heavy falls of rain over the Peninsula, though slightly disturbed conditions occurred at times and the rainfall temporarily increased in amount in the extreme south during these periods.

The rainy unsettled weather which prevailed over Persia, Baluchistan and Afghanistan during November extended into Northern India during December A series of cold-weather storms entered North-West India from the westward during the second half of the month, and passing eastward gave an excess of rain all over Northern India, as well as at some central stations. The excess was (relatively to the normal) great over Rajputana, the Punjab and the North-Western Provinces, and was absolutely greatest in the hill division of the Punjab. This excess of rainfall did not, however, extend beyond West Bengal, and Bengal, Assam and Burma had less rain than usual during the month. Over the west of the Peninsula the rainfall was very scanty, and large parts of the Bombay Presidency were practically rainless. On the other hand, the Madras Coast (except the north division) and the interior of Madras received about the normal amount.

The following are the chief features of the rainfall of the period in India :—

(1) The rainfall of the period was in considerable excess in the Western Himalayas and Baluchistan, chiefly due to the passage of three cold-weather storms across North-Western India in the last fortnight of December. The following gives data for eleven representative stations :—

Station.	Variation of rainfall from normal.				
	October 1900.	November 1900.	December 1900.	Total of period October to December.	Percentage variation from normal.
	Inches.	Inches.	Inches.	Inches.	
Quetta . . .	—0·07	+1·40	+3·51	+4·84	+452
Kalat . . .	—0·07	+0·88	+4·18	+4·99	+489
Chaman . . .	—0·09	+0·97	+2·04	+2·92	+154
Peshin . . .	—0·06	—0·75	+2·32	+1·51	+ 69
Srinagar . . .	+1·27	—0·25	+1·64	+2·66	+155
Leh	—0·13	—0·03	0	—0·16	— 32
Kailang . . .	—0·35	—0·50	+2·27	+1·42	+ 70
Kilba . . .	—0·72	—1·97	+3·73	+1·04	+ 24
Simla . . .	—1·04	—0·54	+2·85	+1·27	+ 51
Chakrata . . .	—0·82	—0·59	+4·89	+3·48	+167
Ranikhet . . .	—1·35	—0·33	+1·55	—0·13	— 6

(2) The rainfall of the period was also in excess in the plains areas affected by the storms in December which gave increased precipitation in the hills. The following gives comparative data for these areas :—

Area.	Average actual rainfall.			Average actual rainfall during period October to December 1900.	Average normal rainfall during period October to December.	Percentage variation from normal.
	October 1900.	November 1900.	December 1900.			
	Inches.	Inch.	Inches.	Inches.	Inches.	
Punjab . . .	0·15	0·05	1·16	1·36	0·88	+ 55
North-Western Provinces and Oudh.	1·24	0	1·33	2·57	1·93	+ 33
Bihar . .	2·49	0	0·59	3·08	3·01	+ 2
Rajputana . . .	0·04	0·12	0·44	0·60	0·58	+ 3
Sind . . .	0	0·05	0·62	0·67	0·21	+219

(3) The precipitation of the period was in defect in Bengal, Assam, Burma and Orissa, due to the early withdrawal of the monsoon from these areas—

Area.	Average actual rainfall.			Average actual rainfall during period October to December 1900.	Average normal rainfall during period October to December.	Percentage variation from normal.
	October 1900.	November 1900.	December 1900.			
	Inches.	Inch.	Inch.	Inches.	Inches.	
Burma . . .	5·68	0·89	0·11	6·68	10·15	—34
Assam . . .	2·34	0·28	0·43	3·05	7·15	—57
Bengal . . .	1·97	0·07	0·06	2·10	5·49	—62
Orissa . . .	7·47	0·05	0·01	7·53	8·26	— 9

(4) The rainfall of the period was very scanty and in large defect over the whole of the interior of the Peninsula and also in the West Coast and North Madras Coast districts. This was due to the abnormally early withdrawal of the monsoon current from the Bay. The following table gives data :—

Division.	Average actual rainfall.			Average actual rainfall during period October to December 1900.	Average normal rainfall during period October to December.	Percentage variation from normal.
	October 1900.	November 1900.	December 1900.			
	Inches.	Inch	Inch.	Inches.	Inches.	
Berar . . .	0	0	0·04	0·04	3·67	—99
Central Provinces .	1·26	0	0·35	1·61	2·79	—42
Hyderabad . .	0·65	0·23	0	0·88	4·62	—81
Mysore . . .	5·55	0·30	0·17	6·02	8·68	—31
Konkan . . .	0·55	0·09	0	0·64	6·87	—91
Malabar . . .	6·42	0·96	0·51	7·89	13·55	—42
Bombay Deccan .	0·97	0·11	0	1·08	6·24	—83
Madras " . .	2·56	0·46	0·44	3·46	7·43	—53
Madras East Coast North.	5·14	0·70	0	5·84	10·33	—43

(5). South Madras received occasional rain throughout the period and the rainfall was in slight to moderate excess on the mean of the whole area The following gives comparative data for the two districts in that area :—

District.	Variation of Rainfall during			
	October 1900.	November 1900.	December 1900.	Period October to December
	Inches.	Inches.	Inch.	Inches.
Madura	—0·19	—0·85	+0·41	+0·63
Tinnevelly	2·03	+3·77	—0·01	+5·79

The year.—The rainfall of the year for the whole of India, as determined by the method employed by Mr. Blanford (and which gives the normal annual rainfall as 41·09 inches), averaged 0·57 inch below the normal.

The average rainfall of the Indian area was considerably above the normal in the cold weather, slightly below it in the hot weather and considerably below in the retreating south-west monsoon and normal in the south-west monsoon.

The following gives comparative data for the whole of India (excluding Burma and the hill divisions) based on the arithmetical means of the actuals and normals for the 46 rainfall divisions (irrespective of extent of area):—

Period.	Rainfall.			
	Average actual of period.	Average normal of period.	Variation from nomal	Percentage variation from normal.
	Inches.	Inches.	Inch.	
Cold weather	1·19	0·99	+0·20	+20
Hot weather	4·19	4·58	—0·39	— 9
South-west monsoon	38·19	37·95	+0·24	+ 1
Retreating south-west monsoon	1·28	1·80	—0·52	—29
Whole year	44·85	45·32	—0·47	— 1

The rainfall of the year was practically normal in amount (*i.e.*, the variation from the normal was less than 10 per cent.) in twenty-two out of the fifty-one rainfall districts (omitting Burma) into which India is divided :—

Division.	Rainfall.			
	Average actual of year, 1900	Average normal of year.	Variation of actual from normal	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Eastern Bengal	81·53	88·64	— 7·11	—8
Central Bengal	55·86	56·27	— 0·41	—1
South Bihar	41·73	43·86	— 2·13	—5
North Bihar	52·64	53·68	— 1·04	—2
North-Western Provinces, East	36·91	38·25	— 1·34	—4
South Oudh	36·26	36·10	+ 0·16	0
North Oudh	38·67	38·95	— 0·28	—1
North-Western Provinces, Central	31·09	34·29	— 3·20	—9
" " West	26·72	26·33	+ 0·39	+1
" " Submontane (East.)	43·92	42·50	+ 1·42	+3
" " Submontane (West.)	45·74	46·36	— 0·62	—1
" " Hills	60·29	61·19	— 0·90	—1
Central Punjab	19·25	18·87	+ 0·38	+2
Malabar	135·89	125·07	+10·82	+9
Madras South Central	28·50	29·33	— 0·83	—3
Konkan	114·21	115·19	— 0·98	—1
Bombay Deccan	33·25	35·99	— 2·74	—8
Hyderabad, North	32·60	35·86	— 3·26	—9
Central Provinces, West	46·61	44·67	+ 1·94	+4
" " Central	54·41	51·53	+ 2·88	+6
Kathiawar and Cutch	29·39	28·19	+ 1·20	+4
Baluchistan Hills	10·14	9·38	+ 0·76	+8

The rainfall was 10 to 25 per cent. in excess in the rainfall districts for which data are given below :—

Division.	Rainfall.			
	Average actual of year 1900.	Average normal of year.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Orissa	71·63	59·76	+11·87	+ 20
Chota Nagpur	59·25	54·00	+5·25	+10
South-East Punjab	28·63	23·54	+5·09	+22
Punjab Hills	72·30	62·14	+10·16	+16
North Punjab	26·52	21·28	+5·24	+25
Mysore	39·17	34·46	+4·71	+14
Rajputana East and Central India	31·09	28·18	+2·91	+10
West Rajputana	13·76	12·53	+1·23	+10
Madras, South	33·29	28·54	+4·75	+17

The rainfall of the year was over 25 per cent. in excess in the following divisions :—

Division.	Rainfall.			
	Average actual of year, 1900.	Average normal of year.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Deltaic Bengal	77·09	60·58	+16·51	+27
South Punjab	22·59	16·00	+6·59	+41
Punjab Submontane	43·41	30·86	+12·55	+41
Central Provinces, East	63·86	50·08	+13·78	+28

The increased rainfall in two of these divisions was mainly due to the excessive rain which fell in these areas during the storm of September.

The rainfall of the year was between 10 and 25 per cent. in defect in fourteen divisions, for which comparative data are given in the following table :—

Division.	Rainfall.			
	Average actual of year, 1900.	Average normal of year.	Variation of actual from normal.	Percentnge variation from normal.
	Inches.	Inches.	Inches.	
Assam, Surma	109·48	133·61	—24·13	—18
Assam Hills	97·56	125·56	—28·00	—22
Assam, Brahmaputra	89·61	99·70	—10·09	—10

Division.	Rainfall.			
	Average actual of year 1900.	Average normal of year.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
North Bengal	76·55	95·04	−18·49	−19
West Punjab	7·99	8·90	−0·91	−10
Khandesh	28·44	32·77	−4·33	−13
Berar	32·02	40·56	−8·54	−21
Gujarat	34·86	44·21	−9·35	−21
Central India, East	38·71	42·91	−4·20	−10
Madras East Coast, North	36·77	41·52	−4·75	−11
Hyderabad, South	26·28	29·96	−3·68	−12
Madras, Central	21·34	24·84	−3·50	−14
Madras East Coast, Central	24·81	33·17	−8·36	−25
,, ,, South	36·50	41·57	−5·07	−12

The rainfall of the year was more than 25 per cent. below the normal in two divisions only—

Division.	Rainfall.			
	Average actual of year 1900.	Average normal of year.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Bengal Hills	100·77	137·56	−36·79	−27
Sind	4·38	6·00	−1·62	−27

The rainfall of the year was less than three inches in amount at thirteen raingauge stations in the Punjab, Sind Baluchistan and Kashmir. The following gives data for these stations:—

Area.	Station.	Total annual rainfall.
		Inches.
Punjab	Toba Teksingh	0·36
	Alipur	1·89
	Muridwala	2·90
Sind	Mehar	1·21
	Rohri	1·60
	Karachi	2·24
	Sehwan	2·32
	Nanshahro	2·33
	Shikarpur	2·59
	Jerruck	2·91
	Tatta	2·94
Baluchistan	Jhatpur	2·33
Kashmir	Gilgit	2·79

Rainfalls exceeding two hundred inches in the year were received at the following stations:—

Province.	Station.	Rainfall.	
		Actual of year, 1900.	Normal of year.
		Inches.	Inches.
Burma	Tavoy	234·87	215·49
	Thayetchaung	217·96	?
	Launglôn	229·11	?
	Yebyu	228·74	?
	Sandoway	209·62	215·73
Assam	Cherra Poonjee (Police Station).	445·39	445·37
Bombay	Mandangad	203·94	?
	Matheran	233·66	210·24
	Malcolmpeth	333·78	?
	Lanoli	241·95	162·66
Mysore	Sringeri	213·82	?
Madras	Peermade	265·35	?
	Vayittri	264·49	164·82
	Beltangadi	206·77	171·32
	Karkala	209·85	186·52
	Devala	221·22	152·45
Coorg	Dunkeld Estate	253·80	?

The following gives the heaviest rainfalls in 24 hours exceeding 15 inches recorded during the year 1900:—

Province.	District.	Station.	Date and month.	Rainfall during 24 hours preceding 8 A.M. of date.
				Inches.
Bengal	Chittagong	Mirsarai	29th June	15·18
	Hooghly	Serampore	21st September	16·65
	24—Parganas	Diamond Harbour.	20th ,,	16·73
	Jessore	Bongaon	20th ,,	17·27
North-Western Provinces.	Gorakhpur	Maharajganj	28th ,,	17·31

The following gives a statement of the variation of the mean rainfall of India (excluding Burma) during the past 26 years :—

Year.	Number of divisions.			Rainfall.			
	Fall excessive.	Fall normal.	Fall deficient.	Average actual.	Average normal.	Variation from normal.	Percentage variation.
				Inches.	Inches.	Inches.	
1875 . . .	16		8	43·47	41·09	+2·38	+ 6
1876 . . .	6		18	36·60	41·09	−4·49	−11
1877 . . .	10		14	36·81	41·09	−4·28	−10
1878 . . .	17	1	6	47·43	41·09	+6·34	+15
1879 . . .	16	2	6	42·78	41·09	+1·69	+ 4
1880 . . .	13	1	10	39·53	41·09	−1·56	− 4
1881 . . .	15		9	41·19	41·09	+0·10	0
1882 . . .	17	1	6	43·73	41·09	+2·64	+ 6
1883 . . .	11	1	12	40·97	41·09	−0·12	0
1884 . . .	12		10	42·82	41·09	+1·73	+ 4
1885 . . .	15		7	42·14	41·09	+1·05	+ 3
1886 . . .	14		8	44·11	41·09	+30·2	+ 7
1887 . . .	11		11	43·51	41·09	+2·42	+ 6
1888 . . .	10		12	39·55	41·09	−1·54	− 4
1889 . . .	15		8	43·50	41·09	+2·41	+ 6
1890 . . .	14	1	8	41·77	41·09	+0·68	+ 2
1891 . . .	6		17	37·55	41·09	−3·54	−9
1892 . . .	15		8	46·18	41·09	+5·09	+12
1893 . . .	22		1	50·16	41·09	+9·07	+22
1894 . . .	17		6	47·56	41·09	+6·47	+16
1895 . . .	5		17	38·90	41·09	−2·19	− 7
1896 . . .	7	2	14	36·26	41·09	−4·83	−12
1897 . . .	10	2	11	40·94	41·09	−0·15	0
1898 . . .	10	3	10	41·52	41·09	+0·43	+ 1
1899 . . .	6		17	29·95	41·09	−11·14	−27
1900 . . .	10		13	40·52	41·09	−0·57	− 1

Concluding Summary.

I.—Cold weather period, January and February 1900.—The following table gives mean variation data of the more important meteorological elements for the cold-weather period, January, and February 1900:—

Meteorological Province.	January and February 1900.							
	Variation from normal of mean monthly pressure.	Variation from normal of mean maximum temperature.	Variation from normal of mean minimum temperature.	Variation from normal of mean aqueous vapour pressure.	Variation from normal of mean relative humidity.	Variation from normal of mean cloud amount.	Total variation from normal of average actual rainfall.	Percentage variation from normal of rainfall.
	"	°		"			Inches.	
Burma Coast and Bay Islands.	−·006	+1·3	+3·2	+·040	+1	−0·3	−0·40	− 45
Burma Inland	+·021	+1·0	+2·7				−0·27	− 69
Assam	−·006	+0·8	+2·0				−0·83	− 34
Bengal and Orissa	−·009	+1·9	+3·9	+·087	+ 2	+2·1	+0·05	+ 4
Gangetic Plain and Chota Nagpur.	−·014	+0·2	+3·1	+·041	+ 5	+2·1	+1·58	+126
Upper Sub-Himalayas	−·010	+0·1	+1·3	−·023	− 6	+0·6	−0·39	− 14
Indus Valley and North-West Rajputana.	−·002	−0·3	−0·7	−·038	− 7	+0·1	−0·44	− 45
East Rajputana, Central India and Gujarat.	−·008	+0·2	+1·1	−·066	−11	+0·5	−0·27	− 57
Deccan	−·014	+3·7	+3·7	−·049	−10	+0·9	−0·10	− 21
West Coast	+·001	−0·8	+0·8	−·028	− 3	+0·3	−0·07	− 18
South India	−·005	+2·8	+2·4	0	− 4	+0·4	−0·30	− 39

The pressure variations were slight to moderate in amount. Pressure was below the normal over nearly the whole of India, except perhaps the interior of Burma, for which, however, the data are doubtful.

The deficiency was greatest in the Gangetic Plain and Chota Nagpur and the Deccan.

The mean maximum temperature of the period was in excess over the greater part of India. The excess was greatest in the Deccan where it averaged 3°·7 and Southern India for which it averaged 2°·8. It was in defect in the West Coast, Sind and North-West Rajputana, but the variations were small in those areas. The mean minimum temperature of the period was in excess over the whole of India, except the Indus Valley and North-West Rajputana. The excess was greatest in amount in Bengal and Orissa (+3°·9), the Deccan (+3°·7), Burma Coast and Bay Islands (+3°·2) and the Gangetic Plain and Chota Nagpur (+3°·1). The mean temperature of the period was above the normal in all divisions except the Indus Valley and North-West Rajputana, where it was 0°·5 below the normal, and the west coast where it was normal.

The air contained less aqueous vapour than usual over the whole of India except in the area of increased rainfall including the Gangetic Plain and Bengal and also in Burma. The deficiency was greatest in Sind, Rajputana, Central India, Gujarat and the Deccan. Humidity was below the normal in all divisions except Burma, Bengal and the Gangetic Plain where it was in slight excess on the mean of the period. The decreased humidity was most marked in the Deccan, East Rajputana, Central India and Gujarat where the deficiency averaged 11. There was also more cloud than usual over the whole area except Burma due to the passage of a succession of eight cold weather storms, of which six were feeble, across Northern India between the middle of January and the end of February. The excess of cloud was very marked in the area of heavier rainfall than usual including Bengal, the Gangetic Plain and Chota Nagpur.

The rainfall of the period was more or less in defect over the whole of India with the exception of Bengal, Orissa and the Gangetic Plain. It was in large excess in the Gangetic Plain.

The chief features of the cold weather season were the prevalence of fine weather in the first half of January and the occurrence of a series of very feeble storms in February which gave much cloud but little rain in North-Western India and moderately heavy rain in North-Eastern India.

A reference to the monthly weather summaries for the year 1900, will show that there was a considerable resemblance between the cold weather period of that year and those of the years 1892, 1896, 1897, 1898 and 1899. These periods were *with one exception* marked by a considerable excess of temperature and by decreased humidity, cloud and rainfall in North-Western India. The following gives comparative data for the cold weather periods of the years 1892 to 1900 for the area including the Punjab, Rajputana, the North Western-Provinces and Bihar.

Cold weather period of	Variation from normal in North-Western India of			
	Temperature	Humidity.	Cloud.	Rainfall.
	°			Inches.
1900	+0·7	−4	+0·7	+0·59
1899	−0·5	−6	−0·9	−0·51
1898	+1·1	−1	−1·0	+1·22
1897	+1·2	−2	−0·4	−0·12
1896	+2·0	−3	−0·5	−0·72
1895	+0·8	+5	−0·2	+0·43
1894	+0·6	+10	+1·3	+0·92
1893	−4·2	+11	+1·4	+2·04
1892	+2·5	−2	−0·2	−0·37

The variations of the temperature and humidity conditions in the cold weather of 1899-1900 were determined

by the distribution of rainfall during the period, and hence by the distribution and character of the cold weather storms of December 1899 and of January and February 1900.

The chief characteristics of the storms of that period were as follows :—

(1) The number of depressions and cold weather disturbances were less than the normal, in January, but greater than usual in February. Two appeared in January and six in February.

(2) The disturbances were (with the exception of the two storms in January) feeble and ill-defined, and did not give rise to deep secondary depressions in the Punjab.

(3) The precipitation accompanying these disturbances in February in the Afghan and Himalayan areas fell as rain to higher levels than in normal cold weather periods.

(4) The precipitation accompanying the two disturbances in January occurred chiefly in North-Western India and in February in North-Eastern India.

The preceding remarks indicate that the chief features of the cold weather storms of 1899-1900 were fairly persistent throughout the greater part of the season.

An examination of the pressure and other conditions obtaining in India before and during the cold weather periods of these two years throws little or no light on the abnormal features of these storms, and suggests that they were related either to conditions in the upper atmosphere over Northern India, or to conditions outside of India.

The following table gives vertical pressure anomalies for the cold weather period of 1899-1900 :—

Pair of stations.	Vertical pressure anomaly.						
	September 1899.	October 1899.	November 1899.	December 1899.	January 1900.	February 1900.	Mean of period November 1899 to February 1900.
	"	"	"	"	"	"	"
Leh and Lahore .	+·018	+·013	+·021	+·009	—·049	+·049	+·008
Quetta and Jacobabad.	+·010	—·005	+·020	+·030	—·015	+·040?	+·019
Murree and Peshawar.	—·001	+·027	+·048	+·042	+·024	+·045	+·040
Simla and Ludhiana.	+·022	+·015	+·029	+·014	—·006	+·011	+·012
Chakrata and Roorkee.	+·024	+·029	+·032	+·024	·0	+·030	+·022
Ranikhet and Bareilly.	+·020	+·018	+·023	+·020	+·021	+·028	+·023
Darjeeling and Dhubri.	+·006	+·001	+·014	+·013	+·022?	+·026?	+·019?
Mount Abu and Deesa.	—·039	—·009	—·008	+·018	—·037	—·003	—·008
Pachmarhi and Hoshangabad.	?	+·005	+·011?	+·004?	—·023	—·013	—·005

The following table gives the mean vertical pressure anomalies for the cold weather periods, November to February, of the past seven years for comparison :—

Pair of Stations.	Vertical Pressure anomaly.						
	1899-1900.	1898-1899.	1897-1898.	1896-1897.	1895-1896.	1894-1895.	1893-1894.
	"	"	"	"	"	"	"
Leh and Lahore . .	+·008	+·038	+·040	+·013	+·041	+·009	—·004
Quetta and Jacobabad.	+·019	+·027	+·050	—·007	+·019	+·001	+·006
Muree and Peshawar	+·040	—·012?	+·041	+·006	+·022	—·006	?
Simla and Ludhiana .	+·012	+·005	+·019	—·003	+·012	—·017	—·015
Chakrata and Roorkee.	+·022	+·019	+·028	+·023	+·030	+·010	—·010
Ranikhet and Bareilly.	+·023	+·011	+·018	+·021	+·028	+·003	+·011?
Darjeeling and Dhubri.	+·019?	—·010	?	+·004	+·007	+·001	+·017
Mount Abu and Deesa .	—·008	—·006	—·002	—·008	+·005	—·007	+·003
Pachmarhi and Hoshangabad.	—·005	—·015	—·017	+·013	?	+·013	?

Hence in the cold weather of 1899-1900 the vertical pressure anomalies in North-Western India were generally positive and slight to moderate in amount, indicating increased pressure in the middle atmospheric strata relatively to the lower strata. The feature was slightly exhibited in September and was persistent in October and November. There was a tendency to a change to the opposite condition in January at all the groups of the stations except Murree, Ranikhet and Darjeeling but the feature was fully re-established in February.

The relative excess of pressure was moderate in November and December 1899 and also in February 1900. The cold weathers of 1895-96, 1896-97 and 1898-99 resembled more or less closely in the horizontal and vertical pressure conditions and the character and distribution of the rainfall accompanying the cold-weather storms to that of 1899-1900.

The rainfall of the cold weather seasons of 1895-96, 1896-97 and 1898-99 in Upper India was below the normal.

The rainfall of the cold weather of 1899-1900 was more or less below the normal over the greater part of North-Western and Central India.

An examination of the Indian monsoon area charts and of the charts in the weekly weather reports issued by the English Meteorological office indicates the conditions which obtained in Europe during the inception of the storms of the period.

The following gives a list of the more important cold weather storms of 1899-1900 and of the conditions

obtaining in South-East and South Europe during their formation :—

Date and character of storm.	Area of formation.	Weather conditions in East, South-East and South Europe prior to and during the formation of a storm.
Cold-weather storm of the 11th and 12th January in Persia, and 13th to 18th in Northern India	Asiatic Turkey	High pressure conditions obtained over South-East and South Europe throughout the month of January except for a short period from the 6th to the 14th, when a depression lay over Italy and the neighbouring parts of the Mediterranean.
Cold-weather storm of the 17th to 19th January in Persia, and 20th to 25th January in Northern India.	West Persia.	
Cold-weather storm of the 5th and 6th February in Persia, and 7th and 8th in Baluchistan and Sind.	West Persia.	High pressure conditions prevailed over the whole of South, South-East and East Europe from the 1st to the 7th.
Cold-weather storm of the 7th to 9th February in Persia and 10th to 12th in Northern India.	Probably West Persia. (?)	A depression appeared over the south-west of Spain on the 7th and drifted eastwards during the next two days to the neighbourhood of Italy where it filled up on the 11th.
Cold-weather storm of 12th to 15th February in Persia, and 10th to 18th in Northern India.	Asiatic Turkey	Low pressure conditions obtained over South-East Europe from the 15th to the 19th, but they were apparently not transmitted eastwards
Cold-weather storm of the 17th to 19th February in Persia and 20th and 21st in North-Western India.	Asiatic Turkey	
Cold-weather storm of the 21st and 22nd February in Persia, and 23rd to 25th in Northern India.	Asiatic Turkey	High pressure conditions obtained in South-East, East and South Europe on the 20th and preceding days.
Cold-weather storm of 24th to 26th in Persia, and 27th and 28th in Baluchistan and North-West India.	West Persia.	A depression formed over Italy on the 21st and moving eastwards passed into Turkey and Asia Minor on the 23rd. It apparently filled up in that area during the next two days.

The preceding data indicate clearly that the cold weather storms of 1899-1900 in India were not, in the majority of cases, the continuation of European storms and that anti-cyclonic conditions prevailed to the north and north-west of Baluchistan or Persia during the initiation of most of these storms. The sixth and eighth depressions or storms followed the march of depressions across South-East Europe and may perhaps have been the continuation of these depressions. The evidence is, however, very slight and imperfect.

The preceding discussion has shown that the rainfall was irregularly distributed over Northern and Central India during the cold weather of 1899-1900. It was below the normal in Sind, the greater part of the Punjab, Rajputana and Central India, but was more or less in excess in the North Punjab, Gangetic Plain and Bengal. The cold weather rainfall was below the normal in North-Western India during the cold weather periods of 1891-92, 1895-96, 1896-97, and 1898-99, and there has been a marked tendency during the preceding five cold weathers to deficient precipitation in the Persian area and North-Western India. The following tables giving the available data will show that the deficiency was as marked at Baghdad and in Persia and Afghanistan during the cold weather of 1899-1900 as during the preceding five corresponding seasons.

Station or Province.	Rainfall of period December to February.							
	Normal of period.	Variation from normal in						
		1891-92.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Baghdad	6·03		+0·51	2·78	−2·10	−4·50	−3·28	−4·10
Teheran	3·49		−0·68	+0·98	−1·03	−0·58	−0·36	−2·03
Ispahan	0·60		−0·15	+0·08	+1·07	+0·09	+0·71	−0·55
Bushire	9·61	−5·89	−6·33	−3·49	−6·86	−4·30	+2·84	−2·53
Jask	2·47		−1·34	−0·80	−2·36	−1·97	+3·54	+0·93
Quetta	5·05	−3·21	+0·34	−0·77	−2·30	−2·61	+0·20	+1·35
Kashgar	0·69		−0·74	−0·20	−0·82	−0·82	+0·22	−0·59
Kalat	5·11			−2.30	−3·37	−2·93	−2.70	+2·50
Chaman	4·63		−2·26	−0·05	−3·03	−1·39	+1·54	+1·21
Kabul	1·85		−1·85	+4·95	−1·47	−1·85	−2·10	−1·80
Punjab	2·22	−1·47	−0·59	+0·17	+7·63	−0·83	−0·63	+2·02
Rajputana	0·78		−0·38	−0·27	+0·24	−0·32	−0·68	+0·56
Sind	0·82	−0·63	−0·53	−0·65	−0·20	−0·78	+1·06	+0·15
North-Western Provinces and Oudh.	1·52	−0·43	−1·05	+0·21	+1·26	−0·26	−0·79	+3·39

Station.	Rainfall of period October to March.							
	Normal of period.	Variation from normal in						
		1891-92.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches
Baghdad	9·03		+2·61	−5·03	−3.18	−6·25	−4·07	−5·08
Teheran	7·73		−0·52	+0·99	−0·67	−3·33	−2·73	−3·01
Ispahan	3·27	−4·56	+0·85	+1·73	−0·26	−1·65	−0·24	−0·80
Bushire	13·30		−7·67	+4·49	−5·30	−4·76	+0·91	−2·60
Jask	4·38	−4·15	−0·73	+2·11	−1·91	−2·96	+2·43	+0·20
Quetta	7·09		+1·74	+0·45	−0·76	−2·49	−0·66	+2·16
Kashgar	1·05		−0·61	+0·50	?	−1·18	+0·01	−0·95
Kalat	7·08		?	+3·08	−3·07	−4·67	−3·40	+2·76
Chaman	6·59		−2·39	+0·03	−2·96	−2·17	+0·18	+1·49
Kabul	8·73		+2·27	+2·60	−4·30	−4·58	−3·63	−3·45

The preceding data show that the winter rainfall and precipitation of the cold weather of 1899-1900 was largely in defect in Asiatic Turkey, Persia and Afghanistan. The facts hence continue to point strongly to the conclusion stated in the Annual Summary for 1899 that deficient cold weather rainfall in North-Western India is not a local incident but is associated with deficiency over the large area to the west of Northern India, including Persia, Baluchistan and Asiatic Turkey, and hence that it is not due to abnormal conditions affecting North-Western India only, but to conditions of a much more general character that have not yet been fully investigated.

The character of the rainfall during the cold weather of 1900-1901, for which data are also given in the table, appears to indicate that the conditions which have prevailed during the past six years determining deficient rainfall over the Persian area and North-Western India are probably passing away.

II.—Hot weather, March to May 1900.—The following table gives the mean variations of the more important meteorological elements in the eleven meteorological provinces of India for the hot weather period, March to May, 1900:—

Meteorological Province.	Hot weather period, 1900.							
	Variation from normal of mean pressure.	Variation from normal of mean maximum temperature.	Variation from normal of mean minimum temperature.	Variation from normal of mean aqueous vapour pressure.	Variation from normal of mean relative humidity.	Variation from normal of mean cloud amount.	Total variation of average actual rainfall of period from normal.	Percentage variation from normal of rainfall.
	"	°	°	"			Inches.	
Burma Coast and Bay Islands.	+·018	+0·8	+1·9	+·019	−1	+0·2	−3·23	−20
Burma Inland .	+·026	+1·0	+1·2				−1·04	−16
Assam . .	+·029	−0·6	−0·4				+5·98	+20
Bengal and Orissa.	+·030	+0·8	+0·4	+·012	−2	+0·2	−1·69	−15
Gangetic Plain and Chota Nagpur.	+·030	+0·1	+0·7	0	−1	+0·2	−0·60	−24
Upper Sub-Himalayas.	+·030	−0·5	+1·5	−·027	−4	+0·7	−0·25	−10
Indus Valley and North-West Rajputana.	+·031	+0·1	+1·2	−·002	0	−0·1	+0·10	+8
East Rajputana, Central India and Gujarat.	+·034	+0·3	+2·3	−·019	−1	−0·6	+0·33	+52
Deccan .	+·032	+1·8	+1·9	−·046	−5	−0·2	−0·88	−46
West Coast .	+·035	−0·2	+0·5	−·032	−3	−1·0	−3·48	−45
South India .	+·027	+1·1	+1·2	−·008	−3	+0·2	−2·85	−66

The previous table gives mean data for the whole period and indicates that on the average of the period, pressure was in moderate excess, temperature generally in slight to moderate excess, humidity slightly to moderately below the normal and cloud and rainfall more or less below the normal over the greater part of North-Western India and the Peninsula.

The mean 8 A.M. pressure of the Indian land area was ·006″ in excess in March, ·021″ in excess in April and 061″ in excess in May, and hence averaged ·029″ in excess for the whole hot weather period. It was hence in increasing excess throughout the period. The excess in May 1900 is the largest registered in the month of May during the past 25 years with one exception, May 1885, when pressure averaged ·068″ above the normal.

Frequent series of thunderstorms occurred in April in the Punjab, North-Eastern India and Southern India. Temperature was in large general excess in March, in slight excess in April and about normal in May on the mean of the whole area. The local variations of pressure from the general conditions in the months of March and April were generally opposite in character and apparently of little importance. The chief feature of the period was a general disturbance in the second week of the month of April which gave moderately heavy rain over the whole of Northern India and Baluchistan. The month of May was hotter than usual over the greater part of the Peninsula, and temperature was on the mean of the month in moderate excess in the Deccan and Mysore. The variations were small and variable in amount in Northern India and Berar. The hot weather conditions of May gave rise to the following abnormal features of the pressure distribution in that month:—

(1) General but slight excess, relatively to the mean condition, over nearly the whole of Northern and Central India and the North Deccan, the excess being most marked in Kathiawar, Lower Sind, Cutch and South-West Rajputana.

(2) General deficiency of pressure in the Peninsula, greatest in the area of greatest excess of temperature in the Madras Deccan and also in Lower Burma and the Andaman Sea where it was absolutely greatest.

(3) Slight excess of pressure at the level of the hill stations as compared with the neighbouring plains.

The following table gives comparative data of the month of May for 1900, and also for thirteen years which were in the great majority of cases characterized by increased temperature and decreased pressure over the Indian area:—

Month and year.	Variation from normal of		
	Mean pressure of month. (Mean of 10 and 16 hours.)	Mean temperature of month.	Mean aqueous vapour pressure of month.
	"	°	"
May 1879	−·045	+1·3	−·010
" 1880	−·022	+0·2	−·001
" 1881	+·002	+0·1	0
" 1882	+·006	−0·2	−·004
" 1885	+·062	−2·1	−·022
" 1890	−·022	+0·6	−·011
" 1892	−·027	+1·8	−·002
" 1894	−·023	+1·5	−·011
" 1895	−·007	+2·4	+·027
" 1896	+·013	+2·3	−·005
" 1897	−·004	+1·7	−·001
" 1898	−·008	+0·6	−·015
" 1899	−·019	+0·8	+·083
" 1900	+·056	+0·8	−·014

The preceding data show that increased temperature in May generally accompanies decreased pressure. The relation is not simple or direct as there is no fixed relation between the two variations. In May 1900, although temperature was in slight excess, pressure was in very large excess, thus pointing to the presence of abnormal conditions—general and not local in character.

The following gives mean temperature variation data of Northern India (including the Punjab, Upper Sind,

the North-Western Provinces, Bihar and Rajputana) for the month of May of fourteen years, resembling May 1900 in their more important features :—

Month and Year.	Variation of mean temperature in Northern India.	Area of greatest variation.	Amount of greatest variation.
	°		°
May 1878 . . .	−4·2	North Bihar . .	+0·3
„ 1879 . . .	+4·0	North-Western Provinces.	+5·0
„ 1880 . . .	+2·0	South Punjab . .	+5·6
„ 1881 . . .	+0·8	Do. . . .	+2·9
„ 1882 . . .	−0·3	North Punjab . .	+2·1
„ 1885 . . .	−4·6	Bihar	+1·0
„ 1890 . . .	+1·5	Punjab . . .	+2·5
„ 1892 . . .	+3·0	West Punjab . .	+5·5
„ 1894 . . .	+3·0	Chota Nagpur . .	+5·0
„ 1895 . . .	+4·0	Punjab . . .	+6·0
„ 1896 . . .	+3·1	Do . . .	+4·8
„ 1897 . . .	+3·6	North-West Rajputana.	+5·5
„ 1898 . . .	+0·8	Assam (Surma) . .	+3·6
„ 1899 . . .	+3·3	Punjab (Central). .	+6·3
„ 1900 . . .	+0·3	Do . . .	+2·5

The data of the preceding table show that the temperature conditions in North-Western India of May 1881, 1882, 1890, 1898 and 1900 were practically normal. In each of the months of May, 1879, 1880, 1892, 1894, 1895, 1896, 1897 and 1899 temperature was considerably above the normal, due largely, if not solely, to deficient precipitation in the cold weather period over the plains and adjacent mountain areas of Northern India. In each of these months, except that of May 1896, the mean pressure of the Indian area was in defect, the deficiency averaging ·025″ for the first five years and almost identical in amount with this in four out of these five years. It will also be seen that May 1900 resembled May 1881 and 1882 most closely and to a slightly less extent May 1898.

Excessive temperature in the month of May generally gives rise to a larger diminution of pressure over the Indian area than that normal to the month, and hence to a deficiency of pressure as compared with the normal. The decrease of pressure is chiefly, if not solely, a temperature effect. This is confirmed by the fact that in each of these months (*viz.*, May 1879, 1880, 1890, 1892, 1894, 1895, 1896, 1897 and 1899) pressure at the level of the hill stations was in large relative excess or the vertical pressure anomalies were positive and considerable to large in amount. On the other hand, in years when the temperature variation is small, as in 1898 and 1900, the vertical anomalies are small, and also frequently somewhat irregular at the hill stations in Northern India. This is established by the following data for six pairs of stations :—

Pair of Stations.	Vertical pressure anomaly in May.											
	1878.	1879.	1880.	1890.	1892.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
	″	″	″	″	″	″	″	″	″	″	″	″
Quetta and Jacobabad	?	?	?	+·006	+·050	+·037	+·063	+·046	+·050	+·012	+·043	−·004
Leh and Lahore	−·052	?	+·069	+·063	+·125	+·082	+·101	+·085	?	+·003	+·075	−·007
Muree and Rawalpindi	+·011	+·040	+·038	+·041	+·035	+·028	+·057	?	+·017	+·001	+·033	+·006
Simla and Ludhiana	−·025	?	?	+·033	+·049	+·042	+·060	+·050	+·054	+·009	+·047	+·022
Chakrata and Roorkee	−·052	+·044	+·015	+·022	+·040	+·035	+·045	+·038	+·058	+·025	+·045	+·049
Darjeeling and Calcutta . . .	−·039	+·032	+·007	+·002	+·003	+·023	+·033	+·011	+·028	+·015	+·025	+·018
Mean	−·031	+·039	+·032	+·028	+·050	+·041	+·060	+·046	+·041	+·011	+·045	·014

These conditions in May 1900 accompanied unusually late and somewhat heavy snowfall in April and May. Similar years of late and heavy snowfall are 1898, 1885 and 1878. The following gives the variations of the mean pressure of the Indian area from the normal during the first five months of these years and of 1900 for comparison :—

Year.	Variation of mean pressure of the Indian area from the normal in				
	January.	February.	March.	April.	May.
	″	″	″	″	″
1878	+·030	+·033	+·044	+·037	+·082
1885	+·039	−·013	+·022	+·018	+·068
1898	+·017	−·077	−·013	−·017	−·009
1900	−·004	−·008	+·006	+·022	+·061

The years 1878 and 1885 were characterized by excessive as well as prolonged snowfall and were associated with a considerable to large excess of pressure throughout.

In the years 1898 and 1900 the snowfall was moderate in the early part of the winter, and, although larger than usual in April and May, it was not excessive as in 1878 and 1885. This is shown very clearly by the temperature variations of the Punjab and North-Western Provinces for the months of April and May :—

Year.	Punjab.		North-Western Provinces and Oudh.	
	April.	May.	April.	May.
	°	°	°	°
1878	−0·9	−4·3	−0·6	−4·6
1885	−3·1	−8·1	−1·0	−3·6
1898	+4·8	+0·2	+2·5	+0·7
1900	−4·0	+0·6	−1·7	−0·2

The statements of the snowfall in April and May received from District Officers show that the snowfall in April was moderate to considerable in amount and was light in May. It was not excessive in character or like that which fell in these months in 1878 and 1885. This is confirmed by the comparison of the pressure and temperature variations of these months. It is hence very probable that the large excess of pressure in May 1900 was not solely due to the action of the late snowfall in May, and was probably in large part due to other and probably more general actions.

The more important features of the hot-weather period were as follows:—

(1) Increasing excess of pressure over the Indian area culminating in an unusually large excess in May.

(2) Higher temperature than usual, the excess being large and general in March, and decreasing in amount in April and May. The variations in May were small in amount over the whole of Northern and Central India. The only important feature in that month was a moderate excess in the interior of the Peninsula.

(3) The local variations of pressure both in the horizontal and vertical directions became less pronounced and marked with the advance of the season, and were slight in May.

(4) The distribution of the rainfall of the period was abnormal. March and May were much drier months than usual, whereas April was marked by a prolonged general disturbance affecting both the hills and the plains in India, so that the precipitation of that month was very generally in excess.

The following table gives vertical pressure anomalies for each month of the hot weather period of 1900 in Northern India determined from the variation data of six pairs of stations. It will be seen that the vertical pressure anomalies in Upper India were positive and large in amount in March and were generally negative but small in amount in April and irregular in May:—

Pair of Stations.	Vertical Pressure Anomaly.			
	March.	April.	May.	Mean of period.
	"	"	"	"
Quetta and Jacobabad	+·053	—·009	—·004	+·013
Leh and Lahore	+·070	—·082	—·007	—·006
Murree and Peshawar	+·047	—·026	+·007	+·009
Simla and Ludhiana	+·049	—·007	+·022	+·021
Darjeeling and Dhubri	+·040	+·038	+·031	+·036
Mount Abu and Deesa	—·006	—·011	—·028	—·015

The highest maximum temperatures were generally registered in the second week of June in Rajputana and in the second and last weeks of June or first week of July in the Punjab.

The highest temperatures of the year were generally registered later than usual due to the protracted dry hot weather in June and the first fortnight of July caused by the delay in the advance of the monsoon currents over North-Western India. The following gives the absolute maximum temperatures exceeding 115° registered in India during the hot weather of 1900:—

Province.	Station.	Highest maximum temperature recorded during the year.	Date on which recorded.
		"	
Punjab	Montgomery	119·0	28th June.
	Lahore	118·6	21st June.
	Sialkot	118·5	2nd and 3rd July.
	Khushab	118·4	22nd June.
	D. I. Khan	118·2	3rd July.
	Peshawar	118·0	2nd July.
	Mooltan	117·4	13th June.
	Sirsa	117·3	13th and 14th June
	Rawalpindi	117·0	2nd and 3rd July.
	Ludhiana	115·4	3rd July.
Sind	Jacobabad	124·5	14th June.
	Hyderabad	122·2	14th June.
Rajputana	Pachpadra	121·3	14th June.
	Jodhpur	118·8	14th June.
	Bikaner	118·3	14th June.
	Deesa	118·1	13th June.
	Sambhar	115·0	14th June.

The meteorology of India during the hot weather of 1900 was determined in part by the distribution of the cold-weather snowfall in the Himalayan area and in part by meteorological actions and conditions which gave abnormal and late snowfall over the greater part of the Western Himalayas during the months of April and May. The abnormal snowfall was heaviest in Chitral and North Kashmir.

The cold-weather or winter snowfall was considerably below the normal in the Western Himalayas and Afghanistan Mountains. The extent of the snow clad surface was less than usual at the beginning of the winter and was probably considerably below the normal in the beginning of March. The disturbances in April and May gave a moderate and late general fall of snow in the Western Himalayas. The snow accumulation in May was somewhat above the normal at the end of the month. The general character of the weather in Northern India in March was such as is invariably associated with deficient winter precipitation in the Western Himalayas and the peculiar features of pressure and temperature in North-Western India in April and May were those associated with moderate late snow in the same region.

The larger features of the hot weather period were hence directly related to the snowfall of the previous cold

weather season and to that of April and the second week of May in the North-West Himalayas.

A noteworthy feature was the increased rainfall in the Assam Valley. This is the rule in about four out of five years of deficient cold-weather rains in North-Western India.

The following gives rainfall variation data for Assam :—

Area.	Rainfall.							
	March.		April.		May.		Total of period.	
	Variation from normal.	Percentage variation from normal.	Variation from normal.	Percentage variation from normal.	Variation from normal.	Percentage variation from normal.	Variation from normal.	Percentage variation from normal.
	Inches		Inches		Inches		Inches	
Assam Surma . .	+5·61	+75	+5·15	+41	−7·84	−42	+2·92	+8
Assam Brahmaputra .	+1·27	+37	+1·74	+22	−2·74	−22	+0·27	+1

The larger features of this period were hence directly related to the snowfall of the previous cold-weather season and to that of the second week of May in the North-West Himalayas. Although the pressure variations of the whole Indian area indicated that there were larger and more general actions in operation modifying the general pressure conditions in Southern Asia and probably the Indian Ocean.

III.—The south-west monsoon period, June to September 1900.—The meteorological conditions in the Indian land area antecedent to the establishment of the south-west monsoon were favourable to a normal monsoon and also to its rapid extension over nearly the whole of India.

The following gives the most prominent and important of these antecedent conditions :—

(1) The snowfall of the past winter was nowhere excessive, and over the greater part of the area was normal or below it. It however commenced later and continued later than usual. The snowfall accumulation in the last week of May 1900 was nowhere in large excess, and was probably about normal in the Kashmir, Bushahar, Kumaon and Garhwal Himalayas and in Baluchistan, and less than usual in the area including the Afghan and Chitral mountains and in Persia.

(2) The snowfall in parts of the Eastern Himalayas, on the other hand, was heavier than the normal.

(3) Pressure was from January to March practically normal over the Indian area, and was in moderate excess in April and in large excess in May. Pressure was during the greater part of the period in slight defect in Northern India and Central India and in slight excess in Burma. Presure was generally in local excess in the Peninsula, Kathiawar, Berar and the Central Provinces. The area of greatest excess varied slightly from month to month. These conditions were established at the end of the rains in November, and were fairly persistent up to May.

(4) Pressure was generally in relative excess at the hill stations or the vertical pressure anomalies were possitive in January, February, March and May and in relative defect in April. On the mean of the period January to May pressure was in moderate to considerable relative excess, except in the case of Leh.

(5) Temperature was in general excess in February and March. It was in local excess except in the Punjab, Sind, Rajputana and Gujarat in January and in the Punjab and North-Western Provinces in April, due to disturbed weather in these areas during these months. The excess was moderate to considerable in Berar, the Central Provinces, the Deccan and Mysore from January to April. Temperature was generally in excess in May, but the variations were small except in Berar, the Central Provinces, Deccan and Mysore (+3°).

(6) The air was much drier than usual during the greater part of the period over nearly the whole of the interior, and more especially in Berar, the Central Provinces, Deccan and Mysore, following the failure of the rains during last year's monsoon. Such continuous low humidities had not been recorded in these areas during the cold and hot weather seasons of the past 25 years. The decreased humidity was in part due to increased temperature and in part to the presence of a smaller amount of aqueous vapour than usual in the air.

(7) The distribution of cold and hot weather rainfall was unusual. The rainfall of both seasons was above the normal only in Chota Nagpur. The cold weather rainfall was practically nil in Sind, Rajputana, Gujarat and Berar and was in slight to moderate defect in Assam, the Punjab and Central India. It was in large excess in Bihar, Chota Nagpur and the North-Western Provinces. The rainfall in the hot weather season was very irregularly distributed over nearly the whole of Northern India and Burma. It was in considarable excess in Chota Nagpur and in considerable to large defect in Burma, Bihar, Berar, Sind and Central India.

(8) The conditions in the Indian Seas and the Indian Ocean were, so far as could be ascertained, somewhat unfavourable at the end of May and indicated that the south-east trades were feebler than usual in the northern half of that area.

The following is a summary of the forecast (prepared in the first week of June) of the probable distribution of the monsoon rainfall based on these conditions :—

(1) Judging from the conditions in India and the known conditions in the Indian Seas and Ocean, it is very probable the monsoon currents of the present year will be, as rain-distributing currents, of about normal strength on the average of the whole season.

(2) It is very probable there will be a considerable delay in the establishment of the monsoon currents on the Bombay and Bengal Coasts. The delay will very probably be greater on the Bombay Coast than in Bengal, and it is probable that the rains will not set in fully on the Bombay Coast before the 4th week of June.

(3) The Bay current is more likely to be above its normal strength than the Bombay current.

(4) The local conditions were most favourable in Burma, East and South Bengal and the Central Provinces, and these areas would receive very probably at least normal rainfall and probably rainfall in excess.

(5) Conditions were favourable on the whole in Bihar, the West Coast districts, the West Deccan, Chota Nagpur, the

North-Western Provinces and Central India, and these areas would probably receive almost normal rain.

(6) Conditions were slightly less favourable in Berar, Khandesh, the Deccan, Carnatic and Mysore, and these areas would probably obtain about their normal amounts. Conditions were most favourable in Mysore.

(7) Conditions were somewhat unfavourable in Rajputana and the Punjab, more especially in the west and central districts, and the rainfall would be in defect, unless the monsoon currents were very vigorous.

The following table gives a summary of the rainfall data of the south-west monsoon period, 1900, for comparison with the statements of the forecast:—

Province.	Rainfall of season, June to October.			
	Average actual.	Average normal.	Variation from normal.	Percentage variation from normal.
	Inches	Inches.	Inches.	
Burma	103·26	98·08	+5·18	+5
Assam	64·28	81·89	−17·61	−22
Bengal	60·96	60·20	+0·76	+1
Chota Nagpur	51·00	47·57	+3·43	+7
Bihar	41·47	43·82	−2·35	−5
North-Western Provinces and Oudh.	32·06	34·67	−2·61	−8
Punjab	19·49	15·16	+4·33	+29
Central Provinces	52·41	45·80	+6·61	+14
Central India	36·67	40·48	−3·81	−9
Rajputana	20·83	18·66	+2·17	+12
Berar	31·61	37·48	−5·87	−16
Bombay	40·04	41·39	−1·35	−3
Madras	33·92	32·92	+1·00	+3

The following table gives the mean variations of the more important meteorological elements in the eleven meteorological provinces of India for the south-west monsoon period, June to September, 1900:—

Meteorological Province.	South-west monsoon period, 1900.							
	Variation from normal of mean pressure.	Variation from normal of mean maximum temperature.	Variation from normal of mean minimum temperature.	Variation from normal of mean aqueous vapour pressure.	Variation from normal of mean relative humidity.	Variation from normal of mean cloud amount.	Total variation from normal of average actual rainfall.	Percentage variation from normal of rainfall.
	″	°	°	″			Inches	
Burma Coast and Bay Islands.	−·007	+0·7	+0·9	+·022	−1	+0·3	+6·68	+6
Burma Inland	+·010	0	+0·3				+4·22	+13
Assam	+·010	+0·5	+0·3				−14·24	−21
Bengal and Orissa.	+·003	+0·2	+0·4	+·017	−1	+0·5	+5·45	+10
Gangetic Plain and Chota Nagpur.	+·003	+0·2	+0·6	−·006	−2	+0·5	−1·88	−5
Upper Sub-Himalayas.	+·010	−0·2	+1·7	+·012	+1	+0·4	+0·43	+1
Indus Valley and North-West Rajputana.	+·004	+2·3	+2·7	+·039	−1	−0·8	+2·27	−32
East Rajputana, Central India and Gujarat.	0	+2·0	+2·2	+·014	−2	−0·7	+0·52	+2
Deccan	−·003	+2·0	+1·4	+·003	−3	+0·1	+1·55	+4
West Coast	+·008	+0·9	+1·2	+·008	−3	+0·1	+6·05	+7
South India	+·003	+1·0	+1·0	+·009	−2	+0·7	−0·75	−5

The following is a statement of the chief features of the meteorology of the whole period:—

(1) Pressure was in slight excess on the mean of the whole period over the greater part of India. The excess was largest in the Upper Sub-Himalayas, Assam and Upper Burma (+·010″). It was in slight defect in Lower Burma and the Andaman Sea. On the mean of the whole Indian area it was ·004″ in excess.

(2) Temperature was in general excess. The night temperature was on the whole in slightly greater excess than the day temperature. The excess was slightly marked in North-Eastern India and Burma, averaging only 0°·4 in the mean temperature. It was, on the other hand, moderate to considerable in amount over the greater part of North-Western India and the Peninsula. The excess in the mean temperature was more than 1° in the following divisions:—Indus Valley and North-West Rajputana, (+2°·5), East Rajputana, Central India and Gujarat (+2°·1) and the Deccan (+1°·7)

(3) The mean aqueous vapour pressure was slightly larger than usual but the relative humidity was below the normal to a slight extent due to the prevailing increased temperature.

(4) The amount of cloud was, on the mean of the period, slightly larger over the whole area, excepting the West Punjab, Gujarat, Sind, Rajputana and Central India.

(5) The rainfall, on the mean of the whole period, of the Indian area was practically normal. The local variations were generally small to moderate in amount. The most important features were:—

(*a*) Unusually favourable and abundant rain in Burma Inland.

(*b*) Considerable deficiency in Assam.

(*c*) Large relative deficiency in the Indus Valley and North-West Rajputana of comparatively little importance.

The chief feature of the south-west monsoon period of 1900 was the contrast between the meteorology of the first two months (June and July) and of the last two months (August and September).

During the first period the Bay monsoon currents were of moderate strength but were determined chiefly to North-East India and Burma and hence the rainfall in Northern India was in moderate excess in the eastern half and in large defect in the western half of that area. The following gives data in illustration :—

Area.	Rainfall of period, June and July.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Burma Coast	69·99	76.99	—7·00	—9
„ Inland	23.00	18·97	+4·03	+21
Bengal	32·23	30·20	+2·03	+7
Assam	43·01	43·31	—0·30	—1
Bihar	21·39	20·53	+0·86	+4
Chota Nagpur	17·91	22·58	—4·67	—21
North-Western Provinces and Oudh.	12·05	16·02	—3·97	—25
South-East Punjab	5·77	10·24	—4·47	—44

(2) The Arabian Sea current was much below its normal strength and was greatly delayed. The following statement gives an approximate estimate of the amount of the delay in different parts of the area which usually receives its monsoon rainfall from the Bombay current. :—

Area.	Actual date of establishment of current.	Normal date of establishment of current.	Delay.
Malabar	12th June	3rd June	9 days.
Konkan	25th „	5th „	20 „
Central Provinces	25th „	10th „	15 „
Central India	10th July	15th „	25 „
Rajputana	10th „	15th „	25 „
Gujarat	12th „	11th „	31 „
Kathiawar	11th „	13th „	28 „

The data show that the delay ranged between a fortnight and a month and that the Arabian Sea current was not fully established until nearly the middle of July.

(3) The rainfall over nearly the whole area, including North-Western and Central India and the greater part of the interior of the Peninsula, was hence very largely below the normal. The following gives data :—

Area.	Rainfall of period, June and July.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
North-Western Provinces and Oudh.	12·05	16·02	—3·97	—25
Punjab	4.88	7·26	—2·38	—33
Sind	0·13	2·06	—1·93	—94
Rajputana	5·15	9·01	—3·86	—43
Central India	11·95	19·63	—7·68	—39
Central Provinces	17·74	23·04	—6·20	—26
Berar	13·81	18·76	—4·95	—26
Kathiawar and Cutch	5·68	15·65	—9·97	—64
Gujarat	9·36	24·72	—15·36	—62
Baluchistan	0·45	1·44	—0·99	—69

(4) The more important features of the meteorology of this period were the direct result of the abnormal distribution of the rainfall of the period. Temperature was in large excess, and humidity and cloud in large defect in the areas of deficient rainfall. On the other hand, temperature was in slight defect and humidity and cloud in slight excess in the areas of increased rainfall. The following gives variation data in illustration for the area of scanty rainfall in June and July.

Meteorological Province.	June and July.			
	Variation from normal of mean temperature.	Variation from normal of mean aqueous vapour pressure.	Variation from normal of mean relative humdty.	Variation from normal of mean cloud amount.
	°	"		
Gangetic Plain and Chota Nagpur	+1·1	—·012	—4	+0·2
Upper Sub-Himalayas	+2·2	·036	—6	—0·6
Indus Valley and North-West Rajputana	+3·2	+·022	—4	—1·4
East Rajputana, Central India and Gujarat	+4·2	—·060	—12	—2·7
Deccan	+3·2	—·012	—5	—0·4

The chief features of the distribution of the rainfall and meteorology of the second period were as follows :—

(1) The Bay current was throughout the period of normal strength but was determined more largely than usual to the Gangetic Plain and Upper India. The rainfall of

the period was hence in defect in Assam and North and East Bengal, as shown below :—

Division.	Rainfall of period, August and September.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Assam Surma	22·19	38·97	−16·78	−43
„ Brahmaputra	15·69	26·74	−11·05	−41
„ Hills	21·53	41·43	−19·90	−48
Eastern Bengal	21·75	27·45	− 5·70	−21
North „	19·25	32·86	−13·61	−41

(2) The rainfall of the period in the intermediate belt or trough of low pressure, including South-West Bengal, Orissa, Chota Nagpur, the Central Provinces and Rajputana was excessive, due to a succession of cyclonic-storms which traversed that area during the period.

Division.	Rainfall of period, August and September.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Deltaic Bengal	42·39	20·69	+21·70	+105
Central „	23·65	20·73	+2·92	+14
Orissa	36·90	22·67	+14·23	+63
Chota Nagpur	30·92	22·09	+ 8·83	+40
Central Provinces East	36·34	20·11	+16·23	+81
„ Central	33·37	20·81	+12·56	+60
„ West	30·54	18·67	+11·87	+64
Rajputana East and Central India West.	21·09	13·49	+7·60	+56
West Rajputana	10·20	5·40	+4·80	+89

(3) The rainfall due to the Bay current was larger than usual over the whole of Northern India with the exception of Bihar, where it was in slight defect. The following gives data for the areas not included in (1) and (2) :—

Division.	Rainfall of period, August and September.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Bihar North	18·71	22·39	−3·68	−16
„ South	16·48	18·82	−2·34	−12
North-Western Provinces East	17·60	17·68	−0·08	0
Oudh	19·55	16·99	+2·56	+15
North Oudh	16·58	17·66	−1·08	−6
North-Western Provinces, Central	18·93	16·05	+2·88	+18
„ West	17·07	12·32	+4·75	+39
„ East Submontane.	19·35	18·69	+0·66	+4
„ West „	22·30	20·49	+1·81	+9
„ Hills	22·19	24·60	−2·41	−10
South-East Punjab	19·13	10·16	+8·97	+88
South „	16·39	6·51	+9·88	+152
Central „	11·26	7·08	+4·18	+59
Punjab Submontane	26·53	12·19	+14·34	+118
„ Hills	31·80	23·07	+8·73	+38
North Punjab	10·00	6·72	+3·28	+49
West „	3·43	2·91	+0·52	+18

(4) The rainfall was more or less in excess in the area exclusively dependent upon the Bombay current, as shown below :—

Division.	Rainfall during period, August and September.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Kathiawar and Cutch	23·13	10·98	+12·15	+111
Gujarat	25·15	17·49	+7·66	+44
Malabar	38·20	29·22	+8·98	+31
Konkan	53·24	38·92	+14·32	+37
Baluchistan	1·22	0·88	+0·34	+39
Khandesh	16·17	12·96	+3·21	+25
Berar	17·80	16·23	+1·57	+10
Mysore	12·44	9·86	+2·58	+26

(5) The variations of the other elements of meteorological observations including pressure, temperature, aqueous vapour pressure and cloud were directly dependent upon the strength and extension of the humid currents. The distribution of rainfall, pressure and temperature hence varied very slightly from the normal over the greater

part of the area and humidity and cloud were in excess. The following gives data :—

Meteorological Province.	Mean variation of				
	Pressure.	Mean temperature.	Aqueous vapour pressure.	Relative humidity.	Cloud.
	"	°	"		
Burma Coast and Bay Islands	—·007	+0·7	+·021	—2	+0·2
Burma Inland	+·012	—0·2			
Assam	+·017	+1·1			
Bengal and Orissa	+·001	+0·4	+·012	0	+0·7
Gangetic Plain and Chota Nagpur.	—·001	—0·3	+·001	0	+0·9
Upper Sub-Himalayas	+·019	—0·6	+·060	+8	+1·4
Indus Valley and North-West Rajputana.	+·011	+1·9	+·056	+1	—0·2
East Rajputana, Central India and Gujarat.	—·014	0	+·089	+8	+1·4
Deccan	—·013	+0·2	+·017	0	+0·5
West Coast	+·012	+1·0	+·014	—3	+0·2
South India	+·007	+0·8	+·016	—1	+0·8

The information at present available for discussing the meteorology of the south-east trades region of the Indian Ocean is very limited.

The following gives variation data of the Royal Alfred Observatory, Mauritius, for nine months of the year, deduced from a comparison of the means of 1900 with normal means based on the observations of the previous 25 years :—

Mauritius.

Month.	Variation from normal of pressure.	Variation from normal of rainfall.	Percentage variation of rainfall.	Variation from normal of hourly wind velocity in miles.	Percentage variation of wind velocity.
	"	Inches.			
January 1900	+·041	—3·56	—52	—2·3	—21
February	+·019	—1·99	—29	—3·5	—31
March	—·014	+0·86	+10	—1·3	—13
April	—·018	—2·20	—41	—0·5	—5
May	—·017	—2·86	—68	—0·5	—5
June	—·022	—0·61	—31	—2·1	—19
July	+·024	+0·02	+1	—1·0	—8
August	+·009	—0·65	—27	—2·4	—19
September	—·002	—0·56	—54	—1·8	—15

The most remarkable feature of the meteorology of the period at Mauritius was the decreased air movement in every month of the period.

The rainfall was in considerable to large defect in seven months and was practically normal in the remaining two months. The deficiency in the nine months was 11·55 inches or 29 per cent. of the normal. Pressure was in steady moderate defect from March to June, in moderate excess in July, and normal in August and September.

In the following table a similar comparison is given for Zanzibar, the normal means being deduced from the observations of nine years :—

Zanzibar.

Month.	Variation from normal of pressure.	Variation from normal of rainfall.	Percentage variation of rainfall.	Variation from normal of hourly wind velocity in miles.	Percentage variation of wind velocity.
	"	Inches.			
January 1900	+·022	+1·50	+51	—1·0	—12
February "	+·025	+1·53	+51	—1·2	—18
March "	+·032	+2·63	+51	—0·8	—14
April "	+·040	+2·86	+24	—1·8	—25
May "	+·006	+1·11	+13	—0·8	—10
June "	+·020	—0·01	—1	—1·3	—14
July "	—·005	+2·98	+141	—2·5	—29
August "	+·010	—0·51	—28	—0·8	—11
September "	+·026	+1·97	+126	—0·2	—3

The preceding data indicate that the air movement at Zanzibar in 1900 was as steadily below the normal throughout the whole period as at Mauritius. Pressure was, on the other hand, above the normal in eight months out of the nine, and the rainfall in considerable to large excess in seven months. The most important features in the meteorology of the south-east trades region, as indicated by the data of these two stations, were the feebleness of the gradients during practically the whole period due to decreased pressure at Mauritius and increased pressure at Zanzibar and the decreased air movement. The winds at both stations averaged 15 per cent below their normal intensity.

The following table gives the mean pressure differences between Mauritius and Zanzibar and Mauritius and the Seychelles (determined from the data of the six years, 1894-99) and the actual differences in the corresponding months of the year 1900 :—

Month.	Pressure difference.					
	Mauritius minus Zanzibar.			Mauritius minus Seychelles.		
	Mean of 1894 to 1899.	Mean of 1900.	Variation.	Mean of 1894 to 1899.	Mean of 1900.	Variation.
	"	"	"	"	"	"
January	+·020	+·078	+·058	+·015	+·068	+·053
February	—·012	+·030	+·042	—·012	+·033	+·045
March	+·049	+·024	—·025	+·056	+·027	—·029

Month.	PRESSURE DIFFERENCE. Mauritius minus. Zanzibar. Mean of 1894 to 1899.	Mean of 1900.	Variation.	Mauritius minus Seychelles. Mean of 1894 to 1899.	Mean of 1900.	Variation.
	"	"	"	"	"	"
April	+·058	+·022	—·036	+·108	+·097	—·011
May	+·064	+·038	—·026	+·167	+·137	—·030
June	+·052	+·036	—·016	+·216	+·172	—·044
July	+·086	+·116	×·030	+·232	+·252	+·020
August	+·111	+·105	—·006	+·246	+·226	—·020
September . . .	+·110	+·101	—·009	+·213	+·200	—·013
Mean of whole period .	+·060	+·061	+·001	+·138	+·135	—·003
Mean of June to September.	+·090	+·090	0	+ 227	+·213	—.014

The preceding data establish that the pressure differences or total gradients between Mauritius and the equatorial belt as represented by Zanzibar and the Seychelles were less than the mean of the five years 1894-99 from March to June, and also in August and September or throughout nearly the whole of the hot weather and monsoon periods. The decrease in the gradients was considerable, averaging, as measured by the differences of pressure, between Mauritius and the Seychelles 50 per cent. in March, and 20 per cent in May and June, in which months the decrease was greatest in actual amount.

The following table gives a comparison, week by week, from the 1st of May to the end of September, of the air pressure and velocity of the air movement at Port Victoria, Seychelles, in the six years 1895, 1896, 1897, 1898, 1899 and 1900:—

Week.	10 A.M. pressure reduced to sea-level and constant gravity at Lat. 45°.	1900. Hourly wind velocity in miles.	1899. Hourly wind velocity in miles.	1898. Hourly wind velocity in miles.	1897. Hourly wind velocity in miles.	1896. Hourly wind velocity in miles.	1895. Hourly wind velocity in miles.
1st to 7th May	29·920	4·9	5·7	3·1	7·1	5·3	5·9
8th to 14th "	·963	6·3	4·4	2·4	6·4	8·3	3·6
15th to 21st "	·910	3·4	7·5	7·9	6·2	10·1	3·7
22nd to 28th "	·907	5·4	19·5	7·5	6·9	9·4	6·4
29th May to 4th June	·933	8·8	10·9	7·5	4·5	9·4	9·9
5th to 11th "	·927	9·6	8·3	10·8	7·3	9·5	12·9
12th to 18th "	·978	9·8	12·2	13·7	7·8	11·8	11·6
19th to 25th June	29·950	8·9	13·5	10·3	9·0	9·9	10·3
26th June to 2nd July	30·004	11·5	11.7	13·0	4·0	10·7	13·0
3rd to 9th "	29·980	9·8	15·9	13·9	11·3	12·6	9·7
10th to 16th "	·973	13·9	14·8	12·2	10·0	11·9	11.3
17th to 23rd "	·949	11 3	13·3	8·9	9·2	12·6	14·0
24th to 30th "	·950	12·4	14·8	11·5	16·8	11·3	11·2
31st July to 6th Aug.	·978	12·9	13·0	12·4	11·5	15 8	13·2
7th to 13th "	·989	13·8	14·2	12·3	9·9	14·0	11·7
14th to 20th "	30·009	15·5	15·3	14·3	13·1	13·7	16·0
21st to 27th "	29·962	14·7	15·8	12 3	12·8	15·5	14·0
28th Aug. to 3rd Sep	·968	12·2	12·2	9·9	8·9	16·1	12·0
4th to 10th "	30·007	10·7	15·0	13·4	16·7	10·8	13·3
11th to 17th "	29·981	11·5	12·8	12·5	10·9	13·3	12·9
18th to 24th "	·989	14·3	7·5	10·3	13·0	12·8	12·1

The considerable delay in the full establishment of the south-west monsoon in India was hence associated with weaker south-east trades than usual. This was strongly exhibited at the Seychelles during the period of the delay. The data of the preceding table appear to indicate that the commencement of the south-west monsoon in the Indian seas is practically coincident with the rise of the air movement at the Seychelles to 12 or 13 miles per hour. The data indicate that the winds were much lighter than usual at that station until the end of the first week of July when a rapid increase occurred and winds were during the remainder of that month and in August above their normal strength. The delay in the strengthening of the winds at the Seychelles antecedent to the full establishment of the monsoon indicated by the data of the preceding table was not due to conditions in either the Indian land or sea area and was almost entirely due to conditions outside of India and probably present in the Indian Ocean.

The data of the preceding four tables indicate that the meteorological conditions in the south-east trades region were abnormal, more especially in the period antecedent to the south-west monsoon and in the month of June. The variations of the actual pressure and of the pressure gradients were not large. The known facts of the distribution of rainfall in South Africa and Mauritius and at the Seychelles and Zanzibar suggest that the south-east trades were considerably below their normal strength during the premonsoon period and the greater part of the monsoon period and also that they were deflected more largely than usual to South and Central Africa during the first two months of the monsoon period.

The following gives the mean direction of the actual and normal air movement at Zanzibar and the Seychelles,

and shows that the direction of the air movement in the south-east trades area was very considerably modified :—

Month.	Zanzibar.		Seychelles.	
	Actual.	Variation. E.	Actual.	Variation. E.
January	N47°E	+12°	N46°W	−3°
February	N41°E	+7°	N22°W	+5°
March	S18°E	−16°	N20°W	+11°
April	S8°W	−13°	N33°W	Large.
May	S3°E	−2°	S44°E	0
June	S10°E	+6°	S35°E	+14°
July	S10°E	+5°	S42°E	+13°
August	S6°E	−3°	S39°E	+3°
September	S2°W	−10°	S51°E	+10°

The retreating south-west monsoon period, October to December 1900.—The following gives mean variation data of this period for eleven meteorological provinces :—

Meteorological Province.	Retreating south-west monsoon period, October to December 1900.							
	Variation from normal of mean monthly pressure.	Variation from normal of mean maximum temperature.	Variation from normal of mean minimum temperature.	Variation from normal of mean aqueous vapour pressure.	Variation from normal of mean relative humidity.	Variation from normal of mean cloud amount.	Total variation from normal of average actual rainfall.	Percentage variation from normal of rainfall.
	"	°	°	"			Inches.	
Burma Coast and Bay Islands.	+·009	+0·6	+0·6	−·002	−3	−0·2	−5·18	−35
Burma Inland	+·010	+0·9	+1·0				−0·36	−6
Assam	+·014	+1·8	0				−2·18	−3
Bengal and Orissa	+·018	+1·5	+0·3	−·002	−3	−0·4	−3·65	−57
Gangetic Plain and Chota Nagpur.	+·016	+0.4	+1·2	+·018	0	+0·2	−0·10	−3
Upper Sub-Himalayas.	+·017	−1·1	+2·7	+·028	+5	+0·8	+0·67	+63
Indus Valley and North-West Rajputana.	+·014	−0·3	+2·4	+·021	+1	+1·0	+0·35	+92
East Rajputana, Central India and Gujarat.	+·008	+1·1	+2·2	+·011	+1	+0·1	−0·47	−44
Deccan	+·022	+2·8	+2·1	−·045	−7	−0·6	−3·18	−72
West Coast	+·009	+1·9	+1·6	−·010	−5	−0·9	−6·89	−59
South India	+·021	+1·5	+1·0	+·010	−2	+0·2	−4·08	−24

The following summarizes the chief features of the period :—

(1) The mean pressure was above the normal over the whole Indian area. It was most largely in excess in the Deccan (+·022″) and South India (+·021″).

(2) The maximum temperature of the period was in excess in all divisions, except the Upper Sub-Himalayas and the Indus Valley and North-West Rajputana. The excess was greatest in the Deccan (+2°·8) and the West Coast (+1°·9).

The minimum temperature was normal in Assam and more or less in excess in all other divisions. The excess was most marked in the Upper Sub-Himalayas (+2°·7) and Indus Valley and North-West Rajputana (+2°·4).

The mean temperature of the period was above the normal over the whole area. The mean variation for the period was 2°·5 above the normal in the Deccan, where it was greatest, and 1°·8 in the West Coast and 1°·7 in East Rajputana, Central India and Gujarat.

(3) The mean absolute humidity was practically normal over the whole Indian area except the Deccan, where the aqueous vapour present in the air was in slight defect in amount. The mean relative humidity was 7 below the normal in that area, 5 below in the West Coast and 5 above in the Upper Sub-Himalayas. The variations in the remaining districts were small.

(4) The rainfall of the period was in moderate to considerable excess in Baluchistan and North-Western India due to more frequent cold weather depressions than usual, more especially in December. The following gives data in illustration :—

Area.	Rainfall during the retreating south-west monsoon period, October to December.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Baluchistan	4·41	1·81	+2·60	+144
Punjab	1·36	0·88	+0·48	+55
Rajputana	0·60	0·58	+0·02	+3
North-Western Provinces and Oudh.	2·57	1·93	+0·64	+33

(5) The precipitation was much heavier than usual in the Western-Himalayas in December.

(6) The rainfall was more or less scanty in the areas which usually receive moderate to heavy rainfall from the retreating south-west monsoon, including Lower Burma, Bengal, Orissa and the Peninsula, except South Madras which received slightly more than usual.

Division.	Rainfall during the retreating south-west monsoon period, October to December.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Lower Burma	8·18	12·59	−4·41	−35
Bengal	2·10	5·48	−3·38	−62

Division.	Rainfall during the retreating south-west monsoon period, October to December.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage veriation from normal.
	Inches.	Inches.	Inches.	
Orissa	7·53	8·26	—0·73	—9
Berar	0·04	3·67	—3·63	—99
Central Provinces	1·61	2·79	—1·18	—42
Bombay Deccan	1·08	6·24	—5·16	—83
Madras ,,	3·46	7·43	—3·97	—53
Hyderabad	0·88	4·62	—3·74	—81
Bombay Coast	4·27	10·21	—5·94	—58
Madras ,,	11·68	17·20	—5·52	—32
Mysore	6·02	8·68	—2·66	—31

(7) The rainfall of the period was very irregularly distributed in South Madras, as is shown by the following data :—

District.	Rainfall during the retreating south-west monsoon period, October to December.			
	Average actual, 1900.	Average normal.	Variation of actual from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Chingleput	16·87	26·64	—9·77	—37
Tanjore	26·72	27·31	—0·59	—2
Trichinopoly	13·09	16·34	—3·25	—20
Madura	16·05	16·68	—0·63	—4
Tinnevelly	22·32	16·53	+5·79	+35

The more noteworthy features of the period were :—

(1) The early withdrawal of the south-west monsoon currents from the Bay.

(2) The earlier commencement of unsettled weather in North-Western India than usual.

(3) The large and increasing excess of temperature in the Deccan area and Central India.

The peculiar character of the monsoon currents of 1900 has been already pointed out.

The monsoon current in the Arabian Sea was very feeble in June and July and strong in August and September. It withdrew from practically the whole sea area during the month of October.

The change was very rapidly effected in a period of about a week, extending from the 28th or 29th of September to the 6th or 7th of October. On the 28th September south-westerly to westerly winds obtained over the greater part of the Arabian Sea. Light and variable winds, chiefly from directions ranging between north-west off the west coast of India, and north-east and east in the centre and west of the sea, prevailed during the next fortnight to the north of Lat. 4° N. During the first week of this period a considerable rise of pressure occurred in the Persian area. Pressure decreased to some extent during the second week of the month in that area. On the 18th and 19th a further rapid increase occurred in the Persian area, establishing marked high pressure conditions which held fairly steadily during the remainder of the month. Steady north-east winds set in about the same time over the Arabian Sea and prevailed over the whole sea area to the north of the equator from the 20th of October to the end of the period. The suddenness and rapidity of the change from south-west monsoon conditions to north-east monsoon conditions in the Arabian Sea in 1900 contrasted with the comparative slowness of the change in the Bay of Bengal is very striking.

The Bay current was vigorous throughout the whole period from June to September.

The chief abnormal features of the distribution of pressure of the month of September were a moderate to considerable excess of pressure in the submontane districts of Northern India and in Assam, East Bengal and Upper Burma (greatest in the latter area) and a moderate to considerable deficiency in the north-east and centre of the Peninsula.

During the first fortnight of October the Bay current continued to be determined northwards to Bengal and Burma. The one storm of this period followed a northerly course, which was, in fact, marked out for it by the lie of the axis of the low pressure area in the Bay. Northerly winds set in over the head of the Bay on the 13th and 14th after the dispersion of the storm of the second week of the month and extended rapidly over the north and east of the Bay. Westerly winds continued in the south and south-west of the Bay during the remainder of the month and a low pressure area or belt with easterly winds to the north and westerly winds to the south lay over the southern half of the Bay from the 17th to the 24th or 25th. A cyclonic storm formed in that area on the 22nd and advanced north-westwards to the Coromandel Coast on the 24th, and was broken up in Southern India during the next 24 hours. Pressure increased in the north of the Bay, and moderate and increasing gradients for north to north-east winds were established before the end of the month.

North-east winds held with unusual steadiness over the north, centre and west of the Bay from the first week of November to the end of December. Occasionally, the gradients for these winds were unusually steep, and strong north-east to east winds obtained on the Coromandel Coast and gave showery weather for brief periods, chiefly in the coast districts and the most southern districts, including Tinnevelly and Madura. Feeble north-east monsoon conditions were hence established in the Bay to the north of Lat. 8° N. in the first week of November, about a month or six weeks earlier than usual.

The larger changes of the abnormal pressure features in India during this period, from October to December, were very interesting. The area of excess pressure, which in September lay over Northern India, extended across Central India into the Deccan in October, when the excess was greatest in Berar and the adjacent districts of the Central Provinces and Central India. Pressure continued

locally in defect in the southern half of the Peninsula and in Burma and the Bay, the deficiency being greatest in the Andaman Sea.

The area of excess pressure extended southwards in November over Southern India, Burma and the Bay, whilst a wave of low pressure appeared in North-Western India and North Bombay. The excess was greatest in the Coromandel districts, from Vizagapatam to Negapatam, and the deficiency in the Indus Valley and in North Bombay.

In December the excess in the Peninsula continued, but was less prominent than in December. The deficiency in North-Western India was replaced by a very slight excess, whilst the area of low pressure in North Bombay had intensified and extended. It was defined by the stations of Veraval, Deesa, Ajmer, Neemuch and Malegaon. This area of low and deficient pressure was important, as there was a very marked tendency during the next three or four months for feeble cold weather disturbances and cyclonic storms to originate in it

The following table gives the pressure anomalies of the eleven meteorological provinces of India for the months of September, October, November and December and illustrates the previous remarks :—

Meteorological Province.	Pressure anomaly.					
	September 1900.	October 1900.	November 1900.	December 1900.	Mean of October to December 1900.	Mean of November and December 1900.
	"	"	"	"	"	"
Burma Coast and Bay Islands.	—·002	—·033	+·004	+·007	—·007	+·006
Burma Inland . .	+·029	—·013	—·004	—·001	—·006	—·003
Assam	+·032	—·005	—·003	+·001	—·002	—·001
Bengal and Orissa. .	+·011	—·002	+·003	+·006	+·002	+·005
Gangetic Plain and Chota Nagpur.	+·003	+·007	—·010	+·004	0	—·003
Upper Sub-Himalayas .	+·022	+·007	—·015	+·011	+·001	—·002
Indus Valley and North-West Rajputana.	+·010	+·015	—·024	+·004	—·002	—·010
East Rajputana, Central India and Gujarat .	—·009	+·012	—·009	—·018	—·005	—·014
Deccan . . .	—·020	+·014	+·011	—·008	+·006	+·002
West Coast . . .	—·002	—·011	0	—·009	—·007	—·005
South India . . .	—·009	—·011	+·017	+·008	+·005	+·013

The data of the preceding table show a marked tendency to local excess of pressure in the Peninsula during the period, October to December. It was most marked in the Deccan in October, when the monsoon currents were withdrawing from North-Eastern India, and was greatest in Southern India during the remainder of the period.

The pressure conditions of the period were favourable to the determination of the retreating south-west monsoon to the South Madras coast districts and Southern India in October only, whilst they were unfavourable to their diversion to the Deccan and North Madras throughout the whole period. They were favourable in Burma, and more especially in Upper Burma. The rains continued until the end of October in Burma.

The following table shows the character of the rainfall distribution during this period in the Peninsula :—

Division.	Rainfall of period, October to December.			
	Average actual, 1900.	Average normal.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Malabar Coast	7·89	13·55	—5·66	—42
Mysore	6·02	8·68	—2·66	—31
Madras (South Central) . .	7·76	11·19	—3·43	—31
" (East Coast North) .	5·84	10·33	—4·49	—43
" (Central) . . .	3·46	7·43	—3·97	—53
" (East Coast Central) .	11·91	18·87	—6·96	—37
" (" South) .	17·29	22·40	—5·11	—23
" (South) . . .	18·88	16·61	+2·27	+14

The third important feature of the period was the excessive temperature in the area including Berar, the Central Provinces, Khandesh and the neighbouring districts of the Deccan and Central India. Temperature was more or less in defect in that area in October, a legacy of the heavy rainfall of the two preceding months. Partly, in consequence of the absence of rain in October and November temperature increased rapidly, relatively to the normal, and was in remarkably large excess in December. The following tables giving temperature, aqueous vapour pressure and cloud data for representative stations in that area show the chief features and combination of conditions :—

Station.	Variation from normal of maximum temperature.		
	October.	November.	December.
	°	°	°
Malegaon	+3·2	+5·2	+7·8
Khandwa	+2·0	+6·4	+6·4
Akola	+1·2	+3·4	+6·6
Amraoti	+0·7	+3·2	+5·2
Chanda	+0·3	+2·9	+5·2
Nagpur	+0·5	+3·2	+5·6
Seoni	—0·8	+2·7	+4·7
Raipur	—2·3	+1·8	+5·5
Jubbulpore	—1·5	+2·0	+3·6
Sutna	—2·7	+1·8	+1·4
Nowgong	—3·4	?	—1·1
Bijapur	+4·6	+4·4	+4·8

Station.	Variation from normal of minimum temperature.		
	October.	November.	December.
	°	°	°
Malegaon	—3·2	+2·4	+9·2
Khandwa	—5·0	+1·5	+10·8
Akola	—4·7	—0·2	+9·4
Amraoti	—1·4	?	+6·6?
Chanda	—1·7	—0·1	+10·3
Nagpur	—2·1	+0·1	+7·8
Seoni	—2·9	+0·2	+7·4
Raipur	—1·7	+0·4	+7·0
Jubbulpore	—2·6	+1·0	+9·7
Sutna	—0·6	+3·5	+8·2
Nowgong	—2·6	+3·2	+7·8
Bijapur	+0·4	+2·1	+7·1

Station.	Variation from normal of mean temperature.		
	October.	November.	December.
	°	°	°
Malegaon	0	+3·8	+8·5
Khandwa	—1·5	+4·0	+8·6
Akola	—1·8	+1·6	+8·0
Amraoti	—0·4	?	+5·9?
Chanda	—0·7	+1·4	+7·8
Nagpur	—0·8	+1·7	+6·7
Seoni	—1·9	+1·5	+6·1
Raipur	—2·0	+1·1	+6·3
Jubbulpore	—2·1	+1·5	+6·7
Sutna	—1·7	+2·7	+4·8
Nowgong	—3·0	?	+3·4
Bijapur	+2·5	+3·3	+6·0

Station.	Variation from normal of aqueous vapour pressure.		
	October.	November.	December.
	"	"	"
Khandwa	—·084	+·009	+·083
Akola	—·148	—·056	+·067
Nagpur	—·104	—·031	+·120
Buldana	—·156	—·095	+·015
Sholapur	—·170	—·107	—·034
Poona	—·096	—·072	+·027

Station.	Variation from normal of cloud amount.		
	October.	November.	December.
Khandwa	—1·2	—0·2	+0·8
Akola	—1·6	—0·5	+1·4
Nagpur	—0·6	0·8	+1·6
Buldana	—1·1	—1·2	—0·3
Sholapur	—2·2	—0·9	—1·2
Poona	—1·8	—0·4	—0·5

The data of the preceding table indicate that the area, including Khandesh, Berar, the Central Provinces and adjacent districts of Central India, had unusually high temperature, both by day and night, in December, and that the air was also damper and contained more aqueous vapour than usual, and that skies were more clouded than usual.

The most remarkable feature of this period in the large area of excessive temperature was the extreme unsteadiness of the winds. This is shown by the following data for all second class stations in the area :—

Station.	Wind steadiness.					
	October.		November.		December.	
	Actual.	Variation from normal.	Actual.	Variation from normal.	Actual.	Variation from normal.
Nagpur	35	14	25	—35	18	35
Khandwa	39	+4	59	+7	32	—10
Akola	52	+20	54	+5	36	21
Buldana	67	+18	58	+6	21	—22
Pachmarhi	52	+20	45	+4	32	+11
Chikalda	33	7	18	—1	27	+19

The data show that this feature of abnormal unsteadiness of the winds was most strongly exhibited in the month of December when the day temperature was, on the whole, most largely in excess.

Winds differed very irregularly in strength from the mean of the period, but were on the average of all stations, slightly feebler than usual, as is shown below :—

Station.	Wind velocity in miles per diem.					
	November.			December.		
	Actual.	Normal.	Percentage variation from normal.	Actual.	Normal.	Percentage variation from normal.
Nagpur	88	95	—7	70	83	—16
Khandwa	58	64	—9	88	62	+42
Akola	57	85	—33	66	80	—18
Buldana	122	122	0	162	132	+23
Chikalda	125	114	+10	135	117	+15
Sutna	62	77	—19	60	86	—30
Raipur	53	79	—33	65	62	+5
Jubbulpore	43	43	0	60	43	+40

The previous data have shown clearly the chief features of the meteorological conditions of the period accompanying the large excess of temperature, which was a prominent feature of the meteorology of the period.

The year.—The following gives a tabular summary of the meteorological data of the year 1900 for the eleven meteorological provinces of India :—

Provincial meteorological data for the year 1900.

Province.	Bar-variation.	Mean maximum temperature of year.	Variation of year.	Mean minimum temperature of year.	Variation of year.	Mean daily temperature of year.	Variation of year.	Mean daily range.	Absolute range during year.	Mean monthly absolute range.	Rainfall of year.	Normal rainfall of year.	Variation from normal of year.	Percentage variation of rainfall.
	″	°	°	°	°	°	°	°	°	°	Inches.	Inches.	Inches.	
Burma Coast and Bay Islands.	+·008	88·5	+0	74·5	+0·8	81·5	+0·9	14·0	36·4	22·1	132·44	139·74	−2·10	−2
Burma Inland . .	+·009	90·8	+0·6	69·9	+1·1	80·4	+0·9	21·0	56·7	31·8	49·08	46·55	+2·53	+5
Assam . . .	+·008	84·3	+0·8	67·5	+0·7	75·9	+0·7	16·8	51·1	28·2	93·65	104·92	−11·26	−11
Bengal and Orissa .	+·009	87·5	+1·2	69·9	+1·1	78·7	+1·1	17·6	53·4	29·4	72·87	72·75	+0·12	0
Gangetic Plain and Chota Nagpur.	+·009	88·4	+0·5	68·1	+1·2	78·3	+0·9	20·3	65·6	34·1	43·98	44·79	−1·01	−2
Upper Sub-Himalayas .	+·014	86·8	−0·2	65·0	+1·9	76·0	+0·9	22·1	77·3	39·3	38·48	37·82	+0·49	+1
Indus Valley and North-Western Rajputana.	+·014	91·7	+0·8	66·4	+1·7	79·0	+1·2	25·0	84·2	42·6	7·39	9·66	−2·26	−23
East Rajputana, Central India and Gujarat.	+·008	91·2	+1·1	68·7	+2·0	80·0	+1·6	22·4	70·8	36·5	30·18	30·13	+0·07	0
Deccan . . .	+·011	92·4	+2·4	69·0	+2·1	80·7	+2·3	23·5	61·2	34·9	38·75	41·30	−2·48	−6
West Coast . . .	+·013	86·7	+0·2	75·0	+0·9	80·9	+0·6	11·6	30·7	19·0	98·76	103·13	−4·37	−4
South India . . .	+·012	91·6	+1·5	73·0	+1·2	82·3	+1·3	18·5	46·1	28·5	31·86	36·63	−4·67	−13

The mean 8 A. M. pressure of the year was in very slight excess over the whole of India, the excess being greatest in the Indus Valley and North-West Rajputana and Upper Sub-Himalayas (+·014″).

The mean maximum temperature was in excess in all provinces except the Upper Sub-Himalayas, where it was 0°·2 below the normal. The excess averaged 0°·9 for the whole of India and was greatest in the Deccan (2°·4). It exceeded 1° in South India (+1°·5), Bengal and Orissa (+1°·2) and East Rajputana, Central India and Gujarat (+1°·1).

The mean minimum or night temperature was also in general excess. The excess was generally greater than that in the day temperature and exceeded 1° in eight out of the eleven meteorological provinces. It averaged (2°·1) in the Deccan and (2°·0) in East Rajputana, Central India and Gujarat.

The mean temperature of the whole land area was, according to the data of Table I, 1°·1 above the normal, and according to those of Table II, 1°·2 in excess. The variations for the year were less than 1° in six out of the eleven meteorological provinces. The mean temperature of the year was 2°·3 in excess in the Deccan, 1°·6 in East Rajputana, Central India and Gujarat, 1°·3 in South India, 1°·2 in the Indus Valley and North-West Rajputana and 1°·1 in Bengal and Orissa.

The mean rainfall for the whole of India was in considerable excess in the first period of the year, inslight defect in the second, and normal in the third period and in large defect in the fourth. The mean variation for the whole year (taking into consideration the areas represented by the rainfall stations) was —0·57 inch. The deficiency was greatest in percentage amount in the Indus Valley and North-West Rajputana (23 per cent.), South India (13 per cent.) and Assam (11 per cent.). The variations in the remaining provinces were small in percentage amount. Although the rainfall of the year was approximately normal on the mean of the whole area it was much more irregularly distributed, both in locality and time, than usual.

Concluding Remarks.—All the more important features of the meteorology of the year have been stated in the preceding discussion. The following gives a very brief summary of the more interesting and important abnormal features with their probable relations to each other.

The chief feature of the cold weather was the absence of well-marked cyclonic storms and the consequent scanty precipitation of the period in North-Western and Central India. This was, as in four out of the five preceding cold weather periods, a phase of a more general partial failure of the winter rains and snowfall over the large area including Baluchistan, Afghanistan, Persia, Arabia and Asiatic Turkey, the causes of which have not yet been worked out, as their investigation would involve the systematic study of the meteorology of South-West Asia and South-East Europe, and perhaps Central Asia in its relation to that of Southern Asia during the past ten years at least.

As is almost invariably the rule, the scanty precipitation of the cold weather accompanied higher temperature and greater dryness of the air in that period, and was followed

by more pronounced and exaggerated hot weather conditions than usual. Similar conditions obtained throughout the whole hot weather periods of the years—1879, 1880, 1882, 1890, 1892, 1895, 1896, 1897, 1898 and 1899, in all of which the winter rains failed more or less in Western India.

Temperature was in large excess in March, the air unusually dry, and the skies more free from cloud than usual. April and May 1900 were characterized by frequent disturbances in the mountain areas to the north-west of the Punjab and the Kashmir Valley. These disturbances gave late and frequent snow on the higher ranges in these mountain areas which brought the snow line for brief periods considerably below the normal height of the period. This descent of the snow line accompanied a considerable temporary reduction of temperature in Upper India after each disturbance.

This reduction of temperature in Upper India cannot be explained by the slight showers, more or less local in character, which occurred in that area during the month.

The rainfall due to the frequent disturbances was more largely in excess, relatively as well as actually, in Assam, parts of Bengal, Chota Nagpur, the Madras coast districts, Malabar and the Deccan, and yet in all these areas temperature was more or less above the normal in April. In the area the temperature of which is almost invariably affected by heavy snowfall, temperature was slightly to largely reduced below the normal. This area usually includes the Punjab, Upper Sind, the North-Western Provinces and North Rajputana.

The reduction was greatest in the North Punjab, and the Kashmir Valley, the districts nearest to the area of heavy snowfall in the Western Himalayas. The following gives variation data for a few stations :—

Station.	Variation from normal of		
	Maximum temperature, April 1900.	Minimum temperature, April 1900.	Mean temperature, April 1900.
	°	°	°
Murree	—8·6	—5·9	—7·3
Leh	—7·2	—2·7	—5·0
Simla	—5·4	—4·6	—5·0
Ranikhet	—4·9	—3·4	—4·2
Peshawar	—6·0	—3·1	—4·6
Khushab	—6·3	—4·1	—5·2
Lahore	—4·7	—0·2	—2·5
Sirsa	—6·6	—0·7	—3·7
Roorkee	—4·7	—2·0	—3·4
Agra	—5·2	+0·4	—2·4
Allahabad	—2·4	+0·6	—0·9
Darjeeling	+2·7	+0·8	+1·8

Data for Darjeeling are given above in order to show that the reduction of temperature was confined to the western half of the Himalayas, and hence that the abnormal snowfall also occurred only in that area.

The only possible explanation of the decreased temperature in April and May in North-Western India is that it was an effect of heavy snowfall in the adjacent mountain ranges to the north and north-west of the Punjab. The snowfall brought down the snow line to low elevation. This was followed by a large reduction of temperature in the mountain area and by a descent of very cool dry air to the adjacent plains which intermingled with the air over the plains and reduced its temperature and humidity considerably to largely. It may be noted that similar late falls of snow have occurred in the months of April and May in the years 1885, 1891, 1897 and also in the present year (1900).

These falls are apparently not due to disturbances or storms of the ordinary cold weather type, nor are they as a rule due to the march of hot weather depressions from Sind to the Punjab hills.

The only explanation of the origin of the disturbances which give this late snow in the Western Himalayas is based on information respecting the seasonal distribution of snowfall in the area, including the Thibetan and Pamir plateaux which I have received from a resident of Kashmir.

The snowfall in these areas is small in amount in the south-west monsoon proper. Light snow is occasionally received in October and November on the outer snowy ranges. This snow usually melts shortly after it falls and it is not until December that more or less frequent snow commences and accumulates on the outer snowy ranges and the higher valleys over about 10,000 feet in height. These areas usually receive heavy snow in January and February and, under normal conditions, moderate to light snow in March. The snow usually begins to melt sufficiently to give increasing volumes to the large rivers rising in that area and fed by the snow water in April. Weather is generally fine with clear skies over the outer snowy ranges of the Himalayas in April and May.

On the other hand, in the interior snowy ranges, including the Karakoram range and on the high plateaux of Thibet and the Pamirs, the chief snowfalls occur later than in the outer snowy ranges, and generally in March and April and sometimes in May. These falls appear to be due to disturbances which, as a rule, apparently do not affect the plains and hills of Upper India and would hence appear to be due to actions and conditions in Central Asia. This, it may be noted, is confirmed by the fact that there are occasional large pressure changes shown by the high level Kashmir stations which do not extend to Murree or the Punjab plains stations and have no apparent connection with the pressure changes in Northern India.

If this be the case, it is probable that when the disturbances which give snow to the inner snowy ranges and plateaux of South-Central Asia, are more extensive than usual, they may also affect the area of the outer snowy ranges of the Western Himalayas and hence give late and heavy snow in that area. In the absence of accurate data for nearly the whole of that area, it is not possible to verify these statements and suggestions. They are hence given partly for what they are worth and partly as indicating that it may be desirable, if not necessary, to study the meteorology of Central Asia, if we wish to obtain an explanation of some of the abnormal features of the hot weather features or conditions which occasionally have a marked influence upon the distribution of the succeeding south-west monsoon rains.

The years 1879, 1880, 1881, 1882, 1890, 1892, 1895, 1896, 1897 and 1898 were all characterized by scanty winter precipitation and more intense hot weather than usual. The following gives a comparison of the variations of temperature, humidity and rainfall for the hot weather periods of these years :—

Year.	Mean variation during hot weather in Extra-Tropical India of			
	Temperature.	Humidity.	Rainfall.	Percentage variation from normal.
	°		Inches.	
1879	+1·9	—6	—1·17	—22
1880	+1·9	—1	—0·62	—11
1881	—0·6	+3	+0·47	+23
1882	+0·1	—3	—0·35	— 7
1890	+0·7	—1	—0·60	—12
1892	+3·1	—5	—0·37	— 8
1895	+0·6	+1	—0·64	—13
1896	+2·3	—6	—1·01	—21
1897	+0·3	—2	—0·30	— 7
1898	+1·5	—5	—1·53	—33
1899	+1·3	—1	+0·44	+10
1900	+0·5	—1	—0·25	— 4

The character and distribution of the cold weather precipitation can be usually foretold in the beginning of December from the meteorological conditions of the months of October and November and the general character of the previous south-west monsoon rains. The more important principles have been stated in the memoir on the "Cold Weather Storms of Northern India." The forecast of the cold weather precipitation of 1899-1900 was in approximate accordance with facts, and hence a confirmation of the theory upon which these forecasts are based.

In hot weather seasons following cold weather periods in which the precipitation in North-Western India has been scanty and below the normal, there frequently occurs heavier rain than usual in North and East Bengal and Assam. There is also very occasionally a very general burst of rain due to a widely spread disturbance giving rise to numerous and prolonged series of thunderstorms. In the hot weather of 1900 the rainfall was slightly heavier than usual in Assam, but was more or less considerably in defect in Bengal.

The following gives the percentage variation of rainfall from the normal in Assam and Bengal in the hot weather seasons of the years characterized by scanty cold weather precipitation in North-Western India :—

Year.	Assam.	East Bengal.	North Bengal.	South-West Bengal.
	Percentage variation of hot weather rainfall from normal.	Percentage variation of hot weather rainfall from normal.	Percentage variation of hot weather rainfall from normal.	Percentage variation of hot weather rainfall from normal.
1879	—3	—55	—10	—68
1880	—38	+15	+7	+6
1881	+16	+72	+30	+31
1882	—4	+2	—21	—8
1890	—15	+4	—10	—23
1892	+53	+16	+52	—22
1895	—4	+19	—6	—17
1896	+9	—2	+11	—29
1897	—6	—22	+5	—6
1899	—1	+29	—10	+5
1900	+5	—24	—26	—12

The meteorology of the south-west monsoon period of 1900 is of much interest on account of the prolonged delay in the establishment of the Bombay monsoon during the months of June and July and of its subsequent strength and abundant rainfall during the latter half of the monsoon. The most marked feature of the meteorology of the year was the contrast between the character, strength and extension of the Bombay monsoon current, more especially considered as a rain-giving current, in the first and second halves of the monsoon period from June to September.

The conditions in India were on the whole favourable to a normal monsoon as a cold weather of scanty snowfall had been followed by a hot weather of somewhat greater intensity than usual. Late and untimely snow fell in April and the first-half of May, but the effects of this on the pressure and temperature conditions in India passed away before the end of the month. There were no strongly marked abnormal pressure features in India at the end of May or beginning of June likely to affect to any large extent the distribution of the rainfall.

The Bay monsoon extended about the usual date, the middle of June, into Bengal, and the rains in that area were, as is generally the case, initiated by a cyclonic storm. The Bay current was determined more largely than usual in June and July to Burma and North-Eastern India and these areas hence as a whole received abundant rain during that period. Cyclonic storms were not so frequent as usual and advanced in June along curved, but on the whole, northerly tracks into Bengal instead of in

the usual west-north-west direction. Only one storm occurred in July, the normal number being three or four.

A considerable change occurred in the character and extension of the Bay current about the end of July. It was during the following two months determined more largely to the Gangetic Plain and Upper India than hitherto and hence diverted to a larger extent than usual from Assam, Cachar and North Bengal. Also a large number of cyclonic storms formed in the north of the Bay and followed each other in rapid succession along west-north-westerly tracks across the West Bengal, Orissa or Ganjam coasts into the Central Provinces, Rajputana or the North-Western Provinces. These storms were largely fed and maintained by the Bombay current after they had passed into the interior and gave remarkably heavy and general rain to the areas over which they passed.

The distribution of the rainfall due to the Bay current was hence very different in the two periods. In the second period the Punjab, the North-Western Provinces, the eastern districts of Rajputana and Central India, Chota Nagpur, the eastern districts of the Central Provinces, Orissa and South-West Bengal obtained unusually heavy rainfall. The rainfall of the period was, on the other hand, more or less in defect in North and East Bengal and Assam.

The contrast between the two periods of the monsoon was hence strongly marked in North-Eastern India although to a less extent than in Western India.

The Arabian Sea monsoon currents began to give heavy rain on the Malabar and South Konkan Coasts on the 12th June. General and heavy monsoon rain extended to Bombay and the West Deccan and the Central Provinces on the 25th June, to Central India and East Rajputana on the 10th July, and to Gujarat, Kathiawar, West Rajputana and the Punjab in the second week of July.

The full extension of the Arabian Sea current from the coast districts into Upper India hence required about four weeks and was effected by a series of four advances of increasing extension and intensity with intervals of partial breaks and local rainfall. After it was fully established, it held with unusual steadiness throughout August and September and gave abundant rain to by far the greater part of the area dependent on it.

These large abnormal variations in the character and rainfall of the south-west monsoon currents are of peculiar interest. Their explanation would probably throw much light on the atmospheric circulation over the Indian Ocean and South Asia.

It has been pointed out in page 951 that the air movement in the South-East Trades region, so far as it is indicated by the observations recorded at Mauritius and Zanzibar, was steadily below its normal amount throughout the whole period from June to September 1900. The deficiency at Mauritius was large and pronounced throughout the whole period and was large at Zanzibar in June and July and small in August and September. The following gives data of each of the years 1898, 1899 and 1900 for comparison :—

Month.	Variation from normal of hourly wind velocity in miles.					
	Mauritius.			Zanzibar.		
	1896.	1899.	1900.	1896.	1899.	1900.
June	−0·5	−1·2	−2·1	−1·2	−0·7	−1·3
July	−0·4	+2·0	−1·0	−1·3	−1·6	−2·5
August	+0·2	+2·3	−2·4	−1·3	−1·3	−0·8
September	−0·6	−0·2	−1·8	−1·1	−1·0	−0·1

The following corresponding data for the Seychelles show that the air movement was very largely below the normal in June and practically normal from July to September :—

Month.	Variation from normal of hourly wind velocity in miles.		
	1896.	1899.	1900.
June	−1·3	−0·3	−2·0
July	+0·2	+2·5	0
August	+1·4	+0·5	+0·3
September	+0·4	−0·8	−0·2

The wind data indicate that the lower air movement in the south-east trades region was remarkably feeble in June. It was feeble throughout the monsoon period to the end of September at Mauritius, and in July at Zanzibar. It was, on the other hand, normal in character in the northern half of the south-east trades region in August and September. There was hence a fairly well marked contrast between the character of the air movement in the first and second halves of the monsoon period, corresponding roughly to the abnormal variations in the rainfall in India.

The available data throw little light on the causes of the remarkable variations of strength of the permanent south-east trades current over the north and centre of the Indian Ocean and of the neighbouring land areas due to general causes and actions.

The utmost that can hence be definitely stated at the present time is that the large variations of the south-west monsoon rainfall of the past year have been apparently related to abnormal features in the air movement in the south-east trades region, and that these variations are not solely due to actions and conditions in the north and centre of the Indian Ocean, but to conditions and actions in the neighbouring land areas and the south of the Indian Ocean, which determine or accompany large modifications of the general atmospheric circulation over the whole of the Indian Ocean and the Indian monsoon area at least.

The only information for the land areas adjacent to the Indian Ocean is from South Africa. It undoubtedly indicates that the weather conditions were very remarkable in that area during the premonsoon period of April and May. Data are given in pages 951-2 of the variations of pressure at the Mauritius, Zanzibar and the Seychelles. They establish that the gradients for south-east winds in the centre and north of the Indian Ocean were much below their normal value in June and July and were normal or slightly below in August and September.

It is difficult to see how these large variations of pressure conditions over an extensive sea area of remarkably uniform conditions can occur except as a result of large variations of conditions (of temperature, rainfall, etc.) over the neighbouring land areas, or of large variations in the general atmospheric circulation.

The available data indicate that the abnormal character of the Arabian Sea monsoon current was, in part at least, due to the abnormal features or conditions in the south-east trades region, including the central and northern areas of the Indian Ocean.

The following extract from a letter received from Mr. Hutchins, Conservator of Forests, Cape Colony, in May 1900, shows the character of the weather and rainfall in South Africa :—

"Briefly, the weather from last November until now resembles the summer of 1895-96, but the failure of the south-east trade is less marked. In 1895-96 it was obvious and striking. This season the failure of the south-east winds is less strongly marked but there is no doubt whatever as to its partial failure this year in South Africa.

"In the Cape Peninsula (which usually receives its rainfall during the winter season) there have been light unseasonable rains all this summer. To it is ascribed a somewhat unhealthy summer and an unusual plague of mosquitos. At an elevation of 1,500 feet on the slopes of Table Mountain where I have a forest station, my Forester declares that he has never known such a failure of the south-east wind which generally in that locality blows with hurricane force for several days together during the summer.

"The character of the weather in South Africa during the past seven months has been as follows:—

"During November and December the south-east winds were generally below the average. There were strongish seasonable winds towards the end of December. In January the peculiar character of the season became more pronounced. February, which is the average month of maximum south-east trade intensity here was characterised by an almost complete failure of the summer rains. In March, especially towards the latter half, there was a recovery to a normal south-east season. The south-easters that prevailed were of the type known in the suburbs of Cape Town as black south-easters. During April there was again a failure of the south-east trade winds. North-west winds and light rain prevailed presaging an early winter.

"There has been an entire absence of south-easters and heavy winter rains have fallen both along the west coast and in the dry north-west area.

"The conditions in South Africa were hence the opposite to those which prevailed during the preceding summer (1899) in that area but were in several respects similar to those which obtained in the summer of 1895-96 immediately antecedent to the drought and famine of 1896-97."

The preceding remarks indicate clearly the abnormal weather which prevailed in South Africa during the premonsoon period of 1900, and suggest the desirability of a thorough investigation of the relations between the variations of strength of the south-east traues, and of the distribution and amount of the rainfall in the land regions dependent on that current, and the strength of the south-west monsoon and intensity and period of its rainfall. This I hope to take up shortly as a general discussion to be published in the Indian Meteorological Memoirs.

It has already been noted in previous annual summaries that areas of deficient rainfall during the south-west monsoon are characterized by increased or excessive local pressure and areas of excessive rain by deficient pressure. These pressure variations are the opposite to those which usually accompany the corresponding temperature variations in the lower atmospheric strata, and are evidently due to decreased or increased ascensional movement accompanying deficient or increased rainfall respectively.

The following table gives the pressure variations in the areas of increased and deficient rain in June and July:—

	Area.	Variation from normal of mean 8 A.M. pressure.		Pressure anomaly.	
		June.	July.	June.	July.
		"	"	"	"
Area of increased rainfall	Burma	—·006	+·003	—·006	—·004
	Bengal	—·015	+·022	—·015	+·015
	Assam	—·011	+·015	—·011	+·008
	Bihar	+·002	+·016	+·002	+·009
	Chota Nagpur	—·004	+·016	—·004	+·009
	Orissa	—·016	+·021	—·016	+·014
Area of decreased rainfall.	North-Western Provinces and Oudh.	+·004	+·005	+·004	—·002
	Punjab	+·001	—·005	+·001	—·012
	Rajputana	+·005	+·011	+·005	+·004
	Central India	+·003	+·017	+·003	+·010
	Central Provinces	0	+·013	0	+·006
	Berar	+·010	+·013	+·010	+·006
	West Coast	+·013	—·003	+·013	—·010

The abnormal pressure conditions in August and September are given in the following table:—

	Area.	Variation from normal of 8 A.M. pressure.		Pressure anomaly	
		August.	September.	August.	September.
		"	"	"	"
Area of decreased rainfall.	Burma	—·042	+·040	—·017	+·012
	Assam	—·026	+·060	—·001	+·032
	North Bengal	—·019	+·058	+·006	+·030
	East Bengal	—·038	+·057	—·013	+·029
	Bihar	—·023	+·040	+·002	+·012
Area of increased rainfall.	North-Western Provinces and Oudh.	—·030	+·039	—·005	+·011
	Punjab	—·009	+·048	+·016	+·020
	Rajputana	—·040	+·022	—·015	—·006
	Central India	—·051	+·009	—·026	—·019
	Central Provinces	—·043	—·006	—·018	—·034
	Berar	—·027	+·013	—·002	—·016
	West Coast	—·003	+·026	+·022	—·002

The effect of these abnormal pressure conditions on the storm tracks of the period was striking. The tendency of the storms of the rains which form in the north-west of the Bay or in Bengal to move westwards along the trough of low pressure, has been frequently pointed out in previous annual summaries. In consequence of the excess of pressure in North-Western and Western India and the deficiency in North-Eastern India in June and July the trough of low pressure in these months ran in a north-west to north direction generally from the Orissa coast instead of in the normal west-north-westerly direction. Two of the three storms of the period followed a much more northerly course than usual and the third storm after advancing along a west-north-west track through the eastern districts of the Central Provinces, recurved very rapidly to north and passed into Central Bengal. The trough of low pressure was hence considerably displaced from its normal position in June and July and the tracks of storms during the period were similarly displaced following closely that of the trough of low pressure. A comparison of the storm track chart of the year (Plate VI) with those for previous years will show at once this noteworthy feature of the meteorology of the year.

The monsoon currents retreated from North-Western India somewhat later than usual in the latter part of September. The Bay current was determined towards North-Eastern India and Burma, during the first week of October and the one storm which formed in this period advanced along a northerly track into Bengal.

The most important changes during this period occurred in the Persian area, North-Western India and the North Deccan. Pressure increased more rapidly than usual in Persia and was in large excess in that area in the beginning of October. This excess of pressure extended south-eastwards and was a prominent feature of the next six weeks in Central India and the North Deccan. The south-west monsoon also withdrew unusually rapidly from the Arabian Sea and the north and centre of the Bay during this period. This may have been due in part to weakness of the south-east trades and the monsoon which was so conspicuous in June and July and in part to the early and pronounced establishment of high pressure and cold weather conditions in the Persian area.

The monsoon currents withdrew from Burma earlier than usual in the fourth week of October and retreated to the south of the Bay during the first half of November when South Madras and the Coromandel coast districts received frequent showers.

The marine data and charts indicate that north-east winds were established over the whole of the Bay (to the north of Lat. 4° N.) in the third week of November and held steadily in December increasing in intensity with the advance of the season.

The most noteworthy feature of the latter half of this period was the extraordinarily high temperature which prevailed in the fortnight of November and in December in a broad belt of country stretching across the head of the Peninsula and including North Bombay, Khandesh, Berar, the Central Provinces and Central India. The westerly winds in North-Eastern India were weaker than usual during the period, whilst the prevailing easterly winds in the Deccan were stronger than the normal. The intermediate belt formed an area of light variable winds and calms. Frequent shifts of wind between east and west occurred accompanied with large changes in the amount of aqueous vapour pressure in the air and also in the amount of cloud. The combination of these conditions, *viz.*, (1) the prevalence of light variable winds alternating between west and east, (2) large changes of the amount of aqueous vapour present in the air and great deficiency in the amount of aqueous vapour, (3) small and deficient cloud which favoured unusually and abnormally high day temperature and to a considerably less degree higher night temperature than usual. These conditions were marked during the whole period. Similar phases of excessive temperature occurred in the months of November and December in the years 1899, 1898, 1896, 1890 and 1877 and the conditions were similar in these years to those prevailing in the hot period in 1900. In each of these years the high temperature conditions in that area were consequent on the early withdrawal of the south-west monsoon winds, and the absence of rain in October. Data showing the actual conditions will be found in pages 953-54.

Appendix.

The following is a brief statement of the hailstorms which occurred during the year 1900 in the Punjab, the North-Western Provinces and the Central Provinces, the reports of which were received too late to be given in the storm sections of the Monthly Weather Reviews of the year :—

Date. Day, month and year.	Area affected by storm.	Hour of occurrence.	Duration of storm.	Direction from which it came.	Size or weight of largest stones.	Character of storm.	Estimate of damage caused by storm.
1900.	PUNJAB.						
20th Mar.	Part of the Sialkot district.				No information.	Severe.	Damaged crops, necessitating remission of revenue to the extent of 1,266 rupees.
6th April	24 villages in the Pindigheb tahsil of the Rawalpindi district.					Severe.	Damaged the rabi crops severely, necessitating remission of revenue to the extent of 1,241 rupees.
27th Sept.	6 villages in the Shakargarh tahsil of the Gurdaspur district.	8 to 9 A.M.		S			Damaged crops to the extent of 2 to 8 annas.
	NORTH-WESTERN PROVINCES.						
22nd Jan.	About 65 square miles in the Mirzapur district.		30 minutes.	S	Half a seer in weight.		No damage.
23rd ,,	About 18 square miles in the Musafir Khana tahsil and about 160 square miles in the Kadipur tahsil of the Sultanpur district.		20 minutes.	SW			Damaged crops to the extent of 8 to 12 annas in the rupee over an area of about 12 square miles
23rd ,,	6,296 acres in the Azamgarh district.		1 hour.		½ lb in weight.		Damaged crops to the extent of 8 to 12 annas.
1900.	NORTH-WESTERN PROVINCES —*contd.*						
23rd Jan.	119 villages in the Banda district.		15 minutes		Pigeon's egg.		Damaged tiled roofs in three and crops in about six villages.
23rd ,,	A part of the Saidpur tahsil of the Ghazipur district.		30 minutes.		2 lb. ?	Severe.	No information.
23rd ,,	115,486 acres in the Ballia district.	Between 11 P.M. and 1 A.M.	20 minutes.		½ lb.	Severe.	Injured crops to the extent of 3 annas in 209 villages, 4 to 7 annas in 182 villages, 8 to 12 annas in 234 villages and 13 to 16 annas in 167 villages.
23rd ,,	100 villages in the Kunda tahsil of the Pertabgarh district.			NE		Moderately severe.	Injured crops to the extent of six annas or more in 26 villages.
23rd ,,	Bansgaon and Deoria tahsils of the Gorakhpur district.			SW		Severe.	No information.
23rd ,,	40 villages in the Benares tahsil of the Benares district.		15 minutes.		6 ounces in weight.		No information.
23rd ,,	Khutahan and Kerakat tahsils of the Jaunpur district.	Between 6 and 8 A.M.	30 minutes.				Damaged crops severely over nearly the whole of the affected area in the Khutahan tahsil.

Date. Day, month and year.	Area affected by storm.	Hour of occurrence.	Duration of storm.	Direction from which it came.	Size or weight of largest stones.	Character of storm.	Estimate of damage caused by storm.
1900.	NORTH-WESTERN PROVINCES —*concld.*						
31st Jan.	22 villages in the pargana Sitapur, 8 villages in the pargana Labarpur and 40 villages in the pargana Hargam of the Sitapur district.		Half an hour.	W			Damaged crops to the extent of 12 annas in 40 villages and 8 to 10 annas in 30 villages.
31st „	12 villages in the Shahabad tahsil of the Hardoi district.						Damaged crops to the extent of 4 to 12 annas.
1900.	CENTRAL PROVINCES.						
14th Jan.	About 900 square miles in the Nagpur district.	No information.	30 minutes.	W	Gram.	Feeble.	No damage.
14th „	11 villages in the Narsinghpur tahsil of the Narsinghpur district.		30 minutes.	SW		Severe.	Damaged crops severely in five and slightly in six villages.
17th „	About 170 villages in the Bilaspur district.			W	Large.		Injured crops more or less seriously in 159 villages.

TABLE I.—Abstract of Observations taken at 8 A.M. at 218 Stations in India, Burma, etc., in the year 1900.

Table

Abstract of observations taken at 8 A.M.

Number of District.	Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches. Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Temperature of Air. Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
	I.—Burma Coast and Bay Islands				+·008							88·5	+0·9	74·5	+0·8	81·5	+0·9	14·0			36·4	22·1
1	Tenasserim and Bay Islands.	Car Nicobar	25	29·831		29·784	30·038	29·631	·407	·150	80·5	87·3		77·7		82·5		9·6	93·8	69·5	24·3	16·5
		Port Blair	61	29·870	+·020	29·862	30·029	29·608	·421	·158	81·1	88·2		78·1		83·2		10·1	96·6	70·0	26·6	17·4
		Mergui	96	29·836	+·005	29·864	29·985	29·667	·318	·148	79·1	87·9	+0·5	73·8	?	80·9	?	14·1	96·1	64·4	31·7	21·7
		Tavoy	26	29·906	?	29·863	30·072	29·699	·373	·151	76·7	88·6	+0·8	72·4	+1·3*	80·5	+1·1*	16·2	99·2	59·0	40·2	25·0
		Moulmein	94	29·834	?	29·805	30·046	29·588	·458	·183	77·5	89·1	+1·1	73·3	+1·2	81·2	+1·2	15·8	99·4	60·4	39·0	24·7
2	Lower Burma	Rangoon	41	29·877	?	29·855	30·087	29·622	·465	·182	76·7	90·0	+0·8	73·2	+0·3*	8.·6	+0·5*	16·8	105·1	59·5	45·6	25·5
		Bassein	27	29·890	+·007	29·852	30·117	29·588	·529	·188	77·3	88·8	+0·9	74·2	?	81·5	?	14·6	100·2	58·8	41·4	22·2
		Diamond Island	41	29·879	+·008	29·855	30·106	29·561	·545	·183	80·8	85·7	+0·1	77·8	?	81·7	?	7·9	91·6	67·2	24·4	14·9
5	Arakan	Akyab	20	29·875	0	29·838	30·122	29·502	·620	·206	76·5	87·6	+1·5						98·4			
3	Central Burma	Toungoo	183	29·725	+·005	29·852	29·951	29·474	·477	·181	76·5	91·0	+1·0*	70·3	+0·2†	80·7	+0·6†	20·7	107·7	53·1	54·6	30·6
	II.—Burma Inland				+·009							90·8	+0·6	69·9	+1·1	80·4	+0·9	21·0			56·7	31·8
	Central Burma	Thayetmyo	130	29·778*	+·011*	29·863*	30·046	29·486	·560	·209*	77·3	93·2*	+1·0*	71·8*	+1·0*	82·5*	+1·0*	21·4*	110·8	49·5	61·3	31·4*
4	Upper Burma	Minbu	165	29·741	?	29·851	30·026	29·401	·625	·216	76·9	92·4	+0·1†	72·3	+1·8†	82·4	+1·0†	20·1	110·6	53·0	57·6	30·9
		Yamethin	657	29·242	?	29·856	29·488	28·931	·557	·195	76·0	92·7	+0·6*	70·0	+1·3*	81·4	+1·0*	22·7	109·1	52·2	56·9	34·1
		Mandalay	250	29·668*	?	29·870*	29·966	29·323	·643	·234*	77·8	93·1	+0·9	71·9	+1·1	82·5	+1·0	21·2	110·6	55·5	55·[illegible]	31·6
		Kindat	377	29·541	+·007*	29·881	29·852	29·172	·680	·232	71·8	86·5	+0·5*	67·6	+0·8*	77·1	+0·6*	18·9	101·8	51·8	50·0	29·4
		Bhamo	381	29·531	?	29·876	29·850	29·174	·676	·236	71·0	86·9	+0·5*	65·5	+0·5*	76·2	+0·5*	21·4	103·6	44·2	59·4	33·5
4(a)	Burma Hill Stations.	Maymyo									65·0	74·3		53·7‡		64·3‡		21·3‡	88·0	33·0	55·0	33·3‡
		Taungyi									65·6	72·2*	?	57·1*	+0·3*	64·7*	?	15·1*	86·7	37·1	49·6	23·0
		Lashio									66·8	83·6	+1·9	60·4	+0·9	72·0	+1·4	23·2	97·5	42·0	55·5	34·2
	III.—Assam				+·008							84·3	+0·8	67·5	+0·7	75·9	+0·7	16·8			51·1	28·2
7	Surma	Silchar	104	29·807	?	29·865	30·117	29·379	·738	·239	73·5	87·8	+2·1†	68·0	+0·7†	77·9	+1·4†	19·8	100·6	49·5	51·1	31·1
9	Brahmaputra	Sibsagar	333	29·577	+·008	29·876	29·913	29·159	·754	·254	69·6	81·5	−0·6	66·5	+0·6	74·0	0	15·0	97·2	46·4	50·8	26·4
		Dhubri	115	29·762	+·008	29·835	30·095	29·201	·894	·270	72·0	83·6	+0·6	68·1	?	75·9	?	15·5	97·2	45·8	51·4	27·0
	IV.—Bengal and Orissa				+·009							87·5	+1·2	69·9	+1·1	78·7	+1·1	17·6			53·4	29·4
6	East Bengal	Chittagong	87	29·801	+·003*	29·837	30·096	29·386	·710	·228	75·9	86·8	+2·4	70·1	+0·6	78·5	+1·5	16·7	96·5	49·1	47·4	27·2
		Noakhali	43	29·835		29·826	30·132	29·429	·703	·237	75·8	86·6		67·6*		77·1*		18·9*	95·2	46·0	49·2	30·6*
		Comilla	36	29·853		29·838	30·151	29·402	·749	·239	75·5	87·8		69·2		78·6		18·6	98·3	49·1	49·2	29·4
		Sirajganj	49	29·810		29·809	30·126	29·221	·905	·275	73·5	86·7		69·1		77·9		17·6	102·0	48·3	53·7	29·3
		Narayanganj	26	29·850	+·012	29·825	30·169	29·378	·791	·256	75·8	86·7	+0·1	71·1	+0·7	78·9	+0·4	15·6	97·6	50·7	46·9	26·2
		Barisal	13	29·862	+·014*	29·821	30·170	29·411	·759	·259	77·4	87·1	+1·9	71·4	+1·3	79·3	+1·6	15·7	98·3	48·7	49·6	26·8
		Mymensingh	59	29·817	+·010	29·829	30·124	29·267	·857	·258	73·6	84·8	+0·5	69·1	+1·2	77·0	+0·9	15·7	94·7	49·7	45·0	27·1
10	Deltaic Bengal	Faridpur	46	29·832		29·827	30·167	29·351	·816	·263	75·0	86·9		69·3		78·2		17·6	100·8	46·5	54·3	29·2
		Jessore	33	29·834	+·010	29·814	30·167	29·314	·853	·281	76·0	87·7	?	70·5	+0·7*	79·1	?	17·2	102·0	45·1	56·9	29·2
		Calcutta	21	29·843	+·011	29·810	30·189	29·288	·901	·303	76·8	88·6	+2·3	71·6	+1·1	80·1	+1·7	17·0	103·4	50·7	52·7	29·1
		Saugor Island	25	29·830	+·004*	29·799	30·176	29·193	·983	·318	78·4	86·7	+1·3	74·4	+0·8	80·6	+1·1	12·3	100·9	55·0	45·9	23·1
		Krishnagar	47	29·823		29·820	30·164	29·256	·908	·291	76·2	89·0		69·6		79·3		19·4	104·0	45·3	58·7	31·5
		Midnapore	149	29·705		29·804	30·060	29·114	·946	·301	74·1	90·5		71·4		81·0		19·1	106·9	53·2	53·7	30·9
11	Central Bengal	Bankura	258	29·529		29·784‡	29·887	28·889	·998	·300	75·4	89·7		70·9		80·3		18·8	110·6	51·[illegible]	59·2	31·6
		Raniganj	334	29·515		29·805	29·861	28·854	1·007	·298	74·6	89·7		70·0		79·9		19·6	108·5	49·3	59·[illegible]	32·0

* Mean of 11 months. † Mean of 10 months. ‡ Wind observations of 288 days.

I.

at 218 stations in India, Burma, etc., in the year 1900.

Wind direction. Number of winds from: Calm.	N	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour by anemometer (uncorrected).	Mean velocity corrected (where possible).	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity of year.	Mean vapour tension of year.	Mean cloud amount of year.	Rainfall. Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal.	Heaviest rainfall during year.	Station.	Meteorological Province or District.	Number of district.
																			132·44	139·74	−2·10		I.—Burma Coast and Bay Islands.		
29	34	81	24	21	24	47	25	3	3·9	3·9			86	·892	7·5	110			85·63			5·30	Car Nicobar‡	Tenasserim and Bay Islands.	1
5	35	62	12	15	9	64	98	64	7·9		7·4	+7	86	·912	5·8	124			83·92	116·78	−32·86	4·30	Port Blair.		
340	7	2		1	6	3	1	4	2·4	2·1	1·8	+17	88	·862	4·3	137			162·52	170·63	− 8·11	9·61	Mergui.		
330	3	3				15	5	9	1·0				90	·834	3·3	141			235·58	198·57	+37·01	13·10	Tavoy.		
	15	64	34	45	9	27	5	7	2·5	2·8	2·8	0	87	·819	4·1	124	137·55	-13·55	184·26	181·34	+ 2·92	8·26	Moulmein,§		
7	21	65	29	18	49	98	67	11	4·2		4·4	− 5	88	·815	4·8	107	116·89	− 9·89	102·80	95·27	+ 7·53	4·64	Rangoon	Lower Burma	2
130	13	36	13	37	14	22	14	86	4·7		3·8	+24	88	·841	4·5	115	131·54	−16·54	113·54	109·55	+ 3·99	8·04	Bassein.		
23	56	55	41	12	18	61	41	58	9·3	9·3	7·1	+31	80	·857	5·0	104	120·44	−15·44	105·41	118·66	−13·25	6·40	Diamond Island.		
	138	83	68	31	32	5	4	3	2·6		3·7	−30	88	·822	4·6	106	120·09	−14·09	165·35	187·08	−21·73	7·19	Akyab	Arakan.	5
100	36	21	11	104	51	10	2	30	3·3	3·2	3·0	+ 7	83	·785	5·1	111	112·63	−1·63	85·38	79·77	+ 5·61	6·55	Toungoo	Central Burma.	3
																			49·08	46·55	+2·53		II.—Burma Inland.		
73	29	16	14	52	91	18	35	19	3·7		5·1	−27	76	·731	3·7	73	76·08	− 3·08	48·53	37·67	+10·86	4·50	Thayetmyo‖	Central Burma.	3
22	25	2	4	160	32	14	18	88	6·0	7·1			81	·741	4·2	59			34·70	28·06	+ 6·64	2·12	Minbu	Upper Burma.	4
88	32	4		125	79	1	2	34	5·5	5·7			81	·739	4·2	65			45·95	34·46	+11·49	2·93	Yamethin.		
120	33	12	10	37	105	32	4	12	4·9	4·9			76	·730	2·7	50			28·83	33·73	− 4·90	4·25	Mandalay.		
291	28	8	3	9	9	4	1	12	1·2	1·2			91	·729	4·6	225			81·24	71·58	+ 9·66	4·96	Kindat.		
184	19	68	17	3	2	24	24	24	2·3	2·6			87	·678	6·0	83			55·21	73·80	−18·59	2·88	Bhamo.		
													90	·572									Maymyo	Burma Hill Stations.	4(a)
	10	12	4	27	110	140	48	14					76	·492	4·3	106			59·41	64·33	− 4·92	3·48	Taunggyi.		
		Not	reco	rded									85	·572	6·4	94			60·44	58·02	+2·42	3·35	Lashio.		
																			93·65	104·92	−11·26		III.—Assam.		
305		12	30	5	1	1		4	1·3	2·3	2·7	−15	87	·749	5·6	125	138·69	−13·69	108·07	125·33	−17·26	4·00	Silchar¶	Surma.	7
203	47	85	3		9	10	2	6	3·2	2·9	2·4	+21	95	·717	7·0	117	129·16	−12·16	89·45	96·09	−6·64	4·12	Sibsagar	Brahmaputra.	
28	12	78	163	19	22	26	13	4	4·6	5·4	4·7	+15	87	·709	4·6	86	92·14	−6·14	83·44	93·33	−9·89	5·30	Dhubri.		
																			72·87	72·75	+0·12		IV.—Bengal and Orissa.		
1	46	121	38	112	36	1	2	7	5·5	5·4	5·1	+6	84	·774	4·8	86	98·83	−12·83	71·53	105·25	−33·72	4·32	Chittagong	East Bengal.	6
	65	54	60	72	43	41	10	20	3·9	3·6			87	·783	4·6	104	107·63	− 3·63	118·11	118·92	− 0·81	5·28	Noakhali.		
97	40	11	42	73	93	5	1	3	5·3				80	·730	4·3	94	101·97	− 7·97	77·30	89·39	−12·09	3·30	Comilla.		
149	15	21	47	45	45	20	6	17	2·1	2·1			88	·756	5·0	71	78·65	− 7·65	50·34	61·55	−11·21	6·27	Sirajganj.		
25	41	41	53	78	44	31	18	34	5·7		4·5	+27	86	·789	5·4	87	94·57	− 7·57	53·38	73·70	−20·32	2·20	Narayanganj.		
49	39	44	13	48	58	34	10	36	3·6				85	·826	4·8	100	99·81	+ 0·19	81·93	77·95	+ 3·98	4·80	Barisal.**		
215		1	56	73	11	7	1	1	0·6	0·6			87	·745	?	102	104·27	− 2·27	108·12	87·23	+20·89	9·05	Mymensingh.		
200	18	3	20	46	68	8		2	2·0	2·3			89	·799	3·9	95	89·31	+ 5·69	69·89	68·54	+ 1·35	5·45	Faridpur.	Deltaic Bengal.	10
217	17	8	16	38	52	9	4	4	2·1	2·0	3·2	−38	85	·793	4·8	85	88·78	− 3·78	80·11	65·46	+14·65	7·35	Jessore.		
59	52	25	40	31	48	65	15	30	4·3		4·8	−10	83	·796	4·7	90	85·32	+ 4·68	89·32	63·68	+25·64	14·53	Calcutta.		
1	59	51	18	18	85	73	22	23	13·1		10·7	+22	86	·854	5·1	82	83·10	− 1·10	89·81	71·79	+18·02	5·73	Saugor Island.††		
7	33	22	54	60	73	26	41	49	4·0				81	·760	4·2	67	74·27	− 7·27	63·08	54·04	+ 9·04	11·57	Krishnagar.		
67	110	24	5	29	106	8	2	14	2·7	3·5			77	·748	2·6	75	75·92	− 0·92	66·59	55·91	+10·68	5·50	Midnapore.		
205	11	13	35	24	20	7	42	7	2·9	3·4			74	·680	3·9	76	79·08	− 3·08	52·31	56·26	− 3·95	3·12	Bankura	Central Bengal.	11
166	14	9	41	29	9	19	26	52	1·7				76	·685	3·5	69	73·07	− 4·07	49·18	54·30	− 5·12	2·52	Raniganj.		

§ Wind observations of 206 days. ‖ Wind observations of 347 days. ¶ Wind observations of 358 days. ** Wind observations of 331 days. †† Wind observation of 350 days.

Table

Abstract of observations taken at 8 A.M.

Number of District.	Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches. Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Temperature of air. Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
11	Central Bengal (concld.)	Burdwan	99	29·764	+·011	29·812	30·115	29·172	·943	·293	75·9	89·4	+0·6	71·4	+0·9	80·4	+0·8	18·0	106·4	52·0	54·4	30·1
		Naya Dumka	489	29·362		29·819	29·702	28·941	·761	·277	76·6*	88·8*		69·5*		79·2*		19·3*	106·0	50·0	56·0	31·5*
		Berhampore	67	29·796	+·007*	29·812	30·150	29·237	·913	·282	74·9	86·6*	?	70·2	?	78·2*	?	17·0*	107·2	46·9	60·3	28·2*
		Rampur Boalia	70	29·773?		29·793?	30·139	29·168	·971	·283	75·5	87·3		69·5		78·4		17·8	104·5	46·1	58·4	30·2
		Malda	72	29·808*		29·833*	30·151	29·203	·948	·299*	74·5	87·0		68·0		77·5		18·9	104·2	40·2	64·0	31·6
		Bogra	61	29·804		29·818	30·139	29·184	·955	·273	73·7	87·2	+1·2	68·4	+0·7	77·8	+1·0	18·8	106·3	48·2	58·1	31·6
12	North Bengal	Dinajpur	123	29·740	+·015	29·821	30·079	29·147	·932	·283	72·2	86·5*	+0·7*	65·3*	?	75·8*	?	21·0*	104·1	42·0	62·1	35·0*
		Rangpur	123	29·749		29·830	30·077	29·146	·931	·275	73·1	86·1		62·9†		74·2†		22·5†	100·8	39·8	61·0	36·5
		Jalpaiguri	284	29·598	?	29·847	29·932	29·047	·885	·269	71·0	84·8	+1·2	66·4	+1·1	75·6	+1·2	18·4	98·4	47·1	51·3	29·1
		Cooch Behar	156	29·731		29·846	30·068	29·182	·886	·271	71·6	84·6		67·4		76·0		17·2	97·4	45·9	51·5	28·6
17	North Bihar	Purnea	125	29·751	?	29·833	30·114	29·222	·892	·280	71·0*	85·3	?	66·8	+0·8	76·6	?	19·5	103·9	43·3	60·6	32·9
14	Orissa	Balasore	46	29·814	?	29·807	30·161	29·263	·898	·305	76·5	88·7	+1·0	71·4	+1·3	80·1	+1·2	17·3	104·5	53·5	51·0	29·7
		False Point	21	29·839	+·003	29·802	30·180	29·295	·885	·305	78·8	86·4	+0·6	73·4	+1·2	79·9	+0·9?	13·1	103·0	56·0	47·0	24·5
		Cuttack	80	29·777	+·003	29·801	30·130	29·138	·992	·304	77·7	92·5	+1·2	74·2	+1·8	83·4	+1·4	18·3	109·0	59·1	49·9	29·0
		Puri	20	29·844		29·807	30·187	29·078	1·109	·314	79·6	87·4		76·0		81·7		11·4	95·7	61·6	34·1	21·5
	V.—Gangetic Plain and Chota Nagpur.				+·009							88·4	+0·5	68·1	+1·2	78·3	+0·9	20·3			65·6	34·1
15	Chota Nagpur	Hazaribagh	2,007	27·840	+·011	29·816	28·142	27·246	·896	·280	72·7	85·4	+0·3	67·4	+1·3	76·4	+0·8	18·0	107·0	46·9	60·1	31·2
		Ranchi	2,128	27·721	+·017	29·813	28·020	27·149	·871	·287	72·1	85·0	+1·2	66·4	+2·0	75·7	+1·6	18·6	106·3	48·8	57·5	31·1
		Daltonganj	730?	29·103		29·805	29·467	28·569	·898	·312	71·4	90·5		65·7		78·1		24·8	113·1	36·5	76·6	39·1
		Purulia		29·043†		29·821†	29·381	28·304	1·077	·303†	75·0	89·0		71·5*		81·0*		19·0*	110·7	51·3	59·4	31·3*
		Chaibassa	760	29·077		29·797	29·424	28·467	·957	·303	75·1	90·5	+0·7	69·9	+1·3	80·2	+1·0	20·6	110·2	51·8	58·4	32·2
16	South Bihar	Gaya	375	29·447	+·007	29·782?	29·812	28·868	·944	·286	75·1	89·9	+0·1†	69·6	+1·0†	79·8	+0·6†	20·3	111·3	44·9	66·4	33·7
		Dehri	351	29·489		29·801	29·862	28·936	·926	·307	76·1	89·5		70·5		80·0		19·0	111·9	46·3	65·6	33·8
		Patna	183	29·671	+·008	29·811	30·043	29·127	·916	·299	74·4	87·2	?	69·2	+1·0	78·2	?	18·0	107·0	44·4	62·6	31·0
		Arrah	190	29·658		29·804	30·028	29·128	·900	·298	74·0	88·1		68·5		78·3		19·6	107·4	42·0	65·4	33·7
		Buxar	239	29·607		29·806	29·993	29·116	·877	·301	75·2	88·4		69·0		78·7		19·4	108·0	42·9	65·1	33·2
17	North Bihar	Bhagalpur	160	29·696		29·812	30·064	29·096	·968	·283	74·7	87·2		68·4		77·8		18·8	104·7	43·0	61·7	31·7
		Darbhanga	166	29·686	+·005†	29·810	30·058	29·172	·886	·283	73·1	86·0	+0·4	68·8	+0·2	77·4	+0·3	17·2	103·3	45·8	57·5	30·1
		Muzaffarpur	178	29·684		29·820	30·071	29·173	·898	·291	73·5	85·1		67·3		76·7		18·8	104·2	43·3	60·9	31·2
		Motihari	224	29·636		29·823	30·030	29·200	·830	·292	72·8	86·1		65·4		75·8		20·8	104·0	39·0	65·0	34·1
		Chapra	181	29·667		29·806	30·047	29·160	·887	·294	73·5	88·1		68·3		78·3		19·9	107·7	43·4	64·3	33·3
18	N.-W. Provinces (East).	Benares	267	29·569	+·004	29·797	29·952	29·100	·852	·306	74·1	89·3	?	68·3	+1·5	78·8	?	21·0	111·3	39·9	71·4	36·4
		Allahabad	309	29·528	+·003	29·798	29·903	29·074	·829	·304	75·3	90·2	+0·3	66·2	+1·7	79·2	+1·0	22·0	113·1	38·9	74·2	37·8
23	N.-W. Provinces (East Submontane).	Gorakhpur	256	29·594	?	29·814	29·991	29·167	·824	·295	73·4	87·3	?	68·0	+0·8	77·7	?	19·3	107·2	42·6	64·6	32·5
19	South Oudh	Lucknow	368	29·466	+·005	29·800	29·847	29·006	·841	·292	73·2	90·1	+0·5	66·8	+1·5	78·5	+1·1	23·3	112·3	40·1	72·2	38·9
20	North Oudh	Bahraich	403	29·436	+·017	29·809	29·815	28·033	·782	·289	73·3	89·8*	+0·5*	66·7	+1·0	79·0*	+0·7*	21·6	107·1	39·5	67·6	35·8
21	N.-W. Provinces (Central).	Cawnpore	416	29·417	+·009	29·796	29·782	28·960	·822	·278	73·7	90·1	+0·6	67·1	+0·8	78·6	+0·7	23·0	112·0	37·5	74·5	39·0
		Mainpuri	516	29·314	+·011	29·800	29·677	28·840	·837	·289	72·8	89·8	+0·3	66·6	+1·1	78·2	+0·7	23·2	113·2	40·0	73·2	39·7
	VI.—Upper Sub-Himalayas				+·014							86·8	−0·2	65·0	+1·9	76·0	+0·9	22·1			77·3	39·3
24	N.-W. Provinces (West Submontane).	Bareilly	569	29·258	+·014	29·804	29·638	28·811	·827	·290	71·5	87·6	+0·1	66·3	+1·8	77·0	+1·0	21·3	110·5	38·7	71·8	37·1
		Dehra Dun	2,233	27·608	+·002	29·832	27·938	27·195	·743	·262	66·3	81·1	+0·4	61·0	+0·1	71·1	+0·3	20·1	104·5	38·0	66·5	34·5
		Roorkee	887	28·939	+·014	29·817	29·314	28·493	·821	·288	69·4	86·4	−0·8	63·3	+0·8	74·9	0	23·1	112·7	34·8	77·9	40·5

* Mean of 11 months. † Mean of 10 months.

I—*contd.*

at 218 stations in India, Burma, etc., in the year 1900—contd.

Wind direction. Number of winds from: Calm.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N W.	Wind velocity. Mean velocity in miles per hour, by anemometer (uncorrected).	Mean velocity corrected (where possible).	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity of year.	Mean vapour tension of year.	Mean cloud amount of year.	Rainfall. Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal.	Heaviest rainfall during year.	Station.	Meteorological Province or District.	Number of district.
120	41	39	32	11	33	51	18	20	3·0	3·0	3·3	− 9	80	·722	4·7	77	77·88	− 0·88	55·06	55·13	− 0·07	3·92	Burdwan.	Central Bengal—*concld.*	11
102	21	15	54	44	33	24	23	47	1·7	1·9			73*	·685*	4·6	84	80·15	+ 3·85	58·32	57·64	+ 0·68	3·21	Naya Dumka.		
212	10	2	51	4	59	19	5	3	2·3	2·2	3·5	−37	82	·739	4·3	71	79·22	− 8·22	62·25	55·97	+ 6·28	8·70	Berhampore.		
103	46	27	35	42	42	33	24	13	3·6	3·6			80	·736	4·3	73	74·85	− 1·85	54·31	56·50	− 2·19	4·10	Rampur Boalia.		
	49	24	47	56	53	22	43	71	2·9	2·6			81	·713	3·4	67	69·31	− 2·31	51·49	55·37	− 3·88	4·10	Malda.		
					Not	recorde	d.						83	·728	3·1	77	81·51	− 4·51	63·86	67·41	− 3·55	3·60	Bogra.		
	31	70	109	36	23	32	34	30	4·3	6·0			83	·690	5·4	77	76·91	+ 0·09	85·61	69·90	+15·71	8·57	Dinajpur . .	North Bengal.	12
51	9	83	107	30	42	16	22	5	3·3†	3·4†			87	·755	3·2*	78	80·33	− 2·33	72·62	82·18	− 9·56	6·12	Rangpur.		
19	55	91	74	56	17	9	13	31	1·5	1·9			87	·689	2·0	88	100·62	−12·62	106·15	127·76	−21·61	11·66	Jalpaiguri.		
136	5	46	97	65	11		4	1	1·8	1·8			87	·703	4·4	33			91·35	131·13	−39·78	4·68	Cooch Behar.		
84	60	70	33	20	6	12	42	37	3·5*	5·5*	2·4	+129	93*	·752*	4·0	78	70·60	+ 7·40	77·47	64·11	+13·36	5·60	Purnea . . .	North Bihar.	17
66	63	17	4	6	56	85	21	44	4·3				83	·784	4·3	92	82·32	+ 9·68	78·42	65·56	+12·86	5·21	Balasore‡ . .	Orissa.	14
14	59	10	11	17	47	80	59	68	9·6	9·2	9·1	+ 1	85	·858	6·1	74	74·44	− 0·44	73·96	69·87	+ 4·09	6·00	False Point.		
175	2	23	13	4	24	85	35	4	2·6	11·2*	3·4	−24	82	·787	4·8	71	76·99	− 5·99	69·10	63·42	+ 5·68	4·71	Cuttack.		
85	53	13	1	1	7	146	18	39	11·4*				83	·854	3·9	62	66·23	− 4·23	65·16	56·62	+ 8·54	5·37	Puri.		
																			43·98	44·79	−1·01		**V.—Gangetic Plain and Chota Nagpur.**		
37	20	9	40	23	77	37	87	35	8·2	7·3	6·8	+ 7	65*	·539*	5·3	77	76·10	+ 0·90	54·43	52·38	+ 2·05	4·14	Hazaribagh . .	Chota Nagpur.	15
67	15	24	26	26	50	54	39	63	5·4	6·1			69	·557	4·7	84	82·99	+ 1·01	60·07	56·47	+ 3·60	4·30	Ranchi.		
153	10	28	38	59	12	15	7	3	3·6	4·3			74	·587	2·3	75	63·31	+11·69	41·44	45·48	− 4·04	2·58	Daltonganj.§		
220	7	15	19	17	13	6	30	38	1·2				70	·632	2·7	74			48·07			4·75	Purulia . . .		
224	7	12	12	6	5	35	45	19	1·5	1·3			77	·675	2·9	82	76·20	+ 5·80	58·81	54·10	+ 4·71	3·30	Chaibassa.		
59	2	67	19	40	77	62	34	5	5·9	5·4	2·6	+108	72	·646	3·9	61	57·26	+ 3·74	37·19	44·95	− 7·76	3·35	Gaya . . .	South Bihar.	16
19	6	13	68	30	93	96	35	5	5·6	6·3			67	·615	4·2	59	54·81	+ 4·16	37·02	43·11	− 6·09	2·70	Dehri.		
13	4	65	85	35	18	58	57	30	4·3	5·1	3·0	+70	76	·672	4·1	54	55·23	− 1·23	48·88	45·13	+ 3·75	6·12	Patna.		
46	6	16	85	44	28	43	81	16	2·6	2·7			75	·657	3·1	52	57·06	− 5·06	43·34	43·88	− 0·54	8·37	Arrah.		
11	5	9	109	35	26	34	131	5	5·5	5·0			70	·630	3·8	53	54·82	− 1·82	35·27	41·89	− 6·62	2·40	Buxar . . .		
89	9	51	59	51	22	49	26	9	3·6	3·3			77	·686	4·2	65	61·01	+ 3·99	70·06	46·73	+23·33	6·23	Bhagalpur.	North Bihar.	17
60	20	23	92	69	11	23	45	22	3·6		3·6	0	81	·686	3·1	46	58·46	−12·46	43·23	48·99	− 5·76	5·07	Darbhanga.		
244		17	53	35		3	10	3	2·3	2·1			83	·715	2·1	53	56·07	− 3·07	41·75	47·24	− 5·49	4·10	Muzaffarpur.		
1	8	83	140	23	15	42	27	26	4·2				86	·719	1·9	62	55·43	+ 5·57	49·08	52·98	− 3·90	6·58	Motihari.		
87	4	13	100	28	18	66	33	11	2·7	3·3			78	·670	4·0	48	52·25	− 4·25	39·60	42·43	− 2·83	5·27	Chapra.‡		
148	5	22	58	27	7	54	31	13	2·5	2·8	3·9	−28	72	·622	4·1	66	50·54	+15·46	38·88	39·43	− 0·55	5·47	Benares . . .	N.-W. Provinces (East).	18
52	5	42	72	14	11	48	87	34	5·6	6·5	4·6	+41	69	·612	4·0	51	48·47	+ 2·53	35·77	39·44	− 3·67	2·79	Allahabad.		
49	46	87	52	12	23	18	40	38	2·0		2·5	−20	76	·650	4·0	59	52·29	+ 6·71	42·78	51·35	− 8·57	4·36	Gorakhpur . .	N.-W. Provinces (East Submontane).	23
57	26	17	91	20	18	23	99	13	2·6	2·8	3·1	−10	69	·588	4·5	43	46·83	− 3·83	33·44	38·80	− 5·36	3·33	Lucknow . .	South Oudh.	19
67	34	6	142	13	19	3	58	23	3·2	3·0			76	·653	2·7	42			39·76	40·94	− 1·18	6·45	Bahraich . .	North Oudh.	20
163	16	22	48	21	11	32	33	19	2·1				67	·581	2·9	42	41·40	+ 0·60	33·27	31·80	+ 1·47	7·44	Cawnpore . .	N.-W. Provinces (Central).	21
133	19	3	61	13	26	3	95	10	2·2	2·2			65	·549	5·1	45			35·31	33·09	+ 2·22	4·96	Mainpuri.		
																			38·48	37·82	+0·49		**VI.—Upper Sub-Himalayas.**		24
218	3	20	56	19	2	8	9	30	1·9	1·3	3·5	−49	70	·561	3·6	50	47·17	+ 2·83	42·22	49·61	− 7·39	3·80	Bareilly . .	N.-W. Provinces (West Submontane).	
225	12		19	17	8	20	28	12	1·5		1·8	−17	69	·468	4·3	86	79·59	+ 6·41	78·14	88·86	−10·74	3·26	Dehra Dun.		
247	3		8	58	12	1	3	33	3·0		2·5	+20	69	·502	3·6	58	46·57	+11·43	47·72	43·82	+ 3·90	4·04	Roorkee.		

‡ Wind observations of 360 days.

§ Wind observations of 325 days.

Table

Abstract of observations taken at 8 A.M.

Number of District.	Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches. Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Temperature of air. Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
22	N.-W. P., West	Meerut	738	29·081	+·007	29·804	29·473	28·629	·844	·288	70·2	88·2	+0·5	65·2	+1·6	76·7	+1·1	23·0	110·8	38·2	72·6	38·0
26	South East Punjab	Delhi	718	29·106	+·007	29·804	29·478	28·651	·827	·280	72·8	87·6	−1·6	72·3	+1·9	80·0	+0·2	15·3	111·2	42·2	69·0	34·6
28	Central Punjab	Lahore	702	29·120	+·015	29·812	29·546	28·630	·916	·317	70·3	89·4	+0·7	64·2	+2·9	76·8	+1·8	25·2	118·6	34·0	84·6	43·5
27	South Punjab	Sirsa	662	29·181	+·005*	29·826	29·571	28·630	·941	·295	72·8	90·4	−1·1	66·1	+2·6	78·3	+0·8	24·4	117·3	33·5	83·8	42·6
		Patiala	818	29·010		29·816	29·392	28·553	·839	·296	71·3	86·4		64·9		75·7		21·5	112·0	37·0	75·0	37·9
29	Punjab (Submontane).	Ludhiana	812	29·009	+·012	29·811	29·410	28·539	·871	·295	70·0	86·7	?	65·6	+2·4	76·2	?	21·1	115·4	36·6	78·8	38·0
		Sialkot	830	28·995	+·026	29·818	29·395	28·504	·891	·312	70·7	87·8	+0·2	65·1	+3·0	76·5	+1·6	22·7	118·5	35·0	83·5	41·8
		Umballa	892	29·954	+·024	29·804	29·311	28·462	·849	·289	68·1	86·2	−1·4?	64·1	+1·0	75·2	−0·2?	22·1	112·4	34·0	78·4	37·9
31	North Punjab	Rawalpindi	1,676	28·159	+·024	29·848	28·544	27·701	·843	·311	67·1	84·2	+0·1	61·4*	+2·8*	73·0*	+1·4*	25·1*	117·0	31·9	85·1	44·6
	VII.—Indus Valley and North-West Rajputana.		...	...	+·014	...	...	...	...	...	...	91·7	+0·8	66·4	+1·7	79·0	+1·2	25·0	...	...	84·2	42·6
31	North Punjab	Peshawar	1,110	28·750	+·016	29·875	29·197	28·246	·951	·331	67·9	85·0	−0·6	60·5	+1·6	72·8	+0·5	24·5	118·0	30·9	87·1	43·8
32	West Punjab	Khushab	612	29·219	+·028	29·819	29·677	28·694	·983	·329	71·2	89·2	0	64·7	+1·2	77·0	+0·6	24·5	118·4	33·0	85·4	45·3
		Montgomery	558	29·263	+·012	29·801	29·718	28·751	·967	·321	73·7	91·2	?	61·0†	?	74·4†	?	26·5†	119·0	31·0	88·0	46·7
		D. I. Khan	594	29·258	+·008	29·815	29·767	28·709	1·058	·343	70·5	89·6	−0·5	63·6	+1·1	76·6	+0·3	26·0	118·2	33·5	84·7	45·0
		Mooltan	420	29·406	+·005	29·807	29·916	28·876	1·040	·340	72·2	92·2	+1·0	67·3	+2·8	79·8	+1·9	24·9	117·4	34·0	83·4	42·3
47	Sind	Jacobabad	186	29·637	+·008	29·798	30·158	29·135	1·023	·326	74·9	97·6	+2·5	67·5	+2·8	82·5	+2·6	30·1	124·5	34·0	90·5	48·6
		Hyderabad	96	29·751	+·016	29·801	30·201	29·265	·936	·290	75·2	94·6	+1·6	68·9	+0·6	81·8	+1·1	25·8	122·2	36·0	86·2	40·9
		Kurrachee	30	29·854	+·017	29·835	30·259	29·375	·884	·272	76·1	89·6	+1·2	71·2	+1·2	80·4	+1·3	18·4	112·4	40·1	72·3	34·1
51	West Rajputana	Bikaner	771	29·053	?	29·806	29·460	28·564	·895	·291	75·3	92·4	+0·9	69·9	+2·5*	81·2	+1·6*	22·5	118·3	36·1	82·2	39·5
		Pachpadra	380	29·477		29·822	29·881	29·017	·864	·276	74·3	95·0		67·1		81·1		27·9	114·7	26·6	88·1	43·7
		Jodhpur	782	29·053		29·831	29·454	28·593	·861	·280	74·3	92·6		69·2		80·9		23·5	118·8	40·1	78·7	39·2
	VIII.—East Rajputana, Central India and Gujarat.		...	...	+·008	...	...	...	...	...	...	91·2	+1·1	68·7	+2·0	80·0	+1·6	22·4	...	...	70·8	36·5
50	East Rajputana	Jaipur	1,431	28·428	+·010	29·841	28·748	27·953	·795	·274	73·8	90·8	+0·8	67·5	+3·0*	79·2	+2·0*	23·4	113·2	33·0	80·2	40·3
		Kotah	819	29·022			29·381	28·539	·842	·269	77·1	92·0		71·9		82·0		20·1	114·1	46·0	68·1	35·3
		Sambhar	1,254	28·597	+·018	29·839	28·939	28·124	·815	·271	71·9	90·2	+1·4*	66·7	+2·3†	78·5	?	23·5	115·0	33·5	81·5	40·3
		Ajmer	1,611	28·247	+·003*	29·850	28·582	27·813	·769	·262	71·8	89·2	+0·7	66·9	+3·5	78·1	+2·1	22·3	114·4	33·9	80·5	38·1
		Udaipur	1,925	27·949		29·853	28·245	27·557	·688	·248	73·2	88·0		66·1		77·1		21·9	112·1	40·2	71·9	36·6
		Deesa	466	29·411	+·010	29·840	29·742	28·996	·746	·240	76·1	94·6	+1·2	69·0	+2·3	81·9	+1·9	25·6	118·1	41·0	77·1	38·9
46	Kathiawar and Cutch.	Bhuj	395	29·492	?	29·846	29·838	29·061	·777	·242	76·7	91·9	+0·8	69·3	+0·6	80·6	+0·7	22·6	111·8	40·5	71·3	35·5
		Jamnagar	61	29·826		29·833	30·182	29·420	·762	·231	76·6	90·3		68·9		79·6		21·4	107·2	43·2	64·0	34·3
		Rajkot	429	29·460	+·013	29·849	29·749	29·057	·692	·223	75·0	93·9	+1·0	66·9	+1·0	80·4	+1·0	27·1	110·9	40·1	70·8	40·1
		Veraval		29·877	+·008	29·837	30·177	29·507	·670	·203	76·3	85·2	+0·4*	71·6	+0·5*	78·4	+0·4*	13·6	99·6	48·3	51·3	26·5
		Bhavnagar Para	35	29·855	+·001†	29·836	30·156	29·446	·710	·217	76·5	95·1	?	69·0	?	82·0	?	26·0	112·7	41·7	71·0	39·1
49	Central India	Nowgong	757	29·087	0	29·816	29·429	28·639	·790	·270	73·6	89·1	?	67·5	+2·3*	78·4	?	21·6	111·5	37·0	74·5	37·1
		Indore	1,823	28·062	?	29·853	28·331	27·689	·642	·232	74·0	90·6*	+2·4*	65·2	+1·8*	78·6*	+2·2†	24·0*	108·8	36·1	72·7	35·8*
		Neemuch	1,630	28·301†	+·015†	29·917†	28·545	27·845	·700	·237†	73·3	89·3	+0·8	66·1	+1·9?	77·8	+1·3?	23·3	109·6	38·6	71·0	38·1
45	Gujarat	Surat	39	29·860	+·003	29·842	30·131	29·471	·660	·207	77·7	93·5	+2·2	71·1	+1·9*	82·3	+2·3*	22·5	109·6	47·2	62·4	33·6
		Ahmedabad	164	29·746	?	29·860	30·057	29·323	·734	·237	78·2	95·3	+2·3	71·9	+1·2	83·9	+1·8	23·9	113·3	42·2	71·1	35·5
22	N.-W. P., West	Agra	555	29·279	+·002	29·805	29·643	28·796	·847	·290	74·4	90·7	+0·3	69·8	+2·5	80·3	+1·4	20·9	112·5	44·4	68·1	36·4
21	N.-W. P., Central	Jhansi	858	28·995	+·008	29·821	29·340	28·576	·764	·277	76·5	91·1	+0·3	71·9	+3·7	81·5	+2·0	19·2	113·9	47·2	66·7	34·6

* Mean of 11 months. † Mean of 10 months.

I—*contd.*

***at 218 stations in India, Burma, etc., in the year 1900*—contd.**

Wind direction. Number of winds from: Calms	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour, by anemometer uncorrected.	Mean velocity corrected (where possible.)	Normal.	Percentage variation.	Hygrometry 8 A.M. Mean humidity of year.	Mean tension of year.	Mean cloud amount of year.	Rainfall. Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal.	Heaviest rainfall during year.	Station.	Meteorological Province or District.	Number of District.
188	3	10	32	37		12	61	12	1·4	1·3	2·2	−41	69	·536	4·5	42	39·18	+ 2·82	43·89	32·89	+11·00	5·46	Meerut.	N.-W. P., West.	22
72	19	8	53	37	15	4	84	73	3·5	3·2	3·6	−11	59	·499	3·7	54	33·74	+20·26	33·65	30·03	+3·62	6·10	Delhi	South-East Punjab.	26
163	29	13	39	52	18	4	32	15	2·4		2·5	− 4	67	·522	3·4	31	28·26	+ 2·74	22·07	21·95	+ 0·12	4·50	Lahore.	Central Punjab.	28
10	4	74	9	111	13	78	7	59	4·9	5·8	3·6	+61	63	·564	1·6	14	23·39	− 9·39	7·20	15·55	− 8·35	1·50	Sirsa	South Punjab.	27
94	48	18	47	62	25	4	19	43	4·3				68	·562	3·3	44			40·42			5·33	Patiala.		
146	28	22	10	54	47		54	4	2·7	2·4	1·5	+60	66	·514	3·6	39	37·00	+ 2·00	50·59	30·90	+19·69	6·72	Ludhiana.	Punjab (Submontane).	29
88	38	74	80	32	8	7	14	23	2·7		1·8	+50	65	·511	2·7	42	38·36	+ 3·64	28·45	34·12	−5·67	2·12	Sialkot.		
159		3	31	89	2	1	6	74	2·5				75	·548	3·1	47			33·72	33·11	+ 0·61	5·47	Umballa.		
364	8	11	9	7	5	4	8	8	2·2	2·0	2·0	0	64	·454	2·7	54	46·81	+ 7·19	33·72	35·17	− 1·45	2·82	Rawalpindi	North Punjab.	31
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7·39	9·66	−2·26	...	**VII.—Indus Valley and North-West Rajputana.**		
254	31	10		1	21	9	16	23	1·7	1·9	3·4	−44	66	·482	3·8	33	21·56	+11·44	11·53	13·54	− 2·01	1·49	Peshawar	North Punjab.	31
119	24	96	56	12	9	27	12	10	5·9	6·8			55	·465	2·2	27	16·40	+10·60	11·82	10·39	+ 1·43	1·35	Khushab	West Punjab.	32
48	32	46	49	54	44	47	21	28	7·1	6·2			50	·432	2·3	10	15·70	−5·70	3·31	10·88	− 7·57	0·85	Montgomery.		
203	30	65	2	19	3	1	11	31	1·9	2·0	1·8	+11	66	·543	2·7	20	14·73	+5·27	6·71	8·42	− 1·71	1·54	D. I. Khan.		
157	13	64	6	34	24	55	4	8	2·0	2·5	2·5	0	60	·518	2·0	14	11·72	+2·28	3·83	7·56	− 3·73	0·89	Mooltan.		
151	10	12	67	67	21	2	11	24	2·9	3·1	3·4	− 9	54	·516	2·0	7	6·63	+0·37	5·25	4·08	+ 1·17	2·70	Jacobabad	Sind.	47
76	65	6	1	3	27	156	9	22	8·9	9·2	10·1	− 9	55	·525	2·2	5	10·14	−5·14	4·44	7·06	− 2·62	2·38	Hyderabad.		
30	7	56	45	7	5	54	131	30	9·2	11·5	13·3	−14	67	·656	2·9	5	9·73	−4·73	1·99	7·92	− 5·93	1·18	Kurrachee.		
29	34	49	32	21	46	60	71	23	7·5		4·8	+56	55	·544	2·4	17			9·21	11·95	− 2·74	1·64	Bikaner	West Rajputana.	51
13	23	48	52	21	56	99	33	19	8·1	9·6	5·8	+66	55	·520	3·0	26			7·31	10·28	− 2·97	0·71	Pachpadra.		
72	29	66	19	4	18	91	56	10	6·6	5·9			52	·489	3·4	24			15·94	14·16	+ 1·78	3·08	Jodhpur.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30·18	30·13	+0·07	...	**VIII.—East Rajputana, Central India and Gujarat.**		
73	44	76	27	6	3	26	57	53	4·0		5·1	−22	56	·492	3·4	34	38·70	− 4·70	24·86	28·76	− 3·90	3·47	Jaipur	East Rajputana.	50
111	31	26	17	15	1	42	65	57	4·6	5·4			52	·496	2·3	46			43·87	29·92	+13·95	4·37	Kotah.		
153	31	30	34	12	7	5	65	28	5·7		6·7	−15	60	·486	3·4	40	32·56	+ 7·44	21·43	22·91	− 1·48	2·01	Sambhar		
134	17	92		13	5	52	83	19	5·5		4·3	+28	65	·539	3·4	35	32·99	+ 2·01	25·64	22·18	+ 3·46	3·60	Ajmer.		
198	18	10	2	6	6	36	50	39	3·0	3·0			56	·484	2·6	41			38·10			4·17	Udaipur.		
	16	70	76	15	23	71	70	24	10·6		10·3	+ 3	57	·525	3·1	26	28·81	− 2·81	28·97	26·73	+ 2·24	4·52	Deesa.		
5	42	9	12	4	18	47	174	34	11·9		10·2	+17	72	·685	3·4	12			17·21	14·61	+2·60	4·45	Bhuj‡	Kathiawar and Cutch.	46
1	19	43	26	15	63	121	57	20	14·9	15·9			65	·644	2·2	19			21·91			5·20	Jamnagar		
32	65	12	32	1	17	42	129	23	9·7	9·7	9·2	+ 5	67	·640	2·4	27	33·94	− 6·94	39·49	28·67	+10·82	9·18	Rajkot.§		
1	80	62	4	12	8	40	98	60	7·8	8·2	7·9	+16	70	·664	3·3	25			34·59	21·02	+13·57	7·69	Veraval.		
2	33	5	3	9	49	63	73	128	7·3	7·5			55	·548	3·0	37			32·34	22·58	+9·76	2·40	Bhavnagar Para.		
56	39	19	55	7	21	47	96	23	2·6	2·6	2·5	+ 4	66	·559	4·6	56	49·75	+ 6·25	31·07	44·43	−13·36	2·42	Nowgong	Central India	49
122	30	33	2	9	10	21	106	32	4·5		4·2	+ 7	62	·538	3·7	50	48·00	+ 2·00	34·28	34·91	− 0·63	4·10	Indore.		
56	8	86	42	9	1	79	68	21	8·6	7·7	10·1	−24	64	·570	3·1	44	39·18	+ 4·82	38·62	32·26	+ 6·36	3·51	Neemuch.		
35	38	18	27	26	19	104	21	19	5·1	8·4	9·0	− 7	65	·656	3·4	36	49·36	−13·36	34·19	46·34	−12·15	6·30	Surat‖	Gujarat.	45
2	50	62	48	9	21	86	7	72	5·7				57	·582	3·2	27			16·02	37·99	−21·97	2·03	Ahmedabad.¶		
36		53		71		108	1	94	4·3	4·6	4·2	+10	61	·545	2·9	44	38·91	+ 5·09	22·15	29·12	− 6·97	2·28	Agra	N.-W. P., West.	22
115	19	19	33	10	51	35	66	17	3·4		2·9	+17	56	·519	2·0	57	49·07	+ 7·39	38·49	39·63	− 1·14	3·22	Jhansi	N.-W. P., Central.	21

‡ Wind observations of 345 days.
§ " " 353 "
‖ " " 355 "
¶ " " 357 "

Table

Abstract of observations taken at 8 A.M.

Number of District.	Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches. Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Temperature of air. Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
	IX.—Deccan.		...	...	+·011	...	...	...	...	...	...	92·4	+2·4	69·0	+2·1	80·7	+2·3	23·5	...	...	61·2	34·9
38	Bombay Deccan	Belgaum	2,539	27·381	+·015	29·859	27·548	27·148	·400	·152	72·6	86·2	+2·0	64·8	+0·9	75·6	+1·5	21·4	101·8	49·4	51·9	30·5
		Sholapur	1,590	28·315	+·010	29·860	28·533	28·047	·486	·175	77·4	95·2	+2·6*	70·2	+2·6	82·7	+2·7*	25·0	110·2	55·6	54·6	34·8
		Poona	1,840	28·076	+·012	29·882	28·318	27·769	·549	·178	72·7	91·8	+3·1	65·2	+0·2	78·5	+1·6	26·7	108·0	48·0	60·0	37·0
		Bijapur	1,946	27·975	+·019†	29·870	28·167	27·716	·451	·162	75·9	93·2	+3·7	69·0	+1·5	81·1	+2·6	24·2	108·2	54·6	53·6	34·0
40	Khandesh	Malegaon	1,430	28·461	+·008	29·857	28·727	28·080	·647	·216	76·1	94·7	+3·7	66·2	+1·3	80·4	+2·6	28·6	110·8	40·8	70·0	40·3
		Ahmednagar	2,152	27·778	?	29·880	28·020	27·464	·556	·186	75·1	92·5	+3·3	64·9	+0·7*	78·5	+2·0†	28·0	106·4	47·4	59·0	38·2
41	Berar	Akola	930	28·950	+·013	29·841	29·257	28·595	·662	·227	76·8	95·4	+3·3	68·6	+1·9	82·0	+2·6	26·8	114·5	46·2	68·3	39·7
		Amraoti	1,215	28·664	?	29·840	28·957	28·257	·700	·238	77·8	94·3	+2·7	70·6	+2·4	82·4	+2·6	23·7	113·0	52·9	60·1	34·8
42	Central Provinces, West.	Khandwa	1,044	28·834	+·015	29·848	29·119	28·442	·677	·242	75·7	93·8	+2·7	68·7	+2·3	81·3	+2·5	25·1	112·2	38·2	74·0	38·4
		Hoshangabad	1,006	28·867	+·018	29·848	29·198	28·441	·757	·290	75·1	92·3	+2·1	68·6	+2·0	80·5	+2·1	23·7	113·0	41·2	71·8	36·2
		Nagpur	1,025	28·832	+·005	29·823	29·148	28·404	·744	·259	77·0	94·5	+2·9	70·8	+2·4	82·7	+2·7	23·7	114·2	52·2	62·0	35·4
43	Central Provinces, Central.	Chanda	634	29·251	+·003*	29·836	29·567	28·880	·687	·236	78·4	95·3	+2·8	71·8	+3·4	83·6	+3·1	23·5	114·7	52·7	62·0	35·8
		Seoni	2,033	27·837	+·012	29·825	28·130	27·417	·713	·259	74·2	89·8	+2·4	66·7	+2·0	78·3	+2·2	23·1	109·9	47·5	62·4	34·1
		Jubbulpore	1,327	28·509	?	29·813	28·826	28·078	·748	·272	72·8	89·9	+1·9	66·6	+2·3	78·3	+2·1	23·4	110·5	44·4	66·1	35·8
		Saugor	1,807	28·055	+·006*	29·830	28·350	27·658	·692	·257	74·6	88·6	+1·0	68·4	+2·9	78·4	+2·0	21·0	109·0	42·6	66·4	34·5
49	Central India	Sutna	1,040	28·795	+·003	29·812	29·131	28·350	·781	·275	74·6	88·7	+1·0	68·3	+3·3	78·5	+2·1	20·3	110·6	38·1	72·5	35·3
44	Central Provinces, East.	Raipur	970	28·881	+·007	29·811	29·211	28·419	·792	·290	77·2	91·6	+1·9*	70·9	+2·0	81·2	+1·8	20·7	112·5	51·8	60·7	33·0
		Sambalpur	486	29·366	?	29·807	29·712	28·759	·953	·302	77·3	92·1	+1·3	72·3	+2·4	82·2	+1·8	19·7	113·1	52·2	60·9	32·2
39	Hyderabad, North.	Indur									78·6	93·1		70·7		82·0		22·4	111·4	52·1	59·3	32·8
		Bidar	2,165	27·692		29·787?	27·950	27·578	·372	·119	78·0	90·6		62·7*		77·0*		28·4	103·5	42·6	60·9	37·1*
39	Hyderabad, South	Gulbarga	1,502	28·418		29·876	28·676	28·134	·542	·181	77·7	94·5		70·7		82·6		23·8	110·2	54·3	55·9	35·0
		Raichur	1,309	28·594*	+·020†	29·855*	28·823	28·352	·471	·169	79·1	94·1	+2·2	73·2	+1·5	83·6	+1·9	20·9	109·0	59·2	49·8	31·1
		Hyderabad (Dn.)	1,690	28·206	+·011*	29·851	28·444	27·898	·546	·193	76·4	92·0	+1·9	71·0	+3·2*	81·5	+2·6*	21·0	109·9	55·3	54·6	31·0
		Secunderabad	1,787	28·113		29·856	28·347	27·809	·538	·189	75·4	92·9	+2·8	70·5	+2·6	81·7	+2·7	22·3	110·8	54·7	56·1	32·8
		Hanumkonda	865	29·005			29·264	28·688	·576	·211	78·1	93·0		72·6		82·8		20·4	112·2	56·2	56·0	33·5
	X.—West Coast.		...	...	+·013	...	...	...	...	...	...	86·7	+0·2	75·0	+0·9	80·9	+0·6	11·6			30·7	19·0
37	Konkan	Bombay	37	29·885	+·016	29·862	30·097	29·553	·544	·187	78·7	86·3	+0·8	75·5	+0·9	80·9	+0·9	10·8	93·5	61·0	32·5	18·3
		Ratnagiri	110	29·804	+·016	29·852	29·980	29·503	·477	·166	78·7	87·6	+0·3	73·9	+1·2	80·8	+0·8	13·7	99·4	60·0	37·4	22·0
		Mormugao	60	29·868	+·005*	29·863	30·040	29·571	·469	·160	78·3	85·9	−0·3	75·5	+0·4	80·7	0	10·4	92·0	65·8	26·2	17·7
		Goa	199	29·723	+·016	29·860	29·882	29·449	·433	·156	78·3	85·0	−1·0*	74·9	+0·5	80·0	−0·2*	10·1	92·0	62·0	30·0	17·1
		Karwar	44	29·894	+·019	29·870	30·047	29·624	·423	·152	75·9	86·4	+0·4	73·1	+0·6	79·8	+0·5	13·3	94·3	59·5	34·8	21·5
33	Malabar	Cochin	11	29·945	+·013	29·883	30·054	29·768	·286	·129	79·9	89·5	?	76·1	+1·5	82·8	?	13·4	95·5	66·8	28·7	20·2
		Calicut	27	29·919	+·005	29·875	30·043	29·721	·322	·143	79·4	87·4	+0·7	75·2	+1·4	81·4	+1·1	12·2	94·9	63·5	31·4	19·3
		Mangalore	65	29·883	+·012	29·880	30·018	29·625	·393	·141	79·4	87·3	+0·7	75·2	+1·2	81·3	+1·0	12·1	94·3	64·0	30·3	19·7
		Trivandrum	198	29·735	?	29·865	29·846	29·577	·269	·132	78·8	84·8	+0·9*	76·0	?	80·4	?	8·8	91·0	66·0	25·0	14·3
	XI.—South India.				+·012							91·6	+1·5	73·0	+1·2	82·3	+1·3	18·5			46·1	28·5
57	Madras, South	Pamban	37	29·895		29·858	30·042	29·675	·367	·138	82·1	88·1		76·3		82·2		11·8	94·3	70·7	23·6	16·6
		Tinnevelly	168	29·772	?	29·871	29·949	29·557	·392	·152	82·5	85·2	+1·0	77·1	+0·4	86·2	+0·7	18·1	106·6	66·9	39·7	27·6
		Madura	447	29·479	+·013	29·864	29·637	29·248	·389	·155	81·6	94·6	+0·4	74·8	+1·2	84·7	+0·8	19·8	103·5	63·2	40·3	28·2
		Periyakulam		28·993			29·148	28·762	·386	·150	78·5	93·3		70·6		82·0		22·7	103·9	52·1	51·8	33·8
34	Madras, South Central.	Salem	940	29·013	+·006	29·898	29·185	28·780	·415	·151	79·1	95·0*	+2·3*	72·6	+2·4	83·8*	+2·4*	22·4*	108·0	55·5	52·5	32·4*
		Coimbatore	1,348	28·590	+·014	29·891	28·759	28·372	·387	·146	76·5	90·6	+0·4	70·8	+1·2	80·7	+0·9	19·8	102·4	57·2	45·2	29·1
35	Coorg	Mercara	3,781	26·237	+·006		26·370	26·046	·324	·123	66·8	77·8	+1·4	62·8	+1·7	70·3	+1·6	15·0	90·5	53·7	36·8	24·1

* Mean of 11 months. † Mean of 10 months.

I—*contd.*

at 218 stations in India, Burma, etc., in the year 1900—contd.

Wind direction. Number of winds from									Wind velocity.				Hygrometry 8 A.M.		Mean cloud amount of year.	Rainfall.						Heaviest rainfall during year.	Station.	Meteorological Province or District.	Number of District.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour, by anemometer (uncorrected).	Mean velocity corrected (where possible).	Normal.	Percentage variation.	Mean humidity of year.	Mean vapour tension of year.		Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal.				
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38·75	41·30	−2·48	...	IX.—Deccan		
47	22	25	43	33	21	33	90	51	14·0		15·7	−11	66	·522	4·4	70	83·08	−13·08	62·74	48·74	+14·00	4·75	Belgaum	Bombay, Deccan.	38
10	19	36	37	58	6	61	40	97	11·4	8·2	8·9	− 8	48	·456	3·6	36	51·00	−15·00	18·93	33·90	−14·97	2·19	Sholapur.		
56	3	15	18	16	4	70	120	63	11·8	13·3	10·0	+33	59	·489	3·5	39	49·36	−10·56	27.45	28·74	− 1·29	2·68	Poona.		
64	2	1	23	28	4	54	125	64	5·7	5·6			62	·555	2·9	33	43·52	−10·52	13·08	16·58	− 3·50	3·23	Bijapur.		38
1	27	19	11	6	12	36	192	61	8·2	9·4	7·2	+31	49	·463	1·6	28	40·57	−12·57	12·95	25·60	−12·65	1·70	Malegaon.	Khandesh.	40
32	62	30	11	28	17	18	68	99	9·0	10·9			61	·539	2·4	28			19·01	23·58	− 4·57	2·50	Ahmednagar.		
53	5	22	29	27	15	35	106	73	7·5	7·4	5·5	+35	54	·500	3·5	40	50·58	−10·58	40·72	37·90	+ 2·82	8·84	Akola	Berar.	41
	25	69	46	15	18	66	86	32	9·3	8·2	4·7	+74	54	·517	3·6	40	50·99	−10·99	30·45	37·41	− 6·96	3·78	Amraoti.‡		
89	5	11	30	8	9	14	117	82	7·4		5·4	+37	53	·487	3·0	45	44·36	+ 0·64	36·25	33·29	+ 4·96	4·87	Khandwa	Central Provinces, West.	42
13		137	1	19		150		45	4·4		3·0	+47	66	·580	2·6	48	60·53	−12·53	49·46	56·58	− 7·12	4·52	Hoshangabad.		
187	23	25	7	4	6	28	47	38	7·0		6·4	+ 9	57	·516	4·5	56	64·93	−8·93	49·62	50·91	− 1·29	7·83	Nagpur.		
141	17	12	26	17	24	24	87	17	3·0		3·7	−19	62	·604	3·9	59			61·28	58·53	+ 2·75	6·24	Chanda	Central Provinces, Central.	43
	64	74	22	26	23	43	42	70	3·0		3·9	−23	60	·500	3·6	68	73·65	− 5·65	42·77	58·89	−16·12	4·08	Seoni.		
29	24	27	16	61	74	44	64	26	3·6		3·3	+ 9	67	·533	3·5	68	65·62	+ 2·38	56·70	60·37	− 3·67	6·40	Jubbulpore.		
1	21	43	53	47	28	54	102	15	3·1	3·5	3·5	0	60	·530	3·2	65	56·93	+ 8·07	43·81	48·93	− 5·12	3·87	Saugor.		
60	54	25	39	11	19	47	55	55	4·8	5·1	6·1	−16	62	·521	3·1	55	52·91	+ 2·09	42·89	46·48	− 3·59	3·43	Sutna	Central India.	49
126	18	35	12	13	12	105	28	15	6·2	5·7	5·6	+ 2	62	·567	2·9	69	65·61	+ 3·39	59·06	52·52	+ 6·54	5·85	Raipur	Central Provinces, East.	44
1	92	65	39	26	29	56	28	29	3·8	3·8	2·3	+65	68	·644	5·1	79			73·43	68·05	+ 5·38	4·10	Sambalpur.		
138	19	9	2	24	7	66	31	69	7·9	7·5			68	·672	3·4	47			45·00	37·40	+ 7·60	3·47	Indur.	Hyderabad, North	39
4	50	25	22	20	13	102	90	39					67	·633	2·4	46			34·57	42·04	− 7·47	2·64	Bidar.		
62	29	51	53	20	19	22	62	47	11·0	10·5			60	·576	3·4	45			29·15	29·19	− 0·04	3·13	Gulbarga	Hyderabad, South.	53
37	15	13	25	63	10	105	44	53	10·9	10·7			64	·639	3·3	38			23·78	28·22	− 4·44	2·53	Raichur.		
151	11	5	21	30	3	4	81	57	5·8	5·6			65	·588	3·8	51			30·47	33·72	− 3·25	1·98	Hyderabad (Dn.)		
34	3	41	60	47	1	36	73	70	7·3		6·5	+12	67	·585	3·6	51			26·22	33·72	− 7·50	1·91	Secunderabad.		
67	20	14	60	128	48	8	4	16	9·3	7·9			71	·687	3·8	48			36·88			4·00	Hanumkonda.		
																			98·76	103·13	−4·37		X.—West Coast.		
10	44	83	61	19	13	28	75	32	10·3		12·2	−16	78	·777	4·2	67	76·65	− 9·65	69·14	74·12	− 4·98	7·52	Bombay	Konkan.	37
94	46	17	41	48	5	26	42	46	5·7	5·7	10·2	−44	73	·727	3·6	89	97·80	− 8·80	98·29	111·65	−13·36	11·98	Ratnagiri.		
42	62	15	71	46	15	11	49	52	9·1				84	·820	4·2	85			93·51	91·80	+ 1·71	8·21	Mormugao.		
5	33	66	133	7	7	23	56	34					81	·791	5·1	85			90·20	103·32	−13·12	8·32	Goa.		
50	74	58	58	3	3	27	49	43	5·3				83	·741	3·7	96	109·07	−13·07	136·61	129·19	+ 7·42	10·43	Karwar.		
37	136	101	5	2	5	10	35	34	6·4				81	·837	5·0	111	132·16	−21·16	97·15	116·52	−19·37	7·30	Cochin	Malabar.	33
77	34	58	63	24	10	12	22	65	7·2	9·1			83	·824	4·8	108	113·90	−5·90	119·12	113·13	+ 5·99	6·31	Calicut.		
160	5	13	69	48	5	9	22	34	2·5		3·4	− 26	80	·810	6·3	117	118·30	− 1·30	143·07	122·74	+20·33	10·56	Mangalore.		
75	119	16	21	3	2	5	17	107	6·0				81	·804	5·3	88			41·72	65·69	−23·97	2·45	Trivandrum.		
...	...	...	...	...	..	...	...	...	...	...		...	...	..	...	...	...	...	31·86	36·63	−4·37	...	XI.—South India.		
5	31	64	50	55	18	103	14	25	10·7	11·6*			78	·858	3·0	53	33·10	+19·90	42·70	37·00	+ 5·70	3·45	Pamban	Madras, South	57
	101	36	2	9	8	43	63	103	5·9	5·6			69	·769	5·0	36	43·00	− 7·00	24·34	28·78	− 4·44	2·36	Tinnevelly.		
52	88	68	26	13	3	25	20	70	2·7	2·7	4·2	−36	72	·788	4·1	44	43·71	+ 0·29	32·48	32·69	+ 0·21	2·66	Madura.		
186	15	30	29	20	15	16	24	29	2·8	3·0			72	·697	3·9	59			29·94			1·60	Periyakulam		
106	2	54	47	35	22	61	34	4	5·0	4·5	4·4	+ 2	75	·753	4·1	60	66·50	− 6·50	34·40	41·44	− 7·04	2·49	Salem	Madras, South, Central.	34
	1	32	149	15	21	72	63	12	3·0		4·8	−38	83	·765	6·0	59	45·20	+13·80	30·36	21·24	+ 9·12	5·57	Coimbatore.		
81	28	37	61	2	1	19	69	67	6·6	6·2	5·8	+ 7	85	·560	6·3	126	137·20	−11·20	142·94	129·37	+13·57	4·62	Mercara	Coorg.	35

‡ Wind observations of 357 days.

Table

Abstract of observations taken at 8 A. M.

Number of District.	Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches. Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Temperature of air. Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
36	Mysore	Chitaldroog	2,405	27·531	+.009*	29·859	27·700	27·309	·391	·150	75·3	89·3	+2·9	63·9	+1·7	79·1	+2·3	20·4	102·2	56·9	45·3	29·2
		Bangalore	3,021	26·955	+·007	29·884	27·112	26·748	·364	·144	71·2	86·1	+2·2	65·6	+1·7	75·9	+2·0	20·5	99·8	51·9	47·9	29·5
		Hassan	3,091	26·896		29·899	27·086	26·675	·411	·141	72·0	84·8		63·1		74·0		21·6	97·3	46·0	51·3	31·8
		Mysore	2,518	27·452	+·015*	29·897	27·607	27·234	·373	·145	73·5	87·8	+1·5	66·8	+1·0	77·4	+1·2	21·0	100·1	53·4	46·7	30·4
56	Madras, East-Coast, South.	Negapatam	31	29·899	+·016	29·859	30·089	29·357	·432	·158	82·5*	90·7*		77·1*	+1·9*	84·1*		13·3*	105·5	66·9	38·6	23·3*
		Cuddalore	12	29·911	+·015*	29·852	30·117	29·645	·472	·160	80·9	91·2	+0·8	75·0	+1·0*	83·1	+0·8*	16·3	106·8	59·3	47·5	25·9
		Trichinopoly	255	29·676	+·009	29·865	29·854	29·443	·411	·147	80·8	95·6	+1·7	75·4	+1·7	85·5	+1·7	20·2	106·7	60·4	46·3	30·5
		Madras	22	29·898	+·008	29·850	30·101	29·601	·500	·186	81·8	91·8	+1·0	75·4	+0·8	83·6	+0·9	16·4	110·0	62·0	48·0	26·0
55	Madras, East-Coast, Central.	Nellore	71	29·835	+·020	29·840	30·085	29·548	·537	·188	82·0	95·5	+1·4	75·7	+0·6	85·6	+1·0	19·8	114·8	62·1	52·7	30·6
		Masulipatam	15	29·890	+·020	29·840	30·153	29·548	·605	·197	81·2	91·2	+0·8	75·3	+1·1	83·3	+1·0	15·9	110·2	59·2	51·0	27·4
54	Madras, Central	Cuddapah	433	29·476	+·008	29·849	29·702	29·211	·491	·168	82·7	97·9	+3·4*	75·9	+1·7	86·9	+2·5*	22·1	114·3	57·8	56·5	33·9
		Kurnool	924	28·976	+·004†	29·850	29·237	28·704	·533	·180	78·0	95·6	+2·5	72·2	+1·7	83·9	+2·1	23·5	111·3	51·2	60·1	35·6
		Bellary	1,475	28·429	+·012	29·864	28·643	28·207	·436	·158	78·7	94·8	?	72·5	+2·2	83·7	?	22·3	107·7	55·1	52·6	33·2
52	Madras, East-Coast, North.	Cocanada	26	29·860	+·016	29·821	30·142	29·496	·646	·211	80·6	90·6	+1·6	75·6	+0·8	83·2	+1·2	15·0	106·6	64·0	42·6	27·0
		Waltair (Vizag)	226	29·646	+·008	29·814	29·946	29·239	·707	·240	80·6	87·7	+0·4	76·0	+0·5	81·9	+0·4	11·6	101·4	66·4	35·0	22·1
		Gopalpur	21	29·840	+·011	29·801	30·186	29·333	·853	·284	79·0	86·7	+0·9	73·9	+0·5	80·3	+0·7	12·9	97·8	59·1	38·7	23·1
	XII.—Hill Stations.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48	Baluchistan	Shahrig		25·746			26·020	25·380	·640	·280	67·4	82·5		48·5		65·6		34·0	112·0	15·0	97·0	54·1
		Pishin										75·4		44·0		59·7		31·3	103·9	3·0	100·9	52·3
		Quetta	5,502	24·637	+·022		24·928	24·364	·564	·250	56·5	73·3	+0·1	45·4	+0·9	59·4	+0·5	27·9	100·1	3·3	96·8	49·5
		Kalat									56·5	73·1		38·4		55·8		34·7	100·3	0	100·3	58·1
		Chaman	4,311	25·711	?		25·969	25·383	·586	·255	64·4	78·5	−0·7	54·9	+0·7	66·7	0	23·6	109·2	18·1	91·1	46·4
30	Punjab	Leh	11,503	19·722	+·018		20·177	19·297	·880	·337	37·8	54·2	−2·7	29·7	−0·1	42·0	−1·4	24·5	82·2	−6·0	88·2	41·6
		Srinagar	5,204	24·898	+·014		25·233	24·607	·626	·317	49·8	65·6	−0·3	45·1	+1·3	55·4	+0·5	20·5	91·3	14·1	77·2	38·8
		Skardu		22·878			23·416	22·584	·832	·390	49·1	63·6		43·2		53·4		20·4	98·1	14·1	84·0	40·2
		Dras		20·819			21·297	20·430	·867	·354	35·5	52·9		22·3		37·6		30·6	88·5	−29·4	117·9	53·9
		Gilgit		25·137			25·671	24·558	1·113	·434	60·3	73·9		53·7		63·8		20·2	108·4	26·7	81·7	40·7
		Chitral		24·653			25·000	24·312	·688	·282	56·4	75·7		48·6		62·2		27·1	104·7	23·0	81·7	46·0
		Killa Drosh									57·3	73·2		51·8		62·5		21·4	105·0	23·6	81·4	42·2
		Para Chinar	6,000								57·9	69·1		49·1		59·1		20·0	98·1	11·8	86·3	40·1
		Cherat		25·685	+·018		25·945	25·351	·594	·279	61·4	72·3	−1·1	57·0	+0·4	64·7	−0·4	15·3	106·5	27·0	79·5	36·8
		Murree	6,333	23·855	+·037		24·060	23·566	·494	·241	55·8	63·6	−2·2	50·1	−0·6	56·9	−1·4	13·5	94·4	21·5	72·9	34·5
		Poo										61·5		41·3		51·4		20·2	85·7	12·6	73·1	35·9
		Simla	7,224	23·118	+·026		23·317	22·872	·445	·219	58·6	60·8	−0·7	49·6	−0·3	55·2	−0·5	11·2	83·2	22·2	61·0	26·7
25	North-Western Provinces.	Chakrata	7,022	23·293	+·039		23·509	23·070	·439	·215	53·7	62·9	−1·3	49·0	−0·5	56·0	−0·9	13·9	81·3	26·8	54·5	28·7
		Mussooree	6,705	23·556	+·024		23·807	23·308	·499	·227	55·0	63·0		50·8		56·9		12·2	84·3	30·0	54·3	27·8
		Ranikhet	6,069	24·105	+·032		24·333	23·844	·489	·220	57·6	67·3	−0·3	53·5	+0·4	60·4	+0·1	13·8	86·1	30·0	56·1	28·2
		Muktesar		22·851			23·054	22·627	·427	·202	54·0	63·9		48·2		56·1		15·7	82·0	25·4	56·6	30·6
13	Bengal	Yatung	10,480?									53·8		35·2		44·5		18·6	69·1	10·9	58·2	32·3
		Darjeeling	7,409	23·019	+·051		23·192	22·708	·484	·223	52·5	59·5	+1·2	46·4*	+0·4*	52·6*	+0·8*	12·4*	79·7	31·0	48·7	24·0
		Gantok	5,660	24·490			24·692	24·144	548	·236	58·0	68·7		37·6		53·1		31·0	80·6	21·0	59·6	42·0

* Mean of 11 months. † Mean of 10 months.

I—*contd.*

at 218 stations in India, Burma, etc., in the year 1900—contd.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour, by anemometer (uncorrected).	Mean velocity corrected (where possible).	Normal.	Percentage variation.	Hygrometry 8 A.M. Mean humidity of year.	Mean vapour tension of year.	Mean cloud amount of year.	Rainfall. Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal.	Heaviest rainfall during year.	Station.	Meteorological Province or District.	Number of District.
8	4	14	55	42	12	91	110	29	9·3	8·2			67	·587	5·0	34			14·88	25·43	−10·55	1·69	Chitaldroog.	Mysore.	36
4	6	30	77	22	28	98	82	18	9·6	8·3	5·2	+60	77	·595	4·8	48	61·68	−13·68	31·42	35·86	− 4·44	3·03	Bangalore.		
9	5	34	63	52	10	42	91	58	3·8	3·3			74	·579	5·7	72			42·61	30·47	+12·14	3·66	Hassan.		
2	11	49	44	19	15	114	95	16	9·3	10·1			75	·616	6·5	48			26·11	29·04	−2·93	1·83	Mysore.		
47	25	50	8	9	40	66	80	39	11·4*	11·4*	5·6	+104	76*	·843*	4·6	60	60·74	− 0·74	61·37	54·66	+ 6·71	5·37	Negapatam	Madras, East-Coast, South.	56
29	39	8	5	9	68	83	62	61	2·8	3·5			81	·864	4·0	61	56·80	+4·20	49·49	47·34	+ 2·15	4·64	Cuddalore.		
155	24	25	6	8	1	26	107	13	5·3		5·8	− 9	75	·778	4·3	39	45·45	− 6·45	32·42	32·69	− 0·27	2·15	Trichinopoly.		
2	61	22	5	17	86	73	76	23	6·7		7·1	− 6	76	·820	5·1	51	60·53	− 9·53	28·93	49·02	−20·09	3·20	Madras.		
21	1	3	1	55	62	16	96	116	6·7				75	·816	5·6	44	44·30	− 0·30	28·34	35·63	− 7·29	3·82	Nellore	Madras, East-Coast, Central.	55
37	58	40	5	32	56	24	60	53	8·0		7·0	+ 14	80	·857	5·4	46	55·24	− 9·24	31·97	43·52	−11·55	3·55	Masulipatam.		
	7	51	52	72	6	53	82	42					66	·736	4·0	40	46·00	− 6·00	21·43	34·18	−12·75	3·24	Cuddapah	Madras, Central.	54
170	10		17	13	12	11	105	27					64	·606	4·1	48	48·93	− 0·93	24·63	30·06	− 5·43	2·26	Kurnool.		
59	6	6	25	59	13	19	104	74	7·3	7·8	6·5	+ 20	52	·513	5·7	33	35·00	− 2·00	17·63	19·73	− 2·10	1·91	Bellary.		
48	40	56	5	12	43	81	56	24	8·5	7·8			76	·797	5·1	40	55·10	−15·10	23·32	44·54	−21·22	3·08	Cocanada	Madras, East Coast, North.	52
30	8	67	12	3	3	162	49	31	11·3				74	·767	4·9	41	64·36	−23·36	28·85	46·47	−17·62	4·95	Waltair (Vizag.).		
20	81		7	2	28	130	16	81	14·0	13·7	9·6	+ 43	86	·851	1·7	56	61·35	− 5·35	43·40	49·39	− 5·99	6·32	Gopalpur.		
...	...	...	...	...	...	...	...	...	...			...	...	...	...	...	...	...	...	...	...	...	**XII.—Hill Stations.**		
94	10	5	2	36	5	92	7	114	4·7				41*	·307*	2·0	23			11·06	14·60	− 3·54	1·50	Shahrig	Baluchistan.	48
																27			10·13	10·61	− 0·48	1·12	Pishin.		
326		2	2	7	12	8	6	2	1·6	1·7	4·1	− 59	65	·312	2·6	40	22·45	+17·55	14·90	10·89	+ 4·01	1·38	Quetta.		
	49		33		230		50						55	·250		25			10·14	9·05	+ 1·09	1·04	Kalat.		
	19	10	71	92	59	80	16	18	6·2	6·6			75	·513	2·1	25			12·34	7·43	+ 4·91	1·00	Chaman.		
	8	94	69	24	67	64	36	3	2·3				53	·140	5·0	16			4·65	3·04	+ 1·61	0·42	Leh	Punjab.	30
176	14	10	22	67	34	4	12	26	3·2	3·4			89	·370	4·8	68			37·24	35·24	+ 2·00	2·18	Srinagar		
218	11	24	13	1	11	35	42	10	4·9	5·9			69	·255	5·2	21			6·64	13·32	− 6·68	0·91	Skardu.		
294	2	4	6	3	5	24	20	7	3·8	3·9			72	·165	4·3	58			22·12	24·25	− 2·13	1·30	Dras.		
308		2	1	1		18	31	1	1·9	1·9			46	·253	5·7	10			2·79	4·08	− 1·29	0·55	Gilgit.		
248	43	6	1	4	13	13	17	5	3·6	3·5			65	·312		36			14·81			2·26	Chitral.‖		
119	38	9	108	9	30	14	34	2					65	·318	4·2	50§			21·06§			2·41	Killa Drosh.		
	85	54	35	20	12	31	56	71	3·6				57	·284	4·9	73			27·38			1·36	Para Chinar.		
11	168	16	1	7	86	4	10	62	11·6	10·7			58	·337	3·9	53			31·80	26·16	+ 5·64	4·65	Cherat.		
145	30	8	17	101	41	6	2	15	5·5	6·8	6·8	0	57	·277	3·5	91	67·56	+23·44	68·00	56·29	+11·71	3·30	Murree		
															4·5	43			19·94	18·56	+ 1·38	1·53	Poo.		
102	57	57	26	25	63	18	2	6	4·3		2·2	+ 95	58	·258	4·7	100	84·52	+15·48	59·32	64·19	− 4·87	2·77	Simla.		
84	185	42	11	29	23	17	2	48	9·3		5·1	+ 82	64	·283	3·1	121			83·21	67·76	+15·45	3·59	Chakrata.	North-Western Provinces.	25
51	30	34	97	44	16	3	27	63					64	·302	4·3	107	79·73	+27·27	97·25	97·95	− 0·70	3·95	Mussooree.		
177	12	33	27	10	10	35	31	30	2·7	3·1	2·1	+ 48	65	·334	4·2	83	77·29	+ 5·71	45·46	54·44	− 8·98	1·96	Ranikhet.		
33	8	16	30	123	15	18	8	114	6·5	6·0			65	·291	4·6	99			46·39			1·32	Muktesar.		
																130			53·69			2·56	Yatung	Bengal.	13
128	3	49	72	49	6	26	25	6	4·9	4·5	3·4	+ 32	84	·348	4·8	112	125·43	−13·43	108·42	121·69	−13·27	7·39	Darjeeling.		
325		6	2						2·8†	3·3†			79	·404	3·7	133			115·29	143·89	−28·60	5·20	Gantok.¶		

‖ Wind observations of 350 days. † Wind observations of 332 days. § Rainfall from 1st February to 31st December. ¶ Wind observations of 332 days.

Table

Abstract of observations taken at 8 A.M.

Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches. Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Temperature of air. Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
Central India	Mount Abu	3,945	26·025	−·005		26·288	25·696	·592	·220	68·0	76·4	+0·2	63·1	+1·2	69·8	+0·7	13·4	100·2	37·0	63·2	26·2
	Pachmarhi	3,528	26·433	+·003		26·685	26·038	·647	·238	70·6	81·6	+2·5	62·7	+1·7	72·1	+2·1	18·8	101·2	36·3	64·9	31·8
South India	Wellington	6,200	24·269	+·010		24·394	24·101	·293	·122	62·8	73·0	+2·4	53·8	+0·2	63·4	+1·3	19·2	82·7	33·7	49·0	30·2
	Kodai Kanal	7,688	22·851			22·968	22·692	·276	·119	58·0	65·1		51·4		58·3		13·6	76·0	42·2	33·8	22·9
XIII.—Extra India.																					
Ceylon	Trincomalee	12	29·913	+·017	29·851	30·058	29·696	·362	·139	81·3	89·0	?	77·3	+1·3	83·2	?	11·7	96·5	70·0	26·5	18·8
	Colombo	40	29·915	+·007	29·881	30·018	29·791	·227	·132	81·0	89·1	+24	75·8	+0·4	82·4	+1·4	13·3	95·5	68·5	27·0	19·5
Persia	Meshed	3,104								55·5			46·9						3·0		
	Teheran		25·975			26·500	25·550	·950	·424	60·1	72·4		45·3		58·9		27·2	103·7	12·0	91·7	47·4
	Ispahan		24·326			24·700	23·975	·725	·352	57·9	74·9		46·9		61·0		28·0	104·0	13·3	90·7	45·6
	Bushire	14	29·875	+·017	29·848	30·411	29·431	·980	·287	74·5	82·1	−0·4	69·4	+1·1	75·8	+0·4	12·7	103·5	45·3	58·2	29·4
	Jask		29·838	−·009		30·288	29·343	·945	·284	78·9	86·7	+0·2	73·8	+0·5	80·2	+0·3	12·9	104·2	45·3	58·9	25·0
	Muscat	20	29·869		29·837	30·305	29·385	·920	·273	81·2	83·5		78·8		81·3		4·7	104·8	62·3	42·5	15·6
Arabia	Baghdad	220	29·788	0	29·988	30·378	29·357	1·021	·376	67·8	86·1	+0·4	60·4	+1·5	73·3	+1·0	25·7	114·4	32·5	81·9	42·9
	Bussrah		29·913			30·442	29·422	1·020	·340		84·4*		71·0*		80·1*		18·1*	112·9	39·5	73·4	28·2*
	Aden	94	29·835	+·004	29·861	30·114	29·521	·593	·185	81·8	87·8	−1·0	78·6	+1·2	83·2	+0·1	9·2	99·3	66·9	32·4	17·8
	Perim	201	29·710		29·844	29·972	29·463	·509	·188	83·4	89·6		79·7		84·7		9·9	102·2	69·0	33·2	17·8
Afghanistan	Kabul									51·7	74·0		43·3		58·6		30·7	99·1	2·4	96·7	52·3
Central Asia	Kashgar		25·633			26·050	25·242	·808	·482	48·3	64·5		41·4		53·0		23·2	102·2	−7·7	109·9	47·5
Arabian Sea Islands	Amini Devi	13	29·942		29·883	30·076	29·668	·408	·162												
	Minicoy	7	29·933		29·865	30·050	29·782	·268	·127	82·6	86·9							92·9			
Africa	Zanzibar	73	30·002	+·009	30·002	30·152	29·863	·289	·144	78·9	84·1		76·7		80·4		7·4	90·9	71·6	19·3	13·1
	Do. Dunga*									77·0	91·4		68·6		80·0		22·9	99·3	61·1	38·2	32·2

* Mean of 10 months.

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

I—*concld.*

at 218 stations in India, Burma, etc., in the year 1900—concld.

Wind direction. Number of winds from									Wind velocity.				Hygrometry 8 A.M.		Mean cloud amount of year.	Rainfall.						Heaviest rainfall during year.	Station.	Meteorological Province or District.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour, by anemometer (uncorrected).	Mean velocity corrected (where possible.)	Normal.	Percentage variation.	Mean humidity of year.	Mean vapour tension of year.		Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal.			
39	29	64	5	23	16	115	46	28	8·4	8·7	7·0	+ 24	53	·369	3·3	45	53·19	− 8·19	49·79	66·87	−17·08	7·86	Central India.	Mount Abu
137	23	19	11	12	5	22	53	83	7·6	7·8	5·2	+ 50	63	·477	4·5	87	80·37	+6·63	91·46	78·23	+13·23	5·71		Pachmarhi.
209	31	21	9	12	11	43	17	10	3·3		3·3	0	68	·390	4·6	94	88·33	+ 5·67	42·69	52·98	−10·29	2·22	South India.	Wellington
7	25	58	44	78	6	13	12	122	10·3				67	·318	4·8	109			59·31			2·66		Kodai Kanal.
																							XIII.—Extra India.	
94		47		2		213	1	7	8·1				84	·901	2·6	81			59·06	75·24	−16·18	6·15	Trincomalee.	Ceylon.
1	28	51	61	54	22	95	49	4	8·0		7·6	+5	84	·892	4·4	111			83·05	90·04	−6·99	5·39	Colombo.	
													68	·342	3·0†	20			7·93	8·12	−0·19	0·80	Meshed	Persia
13	36	98	11	14	32	57	20	19	1·8	2·3			46†	·255†	2·8	26			7·90	9·76	−1·86	0·87	Teheran.‡	
									2·6	3·3			69	·358	2·1	5			1·71	4·69	−2·98	0·63	Ispahan.	
24	49	83	33	62	12	5	10	86	7·8	9·3			68	·604	2·3	24			15·32	12·17	+3·15	2·61	Bushire.	
46	45	38	123	35	3	6	16	43	11·6	13·4			72	·742	1·8	13			7·13	4·45	+2·68	1·40	Jask. §	
123	16	9	12	63	6	12	18	106	4·5	4·7			66	·717	2·9	17			7·91	6·14	+1·77	1·44	Muscat	
125	99	16	6	12	16	6	19	66	2·5	3·4			62	·416	2·4	16			5·78	10·62	−4·84	1·04	Baghdad	Arabia.
3	181	4	3	2	61	2	5	21								13			5·05			0·87	Bussrah.‖	
24	3	122	120	28	17	41	4	4	14·4		11·5	+25	73	·799	4·4	2			1·50	3·79	−2·29	1·20	Aden.	
13	4	30	109	93	26	46	31	12	18·7	17·4			77	·894	3·2	13			5·91	1·71	+4·20	0·90	Perim.	
152	32	30	14	2	5	28	55	44					59*	·286*	2·2	24			9·63	11·44	−1·81	2·11	Kabul	Afghanistan.
180	22	18	25	21	30	11	33	17							4·9	16			3·79	4·41	−0·62	0·50	Kashgar ¶	Central Asia.
6	116	14	12	9	1	29	76	100							4·7	65			42·07			2·51	Amini Devi	Arabian Sea Island.
1	88	61	13	11	8	17	87	79	7·8	8·4			78	·860	3·9	98			69·76			4·17	Minicoy.	
4	30	33	15	57	126	77	19	4	6·2	5·9			84	·829	6·8	101			76·74	55·30	+ 21·44	5·73	Zanzibar	Africa
11	14	1	21	75	97	50	5	4					88	·821		92			55·60			3·25	Do. Dunga.**	

† Mean of 11 months.

station, the data for that station are not utilized in calculating the provincial variations.

‡ Wind observations of 300 days.
§ Do. 355 ,,
‖ Do. 282 ,,
¶ Do. 357 ,,
** Do. 278 ,,

TABLE II.—Abstract of Observations taken at 10 A.M. and 4 P.M., at 66 Stations in India, Burma, etc., in the year 1900.

Table

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

Meteorological Province.	Station.	Elevation of bar-cistern above sea level in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.*	Variation from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Temperature of air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.
Burma Coast and Bay Islands.	Port Blair		29·881	29·784	·097	29·830	+·021	29·821	88·2	78·1	10·1	96·6	70·0	26·6	84·9	86·2	82·1	+1·5
	Rangoon		·887	·766	·121	·829	0	·807	90·2	73·2	17·0	105·0	59·5	45·5	82·8	85·7	79·7	+0·9
	Diamond Island		·891	·792	·102	·840	+·005	·816	85·7	77·8	7·9	91·8	67·2	24·6	83·0	83·3	80·7	+1·8
	Cocos Island	111	·834	·745	089	·787	?	·830	86·9	77·7	9·2	96·2	72·8	23·4	83·8	83·8	81·0	+1·7
	Akyab		·889	·781	·108	·835	?	·798	87·7	?	?	99·0	?	?	81·4	83·9	?	?
Bengal and Orissa	Chittagong		·815	·709	·106	·762	+·005	·797	86·3	70·1	16·7	96·7	49·1	47·6	81·5	83·4	77·7	+1·4
	Calcutta (Alipore)		·857	·742	·115	·797	+·013	·763	88·6	71·6	17·0	103·6	59·8	52·8	82·5	86·0	79·5	+1·6
	Saugor Island		·847	·740	·107	·791	+·009	·760	86·7	74·4	12·3	100·9	55·1	45·8	82·4	83·8	79·3	+1·0
	False Point		·852	·746	·106	·799	−·005	·761	86·4	73·4	13·0	103·1	55·8	47·3	83·5	83·9	78·8	+1·1
Gangetic Plain and Chota Nagpur.	Hazaribagh		27·857	27·754	·103	27·806	+·011	·752	85·3*	67·4	17·9	107·0	46·9	60·1	78·4*	82·0*	75·4*	+0·8
	Darbhanga		29·704	29·582	·122	29·641	+·008	·761	86·0	68·8	17·2	103·1	45·8	57·3	79·9	84·4	76·6	0
	Allahabad		·544	·428	·116	·481	+·003	·744	90·1	68·2	21·9	113·1	39·1	74·0	82·6	88·3	78·3	+0·5
Upper Sub-Himalayas.	Dehra Dun		27·633	27·547	·086	27·581	+·009	·777	81·1	61·0	20·1	104·6	37·8	66·8	73·1	77·0	69·8	−0·3
	Roorkee		28·957	28·855	·102	28·898	+·014	·755	86·4	63·3	23·1	112·7	34·6	78·1	77·7	83·7	73·9	−0·2
	Meerut		29·100	·996	·104	29·041	?	·746	88·1	65·2	22·9	110·8	38·2	72·6	78·3	84·5	75·6	+0·6
	Lahore		·138	29·046	·092	·084	+·011	·758	87·1	65·3	21·8	115·6	35·2	80·4	77·8	86·2	75·5	+1·8
	Lahore (Newshed)								89·3	64·2	25·1	118·4	34·0	84·4	79·5	87·0	75·7	
	Ludhiana		·022	28·930	·092	28·969	?	·752	86·7	65·6	21·1	115·2	36·4	78·8	77·8	84·4	75·2	+1·2
Indus Valley and N.-W. Rajputana.	Peshawar		28·763	·665	·098	·707	+·015	·807	84·9	60·5	24·4	118·0	30·9	87·1	76·3	82·0	71·5	+0·6
	Jacobabad		29·659	29·535	·124	29·589	+·007	·732	97·6	67·4	30·2	124·7	34·0	90·7	85·7	95·3	81·4	+2·4
	Kurrachee		·868	·771	·097	·818	+·014	·798	89·5	71·2	18·3	112·5	40·2	72·3	83·4	85·2	79·0	+1·7
Eastern Rajputana, Central India and Gujarat.	Jaipur		28·445	28·341	·104	28·387	+·011	·768	90·8	67·5	23·3	113·4	32·8	80·6	82·1	88·2	78·0	+1·8
	Udaipur		27·964	27·859	·105	27·912		·775	88·2	66·1	22·1	112·1	40·2	71·9	81·0	85·9	76·6	
	Deesa		29·420	29·299	·121	29·355	+·007	·771	94·5	69·0	25·5	117·9	41·0	76·9	84·8	92·8	81·4	+1·6
	Jamnagar		·842	·736	·106	·788		·795	96·3	68·8	21·5	107·2	43·3	63·9	84·1	87·6	78·9	
Deccan	Belgaum		27·388	27·283	·105	27·335	+·007	·766	86·3	64·8	21·5	101·8	49·9	51·9	79·5	82·5	74·2	+1·5
	Sholapur		28·317	28·179	·138	28·250	+·002	·757	95·2	70·1	25·1	110·2	55·7	54·5	85·6	92·4	81·6	+2·4
	Poona		·076	27·966	·110	·024	+·011	·780	91·8	65·2	26·6	107·9	48·1	59·8	82·6	89·0	77·7	+1·8
	Akola		·957	28·820	·137	·885	+·005	·756	95·4	68·6	26·8	114·4	46·0	68·4	86·2	93·4	81·6	+2·3
	Buldana	2,132	27·771	27·654	·117	27·709	+·006	·751	90·1	69·3	20·8	107·6	51·7	55·9	81·8	87·9	79·3	+2·2
	Khandwa		28·840	28·709	·131	28·771	+·007	·759	93·9	68·7	25·2	112·2	38·2	74·0	84·4	92·3	80·7	+2·5
	Nagpur		·845	·711	·134	·775	+·008	·742	94·6	70·8	23·8	114·2	52·4	61·8	84·7	91·3	82·0	+2·4
	Nagpur (Sanitary Commr.'s Office,)		·864	·733	·131	·796		·753	95·5	70·7	24·8	114·9	55·1	59·8	86·1	92·5	83·4	
	Hyderabad (Deccan)		·214	·093	·121	·153	+·007	·762	92·1	71·0	21·1	110·1	55·5	54·6	83·9	89·3	80·9	+2·3
West Coast	Bombay		29·892	29·792	·100	29·838	+·014	·815	86·3	75·5	10·8	93·4	61·0	32·4	81·4	83·3	80·1	+0·6
	Karwar		·911	·811	·100	·856	+·024	·832	86·5	73·1	13·4	94·2	59·4	34·8	81·9	84·3	79·2	+0·5
South India	Periyakulam		28·993	28·862	·131	28·925			93·2	70·6	22·6	103·9	52·0	51·9	84·4	88·7	80·8	
	Salem		29·013	·872	·141	·951	+·001	29·816	95·0*	72·6	22·4	103·1	55·4	52·7	85·2	90·7	81·9*	+2·0
	Chitaldroog		27·536	27·420	·116	27·480	+·007	·784	89·3	68·9	20·4	102·1	56·9	45·2	80·9	86·4	78·4	+2·6
	Bangalore		26·963	26·850	·113	26·912	+·009	·793	86·1	65·6	20·5	100·1	52·0	48·1	87·7	83·3	75·2	+2·2
	Hassan		·903	·801	·102	·857	+·012	·810	84·8	63·1	21·7	97·3	46·0	51·3	78·0	81·1	73·1	+1·6
	Mysore		27·455	27·336	·119	27·396	+·011	·803	87·8	66·9	20·9	100·1	53·3	46·8	79·4	84·9	76·6	+1·5

* Mean of 11 months.

II.

at 66 Stations in India, Burma, etc., in the year 1900.

Temperature, Wet-bulb.				Vapour Tension.					Humidity.					Cloud.				Rainfall.			
Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Total rainfall for the month.	Heaviest rainfall during the month.	Station.	Meteorological Provinces.
75·4	79·4	79·6	78·2	·850	·938	·927	·905	+·023	88	78	74	80	−1	5·6	6·2	5·9	+0·4			Port Blair.	Burma Coast and Bay Islands.
71·4	76·2	76·2	74·6	·758	·826	·771	·785	+·006	92	74	63	76	−1	4·7	5·2	5·0	−0·4			Rangoon.	
73·8	77·4	77·1	76·1	·778	·870	·851	·833	+·028	82	77	75	78	−1	4·8	5·0	4·9	+0·3			Diamond Island.	
?	77·5	77·2	?	?	·864	·854	?	?	?	75	74	?	?	4·9	5·1	5·0	0	92·44	7·63	Cocos Island.	
?	75·7	76·6	?	?	·829	·829	?	?	?	76	71	?	?	4·8	4·9	4·9	+0·3			Akyab.	
69·0	75·0	75·3	73·1	·716	·795	·780	·763	+·013	94	73	68	78	−1	5·0	5·0	5·0	+0·4			Chittagong	Bengal and Orissa.
69·7	74·9	75·4	73·3	·727	·784	·756	·756	+·020	91	69	60	73	−3	4·6	4·7	4·7	+0·4			Calcutta (Alipore).	
71·9	76·7	76·7	75·1	·774	·860	·840	·825	+·005	88	76	72	79	−1	5·2	5·0	5·1	+0·2			Saugor Island.	
72·2	77·6	77·6	75·8	·796	·877	·874	·849	+·054	94	76	75	81	+1	5·7	5·4	5·6	+0·8			False Point.	
62·1*	66·5*	67·3*	65·3*	·521*	·522*	·504*	·516*	?	74*	54*	49*	59*	?	5·5	6·0	5·8	+1·1			Hazaribagh	Ganoetic Plain and Chota Nagpur.
66·2	71·9	72·7	70·3	·647	·703	·675	·675	+·004	87	67	57	71	0	3·0	2·6	2·8	0			Darbhanga.	
63·3	70·2	71·3	68·3	·557	·605	·564	·575	+·003	77	55	44	59	−2	4·0	4·0	4·0	+0·7			Allahabad.	
56·5	62·8	63·7	61·0	·436	·472	·453	·454	−·012	76	57	49	60	−2	4·1	4·9	4·5	+0·6			Dehra Dun	Upper Sub-Himalayas.
58·3	65·8	67·1	63·7	·465	·510	·471	·482	−·014	74	53	42	57	−2	3·5	3·6	3·6	+0·5			Roorkee.	
60·3	67·1	68·9	65·4	·505	·554	·534	·531	+·018	76	55	45	59	+1	4·4	4·3	4·4	+1·4			Meerut.	
59·4	66·2	68·8	64·8	·482	·531	·508	·507	+·022	71	54	41	56	+4	3·0	2·9	3·0	+0·3			Lahore.	
59·2	66·8	69·0	65·0	·488	·529	·502	·506		75	52	40	56								Lahore (New shed)	
60·9	65·3	67·0	64·4	·520	·497	·465	·494	−·012	77	52	40	57	−2	3·5	3·9	3·7	+0·2			Ludhiana.	
55·1	63·6	65·2	61·3	·416	·480	·459	·452	+·027	72	51	42	55	+2	3·5	4·3	3·9	+0·7			Peshawar	Indus Valley and N.-W. Rajputana.
59·3	69·0	72·6	67·0	·457	·538	·544	·513	+·054	61	41	31	44	+1	1·8	2·2	2·0	+0·1			Jacobabad.	
65·3	71·8	73·8	70·3	·598	·666	·715	·659	−·010	70	55	57	61	−6	2·3	2·2	2·3	−0·8			Kurrachee.	
59·4	66·8	68·0	64·8	·451	·498	·460	·470	+·006	62	44	35	47	−3	3·4	3·9	3·7	+0·2			Jaipur	Eastern Rajputana, Central India and Gujarat.
59·8	66·2	68·0	64·7	·474	·491	·489	·485		69	45	39	51		2·6	3·0	2·8				Udaipur.	
61·2	68·1	68·7	66·0	·480	·494	·402	·459	−·022	61	41	27	43	−3	2·9	2·6	2·8	−0·7			Deesa.	
?	70·1	70·2	?	?	·580	·548	?		?	47	41	?		1·8	1·6	1·7				Jamnagar.	
61·7	65·9	67·6	65·0	·519	·475	·497	·497	−·023	83	50	48	60	−4	4·1	4·5	4·3	−0·4			Belgaum	Deccan.
61·4	67·2	68·6	65·7	·456	·445	·409	·436	−·051	60	38	29	42	−9	3·7	5·3	4·5	−0·3			Sholapur.	
61·0	66·0	67·5	64·8	·507	·444	·412	·454	−·030	78	41	34	51	−2	3·6	4·2	3·9	−0·5			Poona.	
61·7	69·6	71·4	67·6	·491	·514	·483	·496	+·004	66	43	34	48	−3	3·4	4·0	3·7	−0·1			Akola.	
59·6	64·8	65·8	63·4	·410	·416	·370	·400	−·066	57	40	31	43	−9	3·6	4·3	4·0	−0·1	25·63	2·17	Buldana.	
60·2	68·3	69·9	66·1	·451	·502	·460	·471	−·026	61	44	34	46	−6	3·1	4·0	3·6	+0·1			Khandwa.	
62·3	69·2	70·9	67·5	·482	·536	·510	·509	−·019	63	48	38	50	−4	4·3	5·7	5·0	+0·6			Nagpur.	
62·5	69·6	71·4	67·8	·487	·533	·517	·512		64	45	38	49		3·2	4·7	4·0				Nagpur (Sanv. Commr.'s Office).	
65·6	70·1	70·7	68·8	·572	·572	·525	·556	−·022	76	51	41	56	−6	3·8	4·8	4·3	+0·4			Hyderabad (Deccan).	
70·2	74·5	75·9	73·5	·684	·776	·805	·755	−·020	76	71	70	72	−4	3·7	3·8	3·8	−0·5			Bombay	West Coast.
70·7	74·4	75·8	73·7	·729	·757	·783	·756	−·004	89	70	67	75	−2	3·2	3·7	3·5	−0·2			Karwar.	
66·9	73·5	73·3	71·5	·652	·677	·624	·651		86	58	49	64		3·8	5·7	4·8				Periyakulam	South India.
70·0	74·7	75·2	73·3	·704	·726	·678	·703	+·014	88	60	48	65	−2	4·1	5·5	4·8	+0·3			Salem.	
63·4	68·9	69·1	67·2	·526	·562	·500	·530	+·024	74	54	42	57	−1	4·7	5·3	5·0	0			Chitaldroog.	
62·5	67·4	67·4	65·8	·538	·557	·493	·530	−·004	85	59	46	63	−3	4·4	4·8	4·6	−0·1			Bangalore.	
61·3	66·8	66·6	64·9	·533	·531	·487	·517	−·010	91	57	49	66	−3	5·5	6·5	6·0	0			Hassan.	
64·4	68·9	68·9	67·4	·581	·584	·515	·560	+·012	87	58	46	64	−1	6·4	6·8	6·6	+1·1			Mysore.	

* Mean of 11 months.

Table

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

Meteorological Province.	Station.	Elevation of Bar-Cistern above sea level in feet.	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Temperature of air. Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.
South India—concld.	Madras		29·904	29·787	117	29·849	+·010	·800	91·8	75·4	16·4	109·8	62·2	47·6	87·0	86·7	82·4	+0·6
	Bellary		28·446	28·311	·135	28·381	+·001	29·777	94·7	72·5	22·2	107·8	55·1	52·7	85·2	91·5	81·6	+1·9
	Waltair		29·658	29·550	·108	29·604		·770	87·6	76·1	11·5	101·5	66·3	35·2	84·2	83·9	80·9	
Hill Station, Baluchistan.	Quetta		24·649	24·572	·077	24·603	+·020		73·3	45·5	27·8	100·2	3·2	97·0	65·1	69·9	58·5	+0·4
Hill Stations, Northern India.	Leh		19·723	19·634	·089	19·684	+·020		54·2	29·7	24·5	82·2	−6·0	88·2	45·0	50·9	41·4	+0·2
	Srinagar		24·914	24·828	·086	24·864	+·015		65·6	45·1	20·5	91·3	14·1	77·2	55·3	63·6	54·8	+0·5
	Kailang	10,087	20·963	20·887	·076	20·932	?		55·0	32·4	22·6	79·6	3·5	76·1	45·8	48·9	41·2	+0·3
	Simla (Ridge)		23·139	23·087	·052	23·105	+·026		60·7	49·5	11·2	83·2	22·2	61·0	56·5	57·7	54·3	−1·2
	Chakrata		·315	·260	·055	·280	+·027		62·9	49·0	13·9	81·3	26·8	54·5	57·7	58·0	54·7	−1·1
	Ranikhet		24·124	24·053	·071	24·077	+·024		67·3	53·5	13·8	86·0	30·0	56·0	62·2	63·6	59·4	−0·4
	Muktesar		22·874	22·813	·061	22·844			63·8	48·2	15·6	82·0	25·4	56·6	58·1	59·3	54·9	
	Katmandu	4,388	25·571	25·473	·098	25·521	?		77·8	53·8	24·0	92·4	27·2	65·2	67·7	72·6	64·5	−0·3
	Darjeeling		23·033	22·965	·068	22·997	+·044		59·5	47·5†	12·0	79·8	31·0	48·8	54·5	56·9	53·0†	?
Hill Stations, Central India.	Mount Abu		26·046	25·973	·073	26·005	−·007		76·4	63·1	13·3	100·2	37·0	63·2	71·7	74·3	69·2	+1·0
	Pachmarhi		·450	26·359	·091	·402	+·005		81·5	62·6	18·9	99·7	36·5	63·2	75·7	79·6	71·7	+2·1
	Chikalda	3,642	·338	·243	·095	·287	+·003		81·7	65·9	15·8	99·6	48·5	51·1	75·3	80·0	73·5	+2·2
Hill Station, South India.	Wellington		24·279	24·209	·070	24·244	+·020		73·0	53·9	19·1	82·6	33·8	48·8	68·9	68·1	62·2	+1·1
	Kodaikanal		22·867	22·800	·067	22·830			65·0	51·5	13·5	76·0	42·2	33·8	61·6	59·4	56·5	
Extra India	Aden		29·848	29·733	·115	29·786	+·012	·811	87·7	78·6	9·1	99·3	66·9	32·4	84·4	86·2	83·0	+0·8
	Perim		·718	·613	·105	·662	+·025	·794	89·6	79·7	9·9	101·9	69·0	32·9	86·3	86·7	84·0	+0·1
	Minicoy		·940	·859	·081	·897		·829	86·9			92·9			84·6	84·5		
	Zanzibar		30·015	·903	·112	·959	+·016	·958	84·1	76·7	7·4	91·2	71·6	19·6	80·4	83·4	80·3	+0·7
	Port Victoria (Seychelles).	15	29·998	·911	·087	·955	+·010	·894	83·1	75·6	7·5	88·2	70·7	17·5	81·9	82·6	79·2	−0·1
	Mauritius (Pamplemousses).	181				·909	+·010	30·038				93·5	47·6	45·9			74·0	+0·1

II—*concld.*

at 66 Stations in India, Burma, etc., in the year 1900—concld.

Temperature, Wet-bulb.				Vapour Tension.					Humidity.					Cloud.				Rainfall.		Station.	Meteorological Province.
Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Total rainfall for the year.	Heaviest rainfall during the year.		
	76·9	77·5	76·3		·794	·829	·829	+·045		63	66	75	+2	5·3	4·8	5·1	+0·1			Madras	South India—concld.
64·4	68·3	69·8	67·5	·513	·488	·463	·488	−·056	64	41	32	46	−6	5·8	6·8	6·3	+1·3			Bellary.	
70·5	75·2	76·1	74·0	·682	·763	·808	·751		75	65	69	70		4·7	4·9	4·8				Waltair.	
40·1*	51·4	52·7	47·7*	·222*	·267	·244	·244*	?	71*	45	38	52*	+1	2·5	3·5	3·0	+0·9			Quetta	Hill Station, Baluchistan.
25·7	34·4	36·3	32·8	·125	·141	·160	·142	+·007	65	38	38	47	−3	4·6	6·1	5·4	0			Leh	Hill Stations, Northern India.
43·8	53·1	59·9	52·3	·308	·435	·537	·426	+·065	90	86	82	86	+9	4·6	5·2	4·9	+0·4			Srinagar.	
30·9	38·7	39·7	36·4	·182	·205	·193	·193	+·013	87	59	53	66	+4	5·5	7·0	6·3	+0·7	32·76	2·67	Kailang.	
43·9	48·2	49·7	47·3	·251	·275	·297	·274	−·014	66	56	60	61	+1	5·1	6·4	5·8	+0·7			Simla (Ridge).	
44·8	49·8	50·2	48·3	·274	·299	·305	·293	−·009	73	60	61	65	+1	4·3	5·1	4·7	+0·2			Chakrata.	
48·7	53·6	54·1	52·1	·314	·344	·345	·334	−·010	72	59	57	63	−2	4·6	5·0	4·8	+0·4			Ranikhet.	
43·9	50·6	51·5	48·7	·264	·312	·324	·300		72	61	61	65		5·0	5·7	5·4				Muktesar.	
52·4	60·3	62·1	58·2	·413	·467	·462	·446	−·002	90	66	56	71	−1	3·9	5·0	4·5	−0·1	52·26	3·25	Katmandu.	
45·7	51·4	53·5	50·2	·306†	·366	·393	·355†	?	88†	82	81	84†	?	5·5	6·3	5·9	−0·7			Darjeeling.	
54·2	58·9	60·2	57·8	·339	·371	·378	·363	−·003	57	48	45	50	−3	3·5	3·4	3·5	−0·2			Mount Abu	Hill Stations, Central India.
57·0	64·0	65·6	62·2	·424	·479	·489	·464	+·051	72	54	50	59	+1	4·4	5·1	4·8	+0·6			Pachmarhi	
58·1	62·8	64·7	61·9	·409	·438	·447	·431	−·002	64	52	47	54	−4	3·3	4·1	3·7	−0·6	77·01	7·89	Chikalda.	
51·1	58·9	59·7	56·6	·357	·399	·429	·395	+·003	81	58	63	67	−5	5·2	6·5	5·9	+0·1			Wellington	Hill Station, South India.
46·7	53·9	54·9	51·8	·282	·344	·391	·338		72	65	78	71		5·3	7·2	6·3				Kodaikanal.	
72·4	75·9	74·8	74·3	·717	·785	·715	·739	+·001	73	67	57	66	−1	3·8	2·4	3·1	+0·7			Aden	Extra India.
75·4	78·7	78·4	77·5	·829	·896	·877	·867	+·109	81	71	69	74	+9	2·0	1·2	1·6	−0·4			Perim.	
	77·9	77·7			·868	·848				73	73			3·9	4·3	4·1				Minicoy.	
72·8	75·9	75·9	74·9	·759	·839	·796	·798	+·005	82	81	70	78	−1	6·4	5·4	5·9	+1·1			Zanzibar.	
73·0	76·1	76·3	75·1	·783	·831	·827	·813	+·028	88	76	74	79	+2	5·6	5·5	5·6	−0·7	116·47	4·90	Port Victoria (Seychelles).	
							·622					75	0					31·28	2·63	Mauritius (Pamplemousses.)	

* Mean of 11 months. † Mean of 10 months.

Corrigenda in India Monthly Weather Reviews for the year 1900.

TEXT.

Page.	Column.	Part.	Correction.
15	2	January 1900 .	*Omit* figures against Quetta, Lahore and Montgomery in the first figure column of the tabular statement.
26	2	Ditto " .	*For* "1878 and 1889" *read* "1878 and 1880" against Peshawar in the last figure column of the second tabular statement.
27	1	Ditto " .	*For* "Lowest minimum temperature recorded in January 1900" *read* "Lowest minimum temperature recorded in January previous to 1900" as heading of the third figure column of the first tabular statement.
141	2	March " .	*For* "+106" *read* "+6" against Burma Coast and Bay Islands in figure column 4 of the tabular statement.
169	2	Ditto " .	*For* "5·3" *read* "3·5" against Ranikhet in figure column 1 of the last tabular statement.
202	1	April " .	*For* "was usually disturbed" *read* "was unusually disturbed" in the first line under "*Barometric depressions, etc.*"
202	2	Ditto " .	*For* "On these occurred" *read* "on these occasions," in the fourth line under "Barometric depressions, etc."
268	2	May " .	*For* "11·12" and "—2·07*" *read* "11·29 and — 1·88*," respectively, against Burma Coast and Bay Islands in figure columns 1 and 3 of the tabular statement.
269	2	Ditto " .	*For* "more than 0·8" *read* "more than 0·08" in the first line.
296	1	Ditto " .	*For* "—96" *read* +96 against Chakrata in figure column 3 of the third tabular statement.
302	1	Ditto " .	*Insert* "1·0" after "less than" in line 2 of paragraph first.
363	2	June " .	*For* "7·0" *read* "+7·0" against Sind in figure column 5 of the second tabular statement.
416	2	July " .	*For* "14·53" and "+1·78" *read* "14·48 and +1·83," repectively, against Bengal and Orissa in figure columns 2 and 3 of the first tabular statement.
421	2	Ditto " .	*For* "Lat. 2° 20′ N." "*read* "Lat. 21° 20′ N." in line 4 of the last paragraph.
492	2	August " .	*For* "the anomaly equall 0·04"" *read* "the anomaly equalled 0·04" in line 8 of paragraph first.
495	2	Ditto " .	*For* "Lat. 17° 10′ N. and Long. 88° 20′ E." *read* "Lat. 19° 15′ N. and Long. 87° 15′ E." in lines 10 and 11 of paragraph first.
497	1	Ditto " .	*For* "Lat. 19° 30′ N. and Long. 86° 20′ E." *read* "Lat. 20° 0′ N. and Long. 86° 25 E." in lines 5 and 6 of paragraph first.
498	2	Ditto " .	*For* "ainfall" *read* "rainfall" in line 5 of paragraph first below the first tabular statement.
500	1	Ditto " .	*For* "Lat. 19° N. and Long. 87° 10′ E." *read* "Lat. 19° 15′ N. and Long. 87° 40′ E. in line 4 of paragraph first.
502	2	Ditto " .	*For* "iall" *read* "fall" in line 1 of paragraph first.
508	1	Ditto " .	*For* "Lat. 20° N. and Long. 91° E." *read* "Lat. 20° 30′ N. and Long. 89° 40′ E." in line 2 of paragraph first.
514	1	Ditto " .	*For* "Lat. 24° N. and Long. 79° E." *read* "Lat. 26° N. and Long. 80° 40′ E." in line 2 of paragraph second.
611	1	September " .	*For* "unusually for south" *read* "unusually far south" in line 3 of paragraph first.

Corrigenda in India Monthly Weather Reviews for the year 1900.—*contd.*

TEXT—*concld.*

Page.	Column.	Part.	Correction.
621	...	September 1900 .	*For* "+12·70" *read* "+10·70" against Central Provinces East in the last figure column of the tabular statement.
681	2	October " .	*For* "west of the Arabian Sea" *read* "east of the Arabian Sea" in line 5 of paragraph first.
731	1	November " .	*For* "29·86″ in the centre" *read* 29·80″ in the centre in line 6 of paragraph second under "Summary of the chief features, etc."
760	1	Ditto " .	*For* "Sannu" *read* "Bannu" in line 7 of paragraph first below the tabular statement.
800	2	December " .	*For* "The coolest days in the Punjab.....in Bihar the 29th" *read* "The coolest days in the Punjab were the 27th and 28th, in the North-Western Provinces the 29th and in Bihar the 30th" in line 1 of paragraph first below the first tabular statement.
810	2	Ditto " .	*For* "+·5" *read* "+3·5" against Zanzibar in figure column 3 of the second tabular statement.
812	1	Ditto " .	*For* "falls exceeding 2″" *read* "falls exceeding 1″" in line 7 of paragraph fifth.
814	1	Ditto " .	*Insert* "and in the case of the last division six times" after four times in the first line.
816	2	Ditto " .	*For* "All over the province" *read* "Over nearly the whole of the province," in line 1 of paragraph first below the second tabular statement.

N.B.—It should be noted that in the Monthly Weather Reviews the positions assigned to the storm centres over the sea are based on imperfect information, the correct positions being given in the Annual Summary on *Plate VI.*

Corrigenda in India Monthly Weather Reviews for the year 1900—*contd.*

TABLES I AND II.

Page.	Part.	Table.	Meteorological Province or Station.	Heading.	Column number.	Correction.
61	January 1900 . .	I	Jamnagar . . .	Wind velocity .	1 and 2	*For* "0·5" and "0·5" *read* 12·0 and 12·8, respectively.
65	Ditto ,, . . .	I	Minimarg . . .	Rainfall . .	4 and 7	*For* "6·10" *read* 6·15.
68	Ditto ,, . . .	II	Dehra Dun . . .	Temp., Wet-bulb .	4	*For* "37·1" *read* 47·1.
69	Ditto ,, . . .	II	Deesa . . .	Humidity . .	2	*For* "2" *read* 20.
123	February,, . . .	I	Jamnagar . . .	Wind velocity .	1 and 2	*For* "0·5" and "0·5" *read* 12·0 and 12·8, respectively.
133	Ditto ,, . . .	II	Periyakulam. . .	Ditto . .	1	*For* "64*" *read* 62*.
,,	Ditto ,, . . .	II	Simla (Ridge) . .	Humidity . .	5	*For* "—1" *read* +1.
189	March ,, . . .	I	Perim . . .	Rainfall . .	4, 6, 7 and 9.	*For* "1·14," "+1·01," "1·14," and "+1·01" *read* 1·16, +1·03, 1·16 and +1·03, respectively.
190	Ditto ,, . . .	II	Udaipur . . .	Pressure . .	6	*For* "·838" *read* ·833.
249	April ,, . . .	I	VII.—Indus Valley and North-West Rajputana.	Rainfall . .	5	*For* "·49" *read* 0·40.
257	Ditto ,, . . .	II	Jacobabad . .	Humidity . .	5	*For* "—1" *read* +1.
313	May ,, . . .	I	I.—Burma Coast and Bay Islands.	Rainfall . .	4 and 6	*For* "11·12" and "—2·07" *read* 11·29 and —1·88, respectively.
,,	Ditto ,, . . .	I	Diamond Island . .	Ditto . .	4, 6, 7 and 9.	*For* "6·35," "—2·20," "6·61" and "3·11" read 8·06 —0·49, 8·32, and —1·40, respectively.
324	Ditto ,, . . .	II	Diamond Island . .	Temperature of air	9	*For* "4·0" *read* 84·0.
,,	Ditto ,, . . .	II	Jamnagar . . .	Pressure.	1	*For* "·978" *read* ·798.
325	Ditto ,, . . .	II	Sholapur . . .	Vapour tension .	3	*For* "·339" *read* ·331.
394	June ,, . . .	I	Arrah . . .	Pressure, 8 A.M., etc	8	*For* "·466" *read* ·566.
398	Ditto ,, . . .	I	Bijapur . . .	Temperature of air.	5	*For* "1*" *read* 0·1*.
402	Ditto ,, . . .	I	Kabul	Ditto . .	1	*For* "73·7" *read* 74·4.
403	Ditto ,, . . .	I	Yatung . . .	Rainfall . .	1	*Insert* 17.
,,	Ditto ,, . . .	I	Kashgar . . .	Ditto . .	6 and 9	*For* "—0·37" *read* +0·37.
404	Ditto ,, . . .	II	Buldana . . .	Temperature Wet-bulb.	4	*For* "1·4" *read* 71·4.
406	Ditto ,, . . .	II	Madras . . .	Pressure . .	1 and 2	*For* "297·35" and "29·648" *read* 29·735 and 29·618, respe tively.
467	July ,, . . .	I	IV.—Bengal and Orissa.	Rainfall . .	5 and 6	*For* "14 53" and +"1·78" *read* 14·48 and + 1·83, respectivel y.
469	Ditto ,, . . .	I	Shortt's Island . .	Ditto . . .	5 and 6	*For* "10·87" and "—0·47" *read* 9·37 and + 1·03, respectively.
471	Ditto ,, . . .	I	Jamnagar . . .	Wind velocity .	1 and 2	*For* "1·0" and "1·0" *read* 23·0 and 24·7, respectively.
474	Ditto ,, . . .	I	Muktesar . . .	Temperature of air.	1	*Insert* 62·3.
476	Ditto ,, . . .	I	Baghdad . . .	Ditto .	7	*Insert* —0·2.
477	Ditto ,, . . .	I	Darjeeling . . .	Heaviest rainfall during month.	1	*For* "3·65" *read* 4·19.
,,	Ditto ,, . .	I	Teheran . .	Rainfall . .	5, 6, 8 and 9.	*For* "0·51," "—0·51," "0·52" and "—0·50" *read* 0·81, —0·81, 0·82 and —0·80, respectively.
479	Ditto ,, . .	II	Saugor Island . .	Vapour tension .	2	*For* "·017" *read* 1·017.
559	August ,, . .	I	Midnapore . . .	Rainfall . .	4	*For* "125" *read* 12·75.
561	Ditto ,, . .	I	Puri	Wind direction .	1	*Insert* 8.

Corrigenda in India Monthly Weather Reviews for the year 1900—*concld.*

TABLES I AND II—*concluded.*

Page.	Part.	Table.	Meteorological Province or Station.	Heading.	Column number.	Correction.
561	August 1900 . .	I	Puri	Rainfall . .	2 and 3	*Insert* 13·27 and +4·73, respectively.
562	Ditto „ . .	I	Udaipur . . .	Temperature of air .	9 and 11	*For* "70·5" and "68·3" *read* 90·0 and 70·5, respectively.
566	Ditto „ . .	I	Para Chinar . .	Ditto . .	13	*For* "38·6" *read* 33·6.
572	Ditto „ . .	II	Port Victoria (Seychelles)	Ditto . .	4	*For* "82·" *read* 82·3.
647	September „ . .	I	Patiala . . .	Wind direction .	7	*Omit* "2".
„	Ditto „ . .	I	Ludhiana . . .	Rainfall . .	4, 6, 7 and 9.	*For* "11·33," "+6·95," "44·70" and "+20·64" *read* 11·34, 6·96, 44·71 and +20·65, respectively.
652	Ditto „ . .	I	Baghdad . . .	Temperature of air .	7	*Insert* +2·3.
„	Ditto „ . .	I	Busrah . . .	Pressure, 8 A.M., etc.	6	*For* "29·504" *read* 29·584.
„	Ditto „ . .	I	Amini Devi . . .	Temperature of air .	10	*Omit* "29th."
„	Ditto „ . .	I	Minicoy . . .	Ditto . .	10	*Insert* 29th.
656	Ditto „ . .	II	Wellington . . .	Pressure . .	3	*For* "24·072" *read* ·072.
657	Ditto „ . .	II	Quetta . . .	Vapour tension .	2	*For* "·807" *read* ·307.
„	Ditto „ . .	II	Kailang . . .	Ditto . .	2	*For* "·838" *read* ·338.
„	Ditto „ . .	II	Chikalda . . .	Ditto . .	3	*For* "·599" *read* ·699.
714	October „ . .	I	Midnapore . . .	Pressure, 8 A.M., etc.	1	*For* "29·975" *read* 29·795.
717	Ditto „ . .	I	Dehri	Rainfall . . .	3	*For* "+0·27" *read* +0·23.
„	Ditto „ . .	I	Muzuffarpur . .	Wind velocity .	2	*Insert* 0·1.
723	Ditto „ . .	I	Chitral . . .	Wind direction .	1	*Insert* 22.
724	Ditto „ . .	I	Gangtok . . .	Temperature of air .	2	*For* "77·7" *read* 70·7.
„	Ditto „ . .	I	Baghdad . . .	Ditto . .	7	*Insert* +1·4.
726	Ditto „ . .	II	Cocos Island . .	Pressure . .	1 and 3	*For* "·862", "·097" *read* ·864 and ·099, respectively.
727	Ditto „ . .	II	Diamond Island . .	Vapour tension .	2, 4 and 5	*For* "·964," "·905," and "+·038" *read* ·956, ·903 and +·036, respectively.
„	Ditto „ . .	II	Cocos Island . .	Ditto . .	2	*For* "·913" *read* ·911.
776	November „ . .	II	Zanzibar . . .	Pressure . .	4	*For* "·897" *read* ·899.

EXPLANATION OF PLATES.

PLATE I.—A chart of India showing the 11 meteorological provinces and 57 districts of India.

PLATE II.—A chart of India showing the normal average rainfall and the variation of the rainfall from the normal of the months of January and February 1900. This chart and the three following charts have been prepared to illustrate the data given in Table XXVIII. These charts are drawn up in the same manner as the rainfall chart (Plate V) in the Monthly Weather Reviews of the year 1900.

PLATE III.—A chart of India showing the normal average rainfall and the variation of the rainfall from the normal of the months of March to May 1900.

PLATE IV.—A chart of India showing the normal average rainfall and the variation of the rainfall from the normal of the months of June to October 1900.

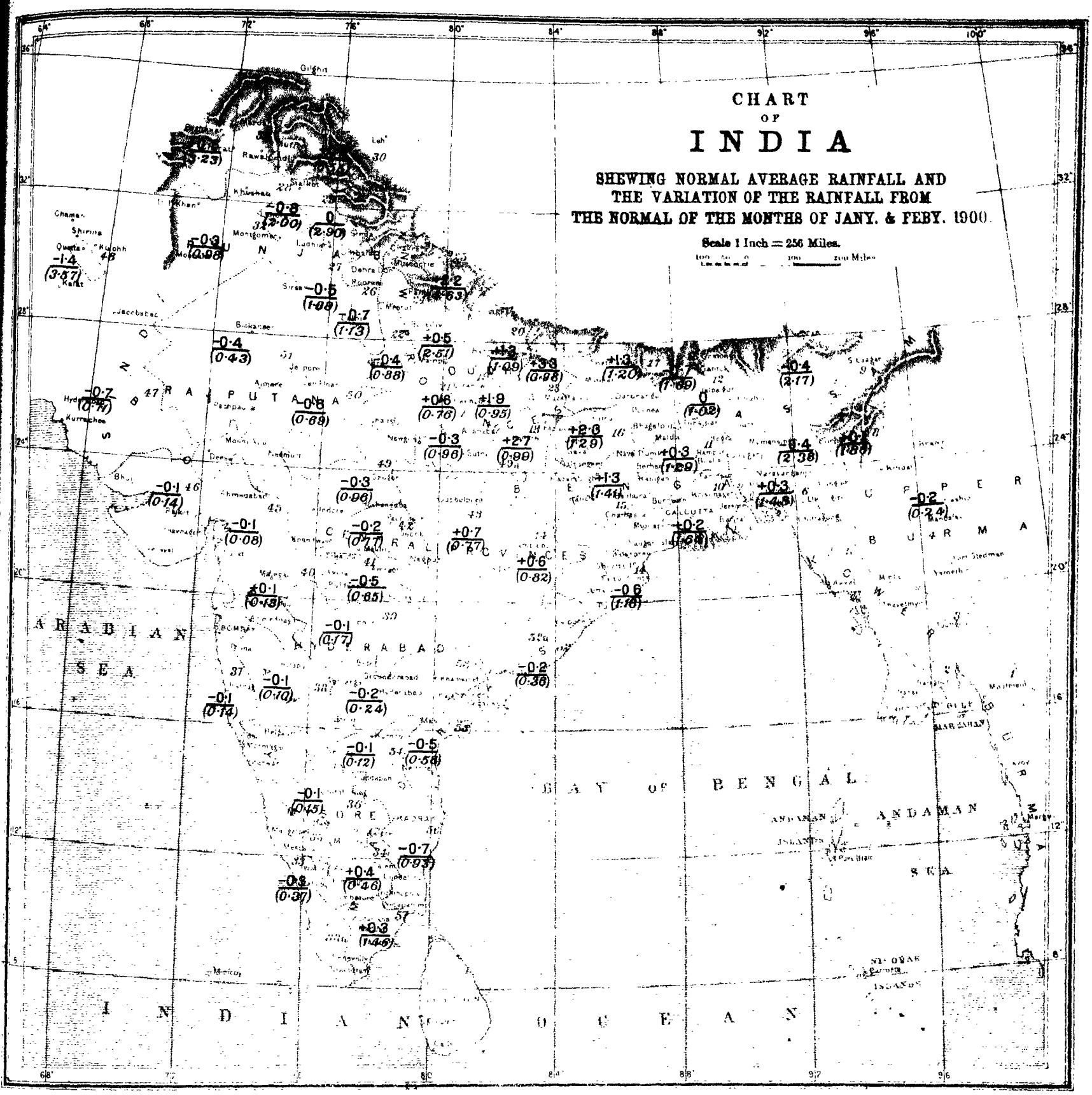
PLATE V.—A chart of India showing the normal average rainfall and the variation of the rainfall from the normal of the months of November and December 1900.

PLATE VI.—Chart showing the tracks of the more important cyclonic storms of 1900 in the Indian area during the south-west monsoon, a brief summary of which is given on pages 876 and 877.

Explanation.

The name of the districts can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting red figures.

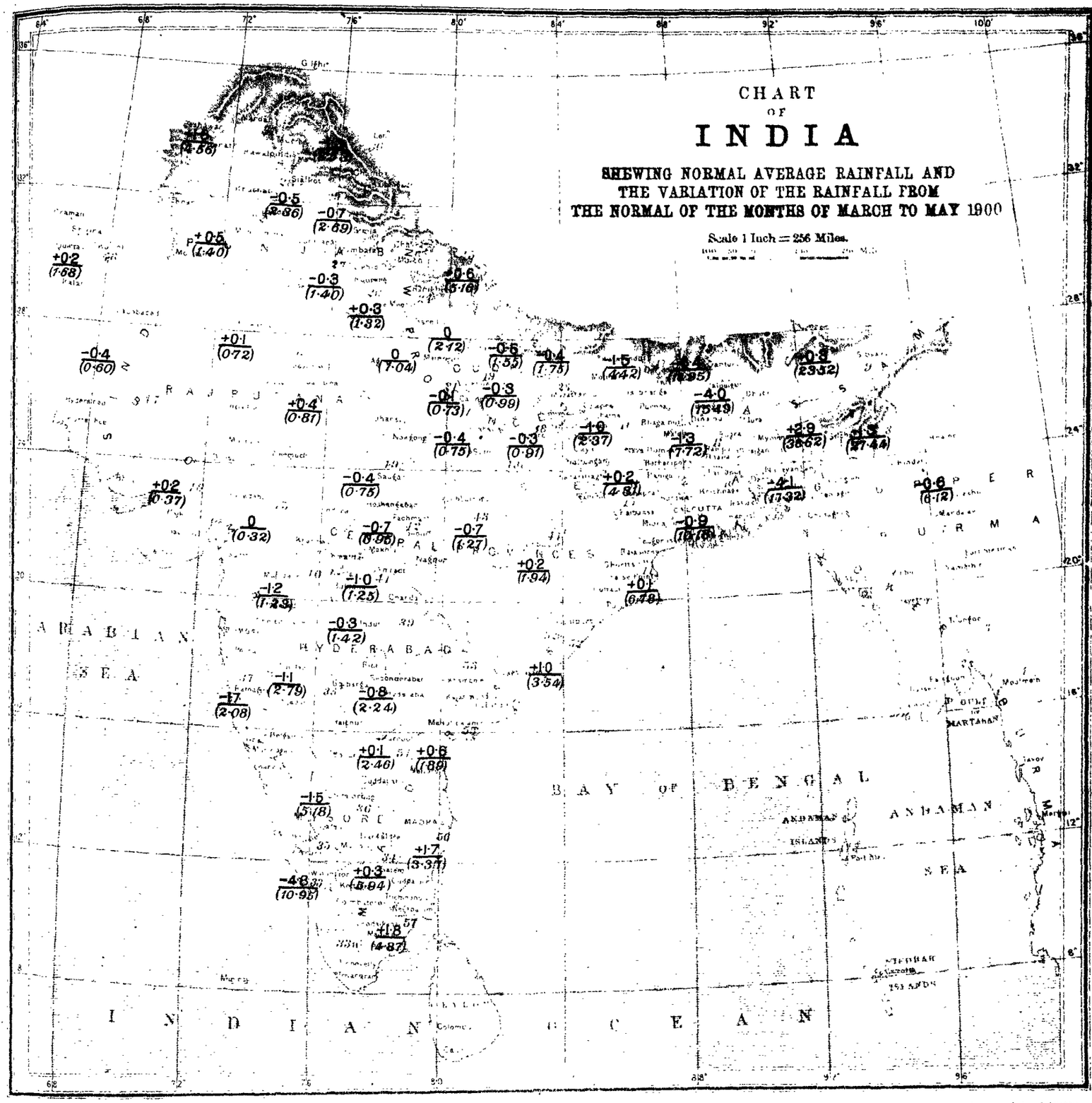
1. Tenasserim
2. Lower Burma Deltaic
3. Central do.
4. Upper do.
5. Arakan
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. North Western Provinces, East
19.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



Explanation.

The Chart gives the variations of the rainfall of the month (to tenths of an inch) from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The normal average rainfall is also given below in smaller figures enclosed within brackets so that the percentage variation can be at once estimated. The name of the district can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting red figures.

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



Explanation.

The Chart gives the variations of the rainfall of the month in tenths of an inch from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The normal average rainfall is also given below in smaller figures enclosed within brackets so that the percentage variation can be at once estimated. The name of the district can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting red figures.

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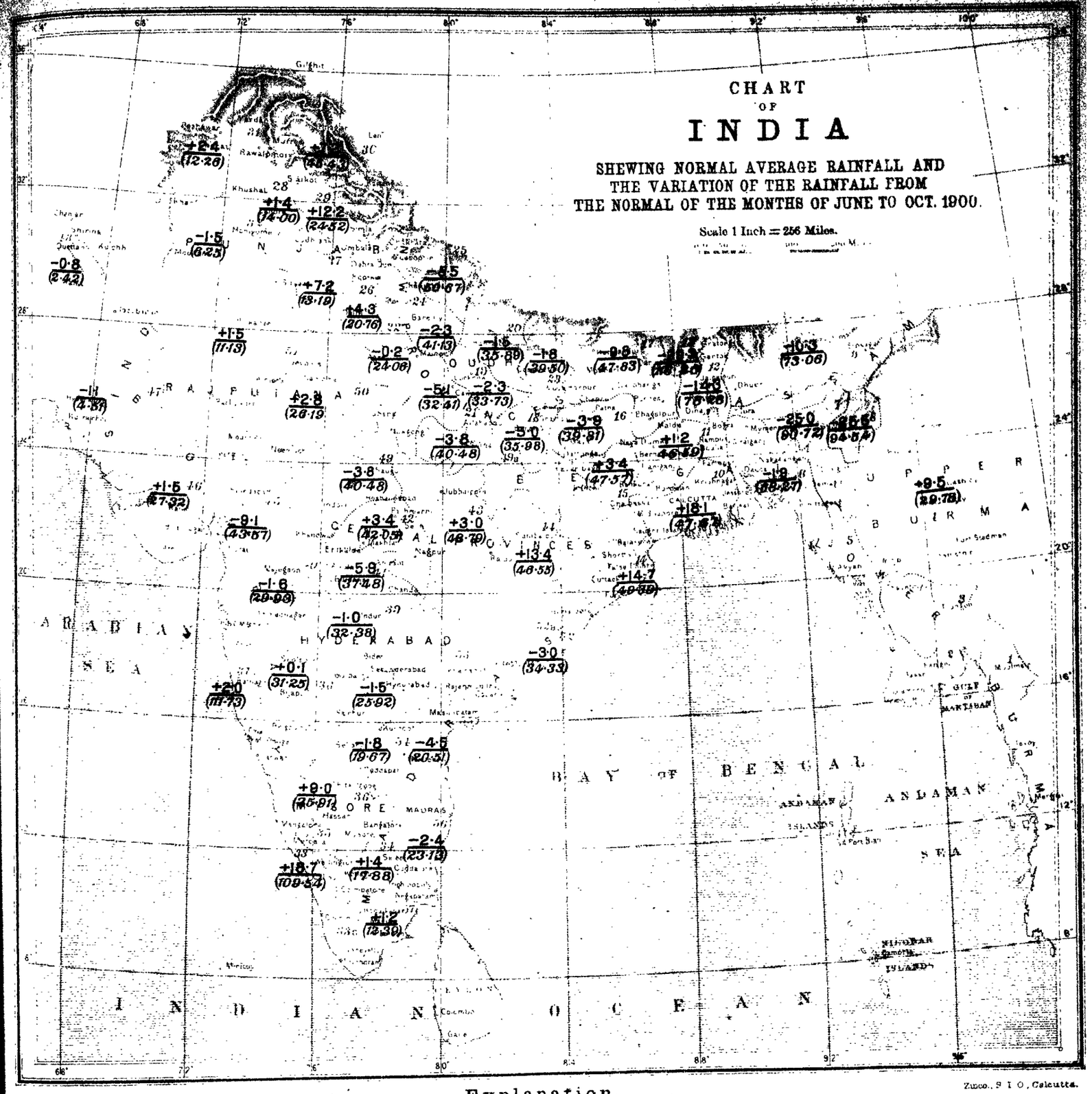
6. East Bengal
7. Assam, Surma
8. Do., Hills
9. Do., Brahmaputra
10. Deltaic Bengal
11. Central do.
12. North do.
13. Bengal Hills
14. Orissa
15. Chota Nagpur
16. South Bihar
17. North Bihar
18. North Western Provinces, East
19. South Oudh
20. North do
21. North Western Provinces, Central
22. Do. do.,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



Explanation.

The Chart gives the variations of the rainfall of the month (to tenths of an inch) from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The normal average rainfall is also given below in smaller figures enclosed within brackets so that the percentage variation can be at once estimated. The name of the district can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting red figures.

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

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Explanation.

The Chart gives the variations of the rainfall of the month (to tenths of an inch) from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 57 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The normal average rainfall is also given below in smaller figures enclosed within brackets so that the percentage variation can be at once estimated. The name of the district can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting red figures.

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

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